

**UNITED STATES
 SECURITIES AND EXCHANGE COMMISSION
 Washington, D.C. 20549**

**FORM S-1
 REGISTRATION STATEMENT
 UNDER
 THE SECURITIES ACT OF 1933**

Casa Systems, Inc.

(Exact name of registrant as specified in its charter)

Delaware
 (State or other jurisdiction of
 incorporation or organization)

3663
 (Primary Standard Industrial
 Classification Code Number)

75-3108867
 (I.R.S. Employer
 Identification No.)

**100 Old River Road
 Andover, Massachusetts 01810
 (978) 688-6706**

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

**Jerry Guo
 President, Chief Executive Officer and Chairman
 Casa Systems, Inc.
 100 Old River Road
 Andover, Massachusetts 01810
 (978) 688-6706**

(Name, address, including zip code, and telephone number, including area code, of agent for service)

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Approximate date of commencement of proposed sale to the public: As soon as practicable after this Registration Statement is declared effective.

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box.

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

| | | | |
|--|-------------------------------------|---------------------------|--------------------------|
| Large accelerated filer | <input type="checkbox"/> | Accelerated filer | <input type="checkbox"/> |
| Non-accelerated filer (Do not check if a smaller reporting company) | <input checked="" type="checkbox"/> | Smaller reporting company | <input type="checkbox"/> |

CALCULATION OF REGISTRATION FEE

| Title of Each Class of Securities To Be Registered | Proposed Maximum Aggregate Offering Price(1) | Amount of Registration Fee(2) |
|--|--|-------------------------------|
| Common Stock, \$0.001 par value per share | \$ | \$ |

(1) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended.
 (2) Calculated pursuant to Rule 457(o) based on an estimate of the proposed maximum aggregate offering price.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

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The information in this preliminary prospectus is not complete and may be changed. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell nor does it seek an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

PROSPECTUS (Subject to Completion)
Issued _____, 2017

Shares



Common Stock

Casa Systems, Inc. is offering _____ shares of our common stock. This is our initial public offering, and no public market currently exists for our shares of common stock. We anticipate that the initial public offering price of our common stock will be between \$ _____ and \$ _____ per share.

We intend to apply to list our common stock on the Nasdaq Global Market under the symbol "CASA."

We are an "emerging growth company" under applicable federal securities laws and will be subject to reduced public company reporting requirements. Investing in our common stock involves risks. See "[Risk Factors](#)" beginning on page 11.

PRICE \$ _____ A SHARE

| Per Share | Price to Public | Underwriting Discounts and Commissions(1) | Proceeds to Casa Systems |
|-----------|-----------------|---|--------------------------|
| Total | \$ | \$ | \$ |
| _____ | \$ _____ | \$ _____ | \$ _____ |

(1) See "Underwriters" beginning on page 123 for additional information regarding underwriting compensation.

We have granted the underwriters the right to purchase up to an additional _____ shares of common stock.

The Securities and Exchange Commission and state securities regulators have not approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The underwriters expect to deliver the shares on _____, 2017.

Morgan Stanley

Raymond James

_____, 2017

J.P. Morgan

Barclays

Stifel

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You should rely only on the information contained in this prospectus or in any free writing prospectus we file with the Securities and Exchange Commission, or SEC. We and the underwriters have not authorized anyone to provide you with additional information or information different from that contained in this prospectus or any free writing prospectus. We and the underwriters are offering to sell, and seeking offers to buy, shares of our common stock only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date on the front cover of this prospectus, or other earlier date stated in this prospectus, regardless of the time of delivery of this prospectus or of any sale of our common stock.

Through and including _____, 2017 (the 25th day after the date of this prospectus), all dealers effecting transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This delivery requirement is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to an unsold allotment or subscription.

For investors outside the United States: Neither we nor the underwriters have done anything that would permit our initial public offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the shares of our common stock and the distribution of this prospectus outside of the United States.

Terms Used in this Prospectus

| <u>Concept</u> | <u>Abbreviation</u> | <u>Definition</u> |
|---------------------------------|---------------------|---|
| Cable Modem Termination System | (CMTS) | A CMTS is a critical element of a cable service provider's network. A CMTS is typically located either on the cable service provider's premises or at a remote hub in the field and is used to provide high-speed data services such as Internet Protocol, or IP, or Voice over Internet Protocol, or VoIP, to cable subscribers. A CMTS enables IP data and IP voice communication between a cable service provider's networks and subscribers' modems through coaxial cable. A CMTS performs several network services, including subscriber and access management, data security and service provisioning for cable subscribers. A CMTS communicates with subscribers' cable modems using DOCSIS protocol. DOCSIS is a cable industry standard defined by CableLabs, a consortium of cable service providers. |
| Converged Cable Access Platform | (CCAP) | A CCAP is a part of a cable service provider's network that enables the delivery of IP voice, digital video and data over a single port. A CCAP combines CMTS functions that enable data and IP voice communication with edge-quadrature amplitude modulation, or Edge-QAM, functionality to enable video delivery over cable networks in one integrated chassis. |
| Field Programmable Gate Array | (FPGA) | An FPGA is an integrated circuit designed to be configured by a customer after manufacturing. FPGAs can be reprogrammed in the field to desired application or functionality requirements through the use of custom software. This feature distinguishes FPGAs from Application Specific Integrated Circuits (ASICs), which are custom manufactured for specific tasks and are not able to be modified after manufacturing. |
| Remote-PHY | (R-PHY) | R-PHY refers to remotely deployable hardware that is typically located at the edge of a cable service provider's network, near where the customers are located. R-PHY is capable of radio frequency signal generation that provides connectivity from where the customers are located to the data center via an optical network. R-PHY is typically connected to a CMTS or a CCAP system at a data center. By placing R-PHY equipment closer to subscribers, cable service providers are able to move fiber closer to the network edge. This allows for cable service providers to serve more subscribers at higher speed, resulting in overall increased network throughput. |

PROSPECTUS SUMMARY

This summary highlights information contained elsewhere in this prospectus. You should read the following summary together with the more detailed information appearing in this prospectus, including our consolidated financial statements and related notes, and the risk factors beginning on page 11, before deciding whether to purchase shares of our common stock. Unless the context otherwise requires, we use the terms “Casa Systems,” “Casa,” “our company,” “we,” “us” and “our” in this prospectus to refer to Casa Systems, Inc. and its subsidiaries.

OUR VISION

Our products help our customers provide and manage broadband connectivity. We believe consumers and enterprises should be able to enjoy ultra-fast speeds and enhanced digital content experiences through their phones, tablets, computers, TVs and other connected devices at home or on the go. We believe that connectivity should be ubiquitous and seamless; it should not matter whether the user is accessing the Internet through wireless or fixed connections, and it should not matter whether that service is being provided by a cable operator, fixed telecom carrier or wireless services provider. Our innovative, software-centric products are designed to help achieve this vision.

OVERVIEW

We provide a suite of software-centric infrastructure solutions that allow cable service providers to deliver voice, video and data services over a single platform at multi-gigabit speeds. In addition, we offer solutions for next-generation distributed and virtualized architectures in cable operator, fixed telecom and wireless networks. Our innovative solutions enable customers to cost-effectively and dynamically increase network speed, add bandwidth capacity and new services for consumers and enterprises, reduce network complexity and reduce operating and capital expenditures.

We focus our development efforts on innovation and being the first to market with new products at each generational shift in cable network technology. We pioneered the use of a software-centric approach to leverage the programmability of FPGAs and general purpose processors for use in the cable industry. In addition, we believe we were the first to provide each of the following to our customers: a solution enabling cable service providers to deliver IP voice, digital video and data over a single port; a solution enabling cable service providers to deliver multi-gigabit speeds to their subscribers; and a remote node solution to enable distributed broadband cable access at gigabit speeds.

We have created a software-centric, multi-service portfolio that enables a broad range of core and access network functions for fixed and wireless networks. These networks share a common set of core and access network functions that enable network services, such as subscriber management, session management, transport security and radio frequency, or RF, management. Our Axyom software architecture allows the deconstruction of these core and access network functions into modular building blocks so that they can be applied to a particular end-user service, across fixed and wireless networks, which enables us to be a leader in network transformation. While we have historically focused on cable service providers, our Axyom software platform allows us to improve and expand the functionality of wireless service provider networks.

We offer a scalable solution that can meet the evolving bandwidth needs of our customers and their subscribers. Our first installation in a cable service provider’s network frequently involves deploying our broadband products in only a portion of the provider’s network and with only a fraction of the capacity of our products enabled at the time of initial installation. Over time, our customers have generally expanded the use of our solutions to other areas of their networks to increase network capacity. Capacity expansions are accomplished either by deploying additional systems or line cards, or by our remote enablement of additional channels through the use of software. Sales of additional line cards and software-based capacity expansions generate higher gross margins than our initial hardware-based deployments.

Our solutions are commercially deployed in over 60 countries by more than 350 customers, including regional service providers as well as some of the largest Tier 1 broadband service providers, serving millions of subscribers. Our principal customers include Charter/Time Warner Cable, Rogers and Mediacom in North America; Liberty Global, Vodafone and DNA Oyj in Europe; and Jupiter Communications and Beijing Gehua CATV Networks in Asia-Pacific.

One of our largest customers, Time Warner Cable, launched its flagship “TWC Maxx” initiative in the New York City metropolitan area in 2014 using our solution. Our solution enabled Time Warner Cable to triple the maximum speed offered to its customers. The deployment of our solution also enabled Time Warner Cable to reduce power consumption by nearly 30%, or approximately 11GWh per year, which we estimate is enough power for over 1,800 residential homes. Our solution also enabled Time Warner Cable to reduce facility space and remove over 140 miles of coaxial copper cable.

We have achieved significant growth and profitability. For the year ended December 31, 2015, we generated revenue of \$272.5 million, net income of \$67.9 million and adjusted EBITDA¹ of \$115.5 million, representing increases of 29.0%, 13.8% and 22.1%, respectively, from the amounts for the year ended December 31, 2014. For the nine months ended September 30, 2016, we generated revenue of \$216.9 million, net income of \$48.8 million and adjusted EBITDA of \$74.5 million, representing increases of 18.8% and 17.4% and a decrease of 1.5%, respectively, from the amounts for the nine months ended September 30, 2015.

INDUSTRY BACKGROUND

We believe broadband service providers are facing several key challenges, including:

- *Rapidly increasing bandwidth demand.* Bandwidth demand has grown substantially and is expected to continue to increase, caused by more users with more connected devices and applications, increased use of bandwidth-intensive streaming media services, and the increasing prevalence of Internet of Things, or IoT, solutions, among other factors.
- *Competition fueled by increasing breadth of service offerings.* With increased consumer and enterprise choice for access to broadband, broadband service providers are increasingly coming into competition with each other, and must develop differentiated service offerings with higher levels of performance at lower cost.
- *Increasing network complexity.* As the diversity of service offerings has grown, network complexity has increased.
- *Need to control operating and capital expenditures.* The operation of network infrastructure is space, power and personnel intensive. In addition, broadband service providers are frequently required to incur significant capital expenditures to upgrade existing equipment.

¹ Adjusted EBITDA is a non-GAAP financial measure. Please see “Selected Consolidated Financial Data—Non-GAAP Financial Measures” for information regarding the limitations of using adjusted EBITDA and for a reconciliation of adjusted EBITDA to net income, the most directly comparable financial measure calculated and presented in accordance with GAAP.

OPPORTUNITY TO TRANSFORM BROADBAND NETWORKS

Given the challenges they face, broadband service providers are undertaking three key technology initiatives to help build next-generation networks:

- *Densification.* Broadband service providers are shifting from centralized to more distributed architectures, a process referred to as densification. Densification requires extending network connectivity and distributing access aggregation solutions closer to end users.
- *Network convergence.* As fixed and wireless providers continue to consolidate and integrate their service offerings, which is referred to as convergence, these service providers are seeking to integrate their separate delivery modes with all-IP architectures, shared transport and a common suite of software-centric core and access network functions.
- *Virtualization.* Software-enabled architectures that are decoupled from underlying hardware allow for increased efficiencies, upgradability, configuration flexibility, service agility and scalability not feasible with hardware-centric approaches.

OUR SOLUTIONS

We offer solutions for fixed and wireless networks. Our software-centric, multi-service broadband platform, Axyom, enables ultra-broadband delivery and convergence. We engineered our platform from the ground-up to be high performance, flexible and adaptable, and to allow our customers to seamlessly address the growing demand for bandwidth and connectivity and competitive need for service agility.

Our platform provides the following key benefits to broadband service providers:

- *Addition of critical bandwidth capacity.* Our solutions enable broadband service providers to offer multi-gigabit speeds and to expand capacity seamlessly to meet the growing demand for bandwidth.
- *Flexibility to add new and expand existing services.* Our platform provides us with the flexibility to adapt to changing industry standards and customer needs.
- *Ability to upgrade networks remotely.* Our programmable architecture allows us to deploy technology updates to our customers remotely without the expense, disruption or network downtime caused by hardware replacements or field visits by personnel.
- *Reduced network complexity, operating costs and capital expenditures.* Our converged software platform allows broadband service providers to significantly reduce the complexity and costs of their networks by reducing parallel and otherwise redundant network architectures.
- *Ability to densify networks.* Our products help broadband service providers deploy more capacity at the network edge, closer to where end users and devices are accessing the network, increasing available bandwidth and reducing latency to improve quality of service.
- *Common platform capabilities to address the needs of both fixed and wireless networks.* Our software-centric, multi-service platform enables a broad range of network services for fixed and wireless networks allowing for the delivery of diverse consumer and enterprise applications.

Our primary product line is our portfolio of converged cable access platform, or CCAP, solutions, which enable the provision of voice, video and data over a single port.

OUR COMPETITIVE STRENGTHS

The following competitive strengths have helped us become a market leader:

- *Highly flexible, software-centric architecture.* We have designed our product portfolio from the ground up to be software-centric and modular in nature. Our proprietary software is at the heart of our

products. Our software allows us to leverage the programmability of FPGAs and general purpose processors in our solutions. Our software-centric architecture enables us to virtualize core network and access functions allowing these functions to be decoupled from underlying hardware, which is not feasible with hardware-centric approaches and allows for increased efficiencies, upgradability, configuration flexibility, service agility and scalability.

- *Proven engineering and product development track record.* We have a proven history of anticipating network evolutions and developing solutions that enable next-generation networks. Our forward-looking design and investment approach, coupled with our proven product development track record, has enabled us to deliver fully featured next-generation solutions in advance of competitors.
- *Strong management and engineering team with a culture of innovation.* We pride ourselves on our culture of innovation, which is driven by our management team of experienced executives and engineers with deep industry expertise. As of September 30, 2016, approximately 85% of our employees were engineers or had other technical backgrounds.
- *Customer focus.* We have a passion to serve our customers and the agility and flexibility to offer solutions to meet their evolving requirements.
- *Diversified and established customer base.* Our solutions are commercially deployed in over 60 countries by more than 350 customers, including some of the world's largest Tier 1 broadband service providers.

MARKET OPPORTUNITY

We believe that the shift to software-centric ultra-broadband networks and fixed and wireless network convergence presents us with a compelling market opportunity. We believe the total addressable market for our CCAP solutions, which currently account for all of our revenue, was \$1.9 billion in 2016. In addition we believe the CCAP market, together with new wireless communications segments that we intend to enter more substantially in coming periods, will grow from \$10.6 billion in 2016 to \$18.3 billion in 2020.

OUR GROWTH STRATEGY

The key elements of our growth strategy are:

- Continue to innovate and extend technology leadership through R&D investment.
- Further penetrate existing customers.
- Expand our customer base.
- Expand the breadth of solutions sold to customers, with particular focus on the development of new software-based and virtualized products.
- Leverage our core technology for the cable industry into adjacent wireless markets.
- Invest in our platform through selective acquisitions.

RISKS ASSOCIATED WITH OUR BUSINESS

You should consider carefully the risks described under the "Risk Factors" section beginning on page 11 and elsewhere in this prospectus. These risks, which include the following, could materially and adversely affect our business, financial condition, operating results, cash flow and prospects, which could cause the trading price of our common stock to decline and could result in a partial or total loss of your investment:

- If we do not successfully anticipate technological shifts, market needs and opportunities, and develop new products and product enhancements that meet those technological shifts, needs and opportunities, we may not be able to compete effectively.

- Our success depends in large part on broadband service providers' continued deployment of, and investment in, ultra-broadband network capabilities that make use of our solutions.
- We expect certain of our customers will continue to account for a substantial portion of our revenue.
- Timing of large orders and seasonality in our revenue may cause our quarterly revenue and results of operations to fluctuate and possibly decline materially from quarter to quarter.
- Our sales to the broadband service provider market are volatile and our sales cycles can be long and unpredictable. As a result, our sales and revenue are difficult to predict and may vary substantially from period to period, which may cause our revenue and results of operations to fluctuate and possibly decline significantly.
- We may not generate positive returns on our research and development investments.
- Our CCAP solutions currently represent all of our sales; this concentration may limit our ability to increase our revenue.
- We have invested heavily in developing wireless solutions, and we face risks in seeking to expand our platform into the wireless market.
- We believe the broadband service provider industry is in the early stages of a major architectural shift toward the virtualization of networks and the use of networks with distributed architectures. If the architectural shift does not occur, if it does not occur at the pace we predict, or if the products and services we have developed are not attractive to our customers after such shift takes place, our revenues could decline.
- We face intense competition, including from larger, well-established companies, and we may lack sufficient financial or other resources to maintain or improve our competitive position.
- If we are unable to sell additional products to our existing customers, our revenue growth will be adversely affected and our revenue could decline.
- We may have difficulty attracting new large customers or acquiring new customers due to the high costs of switching broadband equipment.
- Our results of operations are likely to vary significantly from period to period and be unpredictable. If we fail to meet the expectations of analysts or investors, the market price of our common stock could decline substantially.

OUR CORPORATE INFORMATION

We were incorporated in the State of Delaware on February 28, 2003. Our principal executive offices are located at 100 Old River Road, Andover, Massachusetts 01810, and our telephone number at that address is (978) 688-6706. Our website address is www.casa-systems.com. Information contained on our website is not incorporated by reference into this prospectus, and you should not consider information contained on our website to be part of this prospectus or in deciding whether to purchase shares of our common stock.

"Casa Systems," "Casa," our logo and other trademarks or tradenames of Casa Systems, Inc. appearing in this prospectus are our property. This prospectus also contains trademarks and trade names of other companies, which are the property of their respective owners. Solely for convenience, trademarks and trade names referred to in this prospectus may appear without the ® or ™ symbols, but such references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights or the right of the applicable licensor to these trademarks and trade names.

THE OFFERING

| | |
|--|--|
| Common stock offered | shares |
| Common stock to be outstanding after this offering | shares |
| Option to purchase additional shares | We have granted the underwriters an option, exercisable for 30 days after the date of this prospectus, to purchase up to an additional shares from us. |
| Use of proceeds | <p>The principal purposes of this offering are to create a public market for our common stock, facilitate access to the public equity markets, increase our visibility in the marketplace and obtain additional capital.</p> <p>We estimate that we will receive net proceeds from this offering of \$ million, based upon an assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and offering expenses payable by us. We intend to use the net proceeds from this offering for the repayment of indebtedness of \$ million and for working capital and general corporate purposes. In addition, we believe that opportunities may exist from time to time to expand our current business through acquisitions of or investments in complementary products, technologies or businesses. While we have no current agreements, commitments or understandings for any specific acquisitions at this time, we may use a portion of our net proceeds for these purposes. See “Use of Proceeds” for more information.</p> |
| Dividend policy | Although we have declared a special dividend on two separate occasions since our inception to provide a return of capital to stockholders and intend to declare an additional special dividend of \$ million prior to the closing of this offering, we do not anticipate declaring cash dividends following this offering. We expect to fund the additional special dividend with a debt financing. See “Dividend Policy” for more information. |
| Risk factors | See “Risk Factors” for a discussion of factors you should carefully consider before deciding to invest in our common stock. |
| Proposed Nasdaq Global Market symbol | “CASA” |

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The number of shares of our common stock to be outstanding after this offering is based on 6,590,326 shares of common stock outstanding as of December 1, 2016 and 8,076,394 additional shares of our common stock issuable upon the automatic conversion of all outstanding shares of our convertible preferred stock upon the closing of this offering and excludes:

- 40,000 shares of common stock issuable upon the exercise of stock options outstanding under our 2003 Stock Incentive Plan as of December 1, 2016, with a weighted-average exercise price of \$1.05 per share;
- 2,918,113 shares of common stock issuable upon the exercise of stock options outstanding under our 2011 Stock Incentive Plan as of December 1, 2016, with a weighted-average exercise price of \$18.37 per share;
- 279,740 shares of common stock issuable upon the vesting of restricted stock units outstanding under our 2011 Stock Incentive Plan as of December 1, 2016;
- 664,131 shares of common stock reserved for future issuance under our 2011 Stock Incentive Plan as of December 1, 2016, which plan will terminate as to new awards upon the closing of this offering; and
- additional shares of common stock that will become available for issuance in connection with this offering under our 2017 Stock Incentive Plan.

Except as otherwise noted, all information in this prospectus assumes:

- the automatic conversion of all outstanding shares of our convertible preferred stock into an aggregate of 8,076,394 shares of our common stock upon the closing of this offering; and
- no exercise by the underwriters of their option to purchase up to an additional shares.

SUMMARY CONSOLIDATED FINANCIAL DATA

The following tables present summary consolidated financial and other financial data for our business. The summary consolidated statement of operations data presented below for the years ended December 31, 2014 and 2015 have been derived from our audited consolidated financial statements included elsewhere in this prospectus. The summary consolidated statement of operations data for the nine months ended September 30, 2015 and 2016 and the summary consolidated balance sheet data as of September 30, 2016 have been derived from our unaudited condensed consolidated financial statements included elsewhere in this prospectus and have been prepared on a basis consistent with our audited consolidated financial statements. In the opinion of management, the unaudited data reflects all adjustments, consisting only of normal recurring adjustments, necessary for a fair presentation of the financial information in those statements. Our historical results are not necessarily indicative of the results to be expected in the future, and the results for any interim period are not necessarily indicative of the results to be expected for the full year. You should read this summary consolidated financial data in conjunction with the section of this prospectus titled “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our consolidated financial statements and related notes included elsewhere in this prospectus.

| | Year Ended December 31, | | Nine Months Ended September 30, | |
|---|----------------------------|------------------|------------------------------------|------------------|
| | 2014 | 2015 | 2015 | 2016 |
| (in thousands, except per share amounts) | | | | |
| Consolidated Statement of Operations Data: | | | | |
| Revenue: | | | | |
| Product | \$ 194,358 | \$ 247,588 | \$ 166,167 | \$ 191,763 |
| Service | 16,920 | 24,862 | 16,376 | 25,139 |
| Total revenue | <u>211,278</u> | <u>272,450</u> | <u>182,543</u> | <u>216,902</u> |
| Cost of revenue(1): | | | | |
| Product | 59,088 | 74,349 | 48,484 | 68,793 |
| Service | 5,917 | 5,265 | 3,652 | 5,983 |
| Total cost of revenue | <u>65,005</u> | <u>79,614</u> | <u>52,136</u> | <u>74,776</u> |
| Gross profit | <u>146,273</u> | <u>192,836</u> | <u>130,407</u> | <u>142,126</u> |
| Operating expenses: | | | | |
| Research and development(1) | 25,481 | 37,155 | 27,408 | 37,213 |
| Sales and marketing(1) | 21,409 | 36,157 | 23,876 | 27,289 |
| General and administrative(1) | 10,346 | 16,453 | 12,558 | 13,532 |
| Total operating expenses | <u>57,236</u> | <u>89,765</u> | <u>63,842</u> | <u>78,034</u> |
| Income from operations | 89,037 | 103,071 | 66,565 | 64,092 |
| Other income (expense), net | (2,942) | (1,408) | (1,561) | 953 |
| Income before provision for income taxes | 86,095 | 101,663 | 65,004 | 65,045 |
| Provision for income taxes | 26,387 | 33,742 | 23,405 | 16,228 |
| Net income | <u>\$ 59,708</u> | <u>\$ 67,921</u> | <u>\$ 41,599</u> | <u>\$ 48,817</u> |
| Cash dividends declared per common share or common share equivalent | <u>\$ 1.9173</u> | <u>\$ —</u> | <u>\$ —</u> | <u>\$ 2.9455</u> |
| Net income attributable to common stockholders(2): | | | | |
| Basic | <u>\$ 23,287</u> | <u>\$ 27,302</u> | <u>\$ 16,365</u> | <u>\$ 19,928</u> |
| Diluted | <u>\$ 23,843</u> | <u>\$ 30,402</u> | <u>\$ 18,144</u> | <u>\$ 20,006</u> |

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| | Year Ended December 31, | | Nine Months Ended September 30, | |
|---|----------------------------|-----------|------------------------------------|----------|
| | 2014 | 2015 | 2015 | 2016 |
| (in thousands, except per share amounts) | | | | |
| Net income per share attributable to common stockholders(2): | | | | |
| Basic | \$ 3.88 | \$ 4.30 | \$ 2.58 | \$ 3.04 |
| Diluted | \$ 3.65 | \$ 3.92 | \$ 2.36 | \$ 2.37 |
| Weighted-average shares used to compute net income per share attributable to common stockholders(2): | | | | |
| Basic | 5,997 | 6,348 | 6,344 | 6,564 |
| Diluted | 6,537 | 7,761 | 7,690 | 8,427 |
| Pro forma net income per share attributable to common stockholders (unaudited)(2): | | | | |
| Basic | | \$ | | \$ |
| Diluted | | \$ | | \$ |
| Weighted-average shares used to compute pro forma net income per share attributable to common stockholders (unaudited)(2): | | | | |
| Basic | | | | |
| Diluted | | | | |
| Other Financial Data: | | | | |
| Non-GAAP net income(3) | \$62,145 | \$ 72,812 | \$45,059 | \$53,301 |
| Adjusted EBITDA(3) | \$94,632 | \$115,541 | \$75,685 | \$74,517 |

(1) Includes stock-based compensation expense related to stock options, stock appreciation rights and restricted stock units granted to employees and non-employee consultants as follows:

| | Year Ended December 31, | | Nine Months Ended September 30, | |
|--|----------------------------|---------|------------------------------------|----------|
| | 2014 | 2015 | 2015 | 2016 |
| (in thousands) | | | | |
| Cost of revenue | \$ 161 | \$ 143 | \$ 103 | \$ 178 |
| Research and development expense | 852 | 1,843 | 1,422 | 1,637 |
| Sales and marketing expense | 598 | 775 | 542 | 846 |
| General and administrative expense | 380 | 4,560 | 3,340 | 3,313 |
| Total stock-based compensation expense | \$1,991 | \$7,321 | \$ 5,407 | \$ 5,974 |

(2) See Note 13 to our consolidated financial statements and Note 12 to our unaudited condensed consolidated financial statements, both included elsewhere in this prospectus, for an explanation of the calculations of basic and diluted net income per share attributable to common stockholders and pro forma basic and diluted net income per share attributable to common stockholders.

(3) These financial measures are not calculated in accordance with GAAP. See “Selected Consolidated Financial Data—Non-GAAP Financial Measures” for information regarding our use of these non-GAAP financial measures and a reconciliation of such measures to their nearest comparable financial measures calculated and presented in accordance with GAAP.

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| | As of September 30, 2016 | | |
|---|--------------------------|--------------------------|---|
| | Actual | Pro Forma ⁽²⁾ | Pro Forma As Adjusted ⁽³⁾ |
| | (in thousands) | | |
| Consolidated Balance Sheet Data: | | | |
| Cash and cash equivalents | \$161,706 | \$ | \$ |
| Working capital ⁽¹⁾ | 158,675 | | |
| Total assets | 331,668 | | |
| Long-term debt, including current portion | 7,593 | | |
| Total liabilities | 147,816 | | |
| Convertible preferred stock | 97,479 | — | |
| Total stockholders' equity | 86,373 | | |

(1) We define working capital as current assets less current liabilities.

(2) The pro forma balance sheet data gives effect to the automatic conversion of all outstanding shares of our convertible preferred stock into 8,076,394 shares of common stock upon the closing of this offering, our borrowing in _____, 2016 of \$ _____ million under our Term Loan B and the accrual of a special dividend of \$ _____ million, which was declared by our board of directors on _____.

(3) The pro forma as adjusted balance sheet data gives further effect to (i) our sale of _____ shares of common stock in this offering at an assumed initial public offering price of \$ _____ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and offering expenses payable by us and (ii) the repayment of \$ _____ million of indebtedness under our Term Loan B.

RISK FACTORS

Risks Related to Our Business and Our Industry

If we do not successfully anticipate technological shifts, market needs and opportunities, and develop new products and product enhancements that meet those technological shifts, needs and opportunities, we may not be able to compete effectively.

The broadband service provider market, including fixed and wireless, is characterized by rapid technological shifts and increasingly complex customer requirements to achieve scalable networks that accommodate rapidly increasing consumer demand for bandwidth. To compete effectively, we must continue to develop new technologies and products that address emerging technological trends and changing customer needs. The process of developing new technology is complex and uncertain, and the development of new offerings requires significant upfront investment that may not result in material improvements to existing products or result in marketable new products or costs savings or revenue for an extended period of time, if at all.

We believe that our culture of innovation is a significant factor in our ability to develop new products. If we are not able to attract and retain employees that are able to contribute to our culture of innovation, our ability to identify emerging technological trends and changing customer needs and successfully develop new products to address them could be adversely impacted.

The success of new products and enhancements also depends on many other factors, including timely completion and introduction, differentiation from products offered by competitors and previous versions of our own products and, ultimately, market acceptance of these new products and enhancements. In addition, new technologies or standards could render our existing products obsolete or less attractive to customers. If we are unable to successfully introduce new products and enhancements, we would not be able to compete effectively and our business, financial condition, results of operations and prospects could be materially adversely affected.

Our success depends in large part on broadband service providers' continued deployment of, and investment in, ultra-broadband network capabilities that make use of our solutions.

A significant portion of our product and solution suite is dedicated to enabling cable service providers to deliver voice, video and data services over newer and faster ultra-broadband networks. As a result, our success depends significantly on these cable service providers' continued deployment of, and investment in, their networks, which depends on a number of factors outside of our control. These factors include capital constraints, the presence of available capacity on legacy networks, perceived subscriber demand for ultra-broadband networks, competitive conditions within the broadband service provider industry and regulatory issues. If broadband service providers do not continue deploying and investing in their ultra-broadband networks in ways that involve our solutions, for these or other reasons, our business, financial condition, results of operations and prospects could be materially adversely affected.

We expect certain of our customers will continue to represent a substantial portion of our revenue.

Historically, certain of our customers have accounted for a significant portion of our revenue. For example, sales to Time Warner Cable accounted for 26% of our revenue for the nine months ended September 30, 2016, 14% of our revenue for the year ended December 31, 2015 and 41% of our revenue for the year ended December 31, 2014. In addition, sales to Rogers accounted for 17% of our revenue for the nine months ended September 30, 2016, sales to Liberty Global accounted for 17% of our revenue for the year ended December 31, 2015 and sales to SCSK Corporation accounted for 13% of our revenue for the year ended December 31, 2014. In addition, our customers generally make purchases from us on a purchase-order basis rather than pursuant to long-term contracts, and those that do enter long-term contracts typically have the right to terminate their contracts for convenience. We expect that large customers will continue to account for a substantial portion of

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our revenue for the foreseeable future. We may also see consolidation of our customer base, which could result in loss of customers. In addition, some of our large customers have used, and may in the future use, the sizes and relative importance of their orders to our business to require that we enter into agreements with more favorable terms than we would otherwise agree to and obtain price concessions. The loss of a significant customer, a significant delay or reduction in purchases by large customers or significant price concessions to one or more large customers, could have a material adverse effect on our business, financial condition, results of operations and prospects.

Timing of large orders and seasonality in our revenue may cause our quarterly revenue and results of operations to fluctuate and possibly decline materially from quarter to quarter.

Our customers tend to make large purchases from us when initiating or upgrading services based on our solutions, followed by smaller purchases for maintenance and ongoing support. As a result, our quarterly revenue and results of operations may be significantly impacted by one or a small number of large individual orders. For example, any cancellation of orders or any acceleration or delay in anticipated product purchases or the acceptance of shipped products by a large customer could materially affect our revenue and results of operations in any quarterly period. We may be unable to sustain or increase our revenue from other new or existing customers to offset the discontinuation of purchases by one of our larger customers. As a result, our quarterly revenue and results of operations are difficult to estimate and may fluctuate or decline materially from quarter to quarter.

In addition, we believe that there are significant seasonal factors which may cause revenue to be greater for the first and fourth quarters of our fiscal year as compared to the second and third quarters. We believe that this seasonality results from a number of factors, including the procurement, budgeting and deployment cycles of many of our customers. These seasonal variations may cause our quarterly revenue and results of operations to fluctuate or decline materially from quarter to quarter.

Our sales to the broadband service provider market are volatile and our sales cycles can be long and unpredictable. As a result, our sales and revenue are difficult to predict and may vary substantially from period to period, which may cause our revenue and results of operations to fluctuate and possibly decline significantly.

Our sales to the broadband service provider market have been characterized by large and sporadic purchases and long sales cycles. Sales activity often depends upon the stage of completion of expanding network infrastructures, the availability of funding and the extent to which broadband service providers are affected by regulatory, economic and business conditions in the countries in which they operate.

In addition, the timing of our sales and revenue recognition is difficult to forecast because of the unpredictability of our products' sales cycles. A sales cycle is the period between initial contact with a prospective customer and the sale of our products to that customer. Customer orders often involve the purchase of multiple products. These orders are complex and difficult to obtain because prospective customers generally consider a number of factors over an extended period of time before committing to purchase the products and solutions we sell. Customers, especially in the case of our large customers, often view the purchase of our products as a significant and strategic decision and require considerable time to evaluate, test and qualify our products prior to making a purchase decision and placing an order. The length of time that customers devote to their evaluation, contract negotiation and budgeting processes varies significantly, but can often exceed 24 months. During the sales cycle, we expend significant time and money on sales and marketing activities and make investments in evaluation equipment, all of which lower our operating margins, particularly if no sale occurs.

Even if a customer decides to purchase our products, there are many factors affecting the timing of our recognition of revenue, which makes our revenue difficult to forecast. For example, the sale of our products may be subject to acceptance testing or there may be unexpected delays in a customer's internal procurement processes, particularly for some of our larger customers, for whom our products represent a very small

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percentage of their total procurement activity. These factors may result in our inability to recognize revenue for months or years following a sale. In addition, other factors that are specific to particular customers can affect the timing of their purchases and the variability of our revenue recognition, including the strategic importance of a particular project to a customer, budgetary constraints and changes in their personnel. For all of these reasons, it is difficult to predict whether a sale will be completed, the particular period in which a sale will be completed and the period in which revenue from a sale will be recognized. If our sales cycles lengthen, our revenue could be lower than expected, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

We may not generate positive returns on our research and development investments.

Developing our products is expensive, and the investment in product development may involve a long payback cycle or may result in investments in technologies or standards that do not get adopted in the timeframe we anticipate, or at all. In the nine months ended September 30, 2016 and the years ended December 31, 2015 and 2014, respectively, our research and development expenses were \$37.2 million, or approximately 17.2% of our revenue, \$37.2 million, or approximately 13.6% of our revenue, and \$25.5 million, or approximately 12.1% of our revenue. We expect to continue to invest heavily in software development in order to expand the capabilities of our broadband and wireless infrastructure solutions, introduce new products and features and build upon our technology leadership. Our investments in research and development may not generate positive returns in a timely fashion or at all.

Our converged cable access platform, or CCAP, solutions currently represent all of our sales; this concentration may limit our ability to increase our revenue, and our business would be adversely affected in the event we are unable to sell one or more of our products.

We are heavily dependent upon the sales of our CCAP solutions. In the event we are unable to market and sell these products or any future product that represents a substantial amount of our revenue, our business, financial condition, results of operations and prospects could be materially adversely affected.

We have invested heavily in developing wireless solutions, and we face risks in seeking to expand our platform into the wireless market.

We have invested heavily in developing wireless solutions that have yet to generate revenue. We cannot guarantee that these investments, or any of our other investments in research and development will ever generate revenue or become profitable for us, and the failure of these investments to generate positive returns may adversely impact our business, financial condition, results of operations and prospects. The wireless market makes up a substantial portion of our total potential addressable market. In addition, expanding our offerings into the wireless market presents other significant risks and uncertainties, including potential distraction of management from other business operations that generate more substantial revenue, the dedication of significant research and development, sales and marketing, and other resources to this new business line at the expense of our other business operations and other risks that we may not have adequately anticipated.

We believe the broadband service provider industry is in the early stages of a major architectural shift toward the virtualization of networks and the use of networks with distributed architectures. If the architectural shift does not occur, if it does not occur at the pace we predict, or if the products and services we have developed are not attractive to our customers after such shift takes place, our revenues could decline.

We believe the broadband service provider industry is in the early stages of transitioning to the virtualization of networks and the use of networks with distributed architectures. We are developing products and services that we believe will be attractive to our customers and potential customers who make that shift. Our strategy depends in part on our belief that the industry shift to a software-centric cloud-based architecture and increasing densification will continue. In our experience, fundamental changes like this often take time to

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accelerate and the adoption rates of our customers may vary. As our customers determine their future network architectures and how to implement them, we may encounter delayed timing of orders, deferred purchasing decisions and reduced expenditures. These longer decision cycles and reduced expenditures may negatively impact our revenues, or make it difficult for us to accurately predict our revenues, either of which could materially adversely affect our business, financial condition, results of operations and prospects. Moreover, it is possible that our customers may reverse or fail to expand upon current trends toward virtualization and distributed architectures, which could result in significantly reduced demand for the products that we have developed and currently plan to develop.

We face intense competition, including from larger, well-established companies, and we may lack sufficient financial or other resources to maintain or improve our competitive position.

The market for broadband infrastructure solutions is intensely competitive, and we expect competition to increase in the future from established competitors and new market entrants. This competition could result in increased pricing pressure, reduced profit margins, increased sales and marketing expenses and our failure to increase, or the loss of, market share, any of which could materially adversely affect our business, financial condition, results of operations and prospects.

In the broadband service provider market, we primarily compete with larger and more established companies, such as Arris and Cisco. As we seek to enter the wireless market, we expect to encounter additional competition from large, established providers of wireless communication networks, including Ericsson and Nokia.

Many of our existing and potential competitors enjoy substantial competitive advantages, such as:

- greater name recognition and longer operating histories;
- larger sales and marketing budgets and resources;
- broader distribution and established relationships with customers;
- greater access to larger customer bases;
- greater customer support resources;
- greater manufacturing resources;
- the ability to leverage their sales efforts across a broader portfolio of products;
- the ability to leverage purchasing power with vendor subcomponents;
- the ability to incorporate additional functionality into their existing products;
- the ability to bundle offerings with other products and services;
- the ability to set more aggressive pricing policies;
- lower labor and development costs;
- greater resources to fund research and development or otherwise acquire new product offerings;
- larger intellectual property portfolios; and
- substantially greater financial, technical, research and development or other resources.

Our ability to compete will depend upon our ability to provide a better solution than our competitors at a price that offers superior value. We may be required to make substantial additional investments in research, development, sales and marketing in order to respond to competition.

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We also expect increased competition if our market continues to expand. Conditions in our market could change rapidly and significantly as a result of technological advancements or other factors. Current or potential competitors may be acquired by third parties that have greater resources available than we do. Our current or potential competitors might take advantage of the greater resources of the larger organization resulting from these acquisitions to compete more vigorously or broadly with us. In addition, continued industry consolidation might adversely affect customers' perceptions of the viability of smaller and even medium-sized companies, such as us, consequently, customers' willingness to purchase from us. Further, certain large customers may develop broadband infrastructure solutions for internal use and/or to broaden their portfolios of internally developed resources, which could allow these customers to become new competitors in the market.

If we are unable to sell additional products to our existing customers, our revenue growth will be adversely affected and our revenue could decline.

To increase our revenue, we must sell additional products to our existing customers and add new customers. For example, one of our sales strategies is to target sales of capacity expansions and implementation of wireless solutions at our current cable customers because they are familiar with the operational and economic benefits of our solutions. However, our existing customers may choose to use other providers for their infrastructure needs. If we fail to sell additional products to our existing customers, our business, financial condition, results of operations and prospects could be materially adversely affected.

We may have difficulty attracting new large customers or acquiring new customers due to the high costs of switching broadband equipment.

Broadband service providers typically need to make substantial investments when deploying network infrastructure, which can delay a purchasing decision. Once a broadband service provider has deployed infrastructure for a particular portion of its network, it is often difficult and costly to switch to another vendor's infrastructure. Unless we are able to demonstrate that our products offer significant performance, functionality or cost advantages that outweigh a customer's expense of switching from a competitor's product, it will be difficult for us to generate sales once that competitor's equipment has been deployed. Accordingly, if a customer has already deployed a competitor's product for its broadband infrastructure, it may be difficult for us to sell our products to that customer. If we fail to attract new large customers or acquire new customers, our business, financial condition, results of operations and prospects could be materially adversely affected.

We are exposed to the credit risk of some of our customers and to credit exposures in the event of turmoil in the credit markets, which could result in material losses.

Due to our reliance on significant customers, we are dependent on the continued financial strength of these customers. If one or more of our significant customers experience financial difficulties, it could result in uncollectable accounts receivable and our loss of such customers and anticipated revenue.

The majority of our sales are on an open credit basis, with typical payment terms of one year or less. We monitor individual customer payment capability in granting such open credit arrangements, seeking to limit such open credit to amounts we believe our customers can pay and maintain reserves we believe are adequate to cover exposure for doubtful accounts. However, there can be no assurance that our open credit customers will pay the amounts they owe to us or that the reserves we maintain will be adequate to cover such credit exposure. Our customers' failure to pay and/or our failure to maintain sufficient reserves could have a material adverse effect on our consolidated financial statements. In addition, in the event that turmoil in the credit markets makes it more difficult for some customers to obtain financing, those customers' ability to pay could be adversely impacted, which in turn could have a material adverse impact on our business and operations.

A portion of our sales is also derived through our resellers, which tend to have more limited financial resources than other customers and to present increased credit risk. Our resellers also typically have the ability to terminate their agreements with us for any reason upon advance written notice.

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We are exposed to fluctuations in currency exchange rates, which could adversely affect our business, financial condition, results of operations and prospects.

Our sales agreements are primarily denominated in U.S. dollars. Therefore, a strengthening U.S. dollar could increase the real cost of our products to our customers outside of the U.S., and alternatively a decrease in the value of the U.S. dollar relative to foreign currencies could increase our product and operating costs in foreign locations. If we are not able to successfully hedge against the risks associated with the currency fluctuations, our business, financial condition, results of operations and prospects could be materially adversely affected.

We generate a significant amount of revenue from sales to customers outside of the United States, and we are therefore subject to a number of risks associated with international sales and operations.

We have extensive international operations and generate a significant amount of revenue from sales to customers in Asia-Pacific, Europe and the Latin America. Our ability to grow our business and our future success will depend to a significant extent on our ability to continue to expand our operations and customer base worldwide.

As a result of our international reach, we must hire and train experienced personnel to staff and manage our foreign operations. To the extent that we experience difficulties in recruiting, training, managing and retaining an international staff, and specifically staff related to sales management and sales personnel, we may experience difficulties in sales productivity in foreign markets. We also enter into strategic relationships with resellers and sales agents in certain international markets where we do not have a local presence. If we are not able to maintain these relationships internationally or to recruit additional companies to enter into reseller and sales agent relationships, our future success in these international markets could be limited. Business practices in the international markets that we serve may differ from those in the U.S. and may require us in the future to include terms other than our standard terms in customer contracts. To the extent that we may enter into customer contracts in the future that include non-standard terms related to payment, warranties or performance obligations, our business, financial condition, results of operations and prospects could be materially adversely affected.

Our international sales and operations are subject to a number of risks, including the following:

- greater difficulty in enforcing contracts and accounts receivable collection and longer collection periods;
- increased expenses incurred in establishing and maintaining our international operations;
- fluctuations in exchange rates between the U.S. dollar and foreign currencies where we do business;
- greater difficulty and costs in recruiting local experienced personnel;
- wage inflation in certain growing economies;
- general economic and political conditions in these foreign markets;
- economic uncertainty around the world as a result of sovereign debt issues;
- communication and integration problems resulting from cultural and geographic dispersion;
- limitations on our ability to access cash resources in our international operations;
- ability to establish necessary business relationships and to comply with local business requirements;
- risks associated with trade restrictions and foreign legal requirements, including the importation, certification and localization of our products required in foreign countries;
- greater risk of unexpected changes in regulatory practices, tariffs and tax laws and treaties;

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- the uncertainty of protection for intellectual property rights in some countries;
- delays resulting from our need to comply with foreign cybersecurity laws;
- greater risk of a failure of our operations and employees to comply with both U.S. and foreign laws and regulations, including antitrust regulations, the FCPA, privacy and data protection laws and regulations and any trade regulations ensuring fair trade practices; and
- heightened risk of unfair or corrupt business practices in certain geographies and of improper or fraudulent sales arrangements that may impact financial results and result in restatements of, or irregularities in, financial statements.

These and other factors could harm our ability to gain future international revenue and, consequently, materially adversely affect our business, financial condition, results of operations and prospects. Expanding our existing international operations and entering into additional international markets will require significant management attention and financial commitments. Our failure to successfully manage our international operations and the associated risks effectively could limit our future growth or materially adversely affect our business, financial condition, results of operations and prospects.

We are subject to anti-corruption laws such as the U.S. Foreign Corrupt Practices Act of 1977, as amended.

We are subject to anti-corruption laws such as the U.S. Foreign Corrupt Practices Act of 1977, as amended, or the FCPA, which generally prohibits U.S. companies and their employees and intermediaries from making corrupt payments to foreign officials for the purpose of obtaining or keeping business, securing an advantage or directing business to another, and requires companies to maintain accurate books and records. Under the FCPA, U.S. companies may be held liable for the corrupt actions taken by directors, officers, employees, agents, or other strategic or local partners or representatives. We rely on non-employee third-party representatives and other intermediaries to develop international sales opportunities, and generally have less direct control over such third parties' actions taken on our behalf. If we or our intermediaries fail to comply with the requirements of the FCPA or similar legislation, governmental authorities in the United States and elsewhere could seek to impose civil and/or criminal fines and penalties, which could have a material adverse effect on our business, reputation, results of operations and financial condition. We intend to increase our international sales and business and, as such, the cost of complying with such laws, and the potential harm from our noncompliance, are likely to increase.

Failure to comply with anti-corruption laws, such as the FCPA and the United Kingdom Bribery Act 2010, or the Bribery Act, and similar laws associated with our activities outside the U.S., could subject us to penalties and other adverse consequences. Any violation of the FCPA, Bribery Act or similar laws could result in whistleblower complaints, adverse media coverage, investigations, loss of export privileges, severe criminal or civil sanctions suspension or debarment from U.S. government contracts, all of which could have a material adverse effect on our reputation, business, results of operations and prospects. In addition, responding to any enforcement action or related investigation may result in a materially significant diversion of management's attention and resources and significant defense costs and other professional fees.

We are subject to governmental export and import controls that could impair our ability to compete in international markets or subject us to liability if we violate these controls.

Our products may be subject to various export controls and because we incorporate encryption technology into certain of our products, certain of our products may be exported from various countries only with the required export license or through an export license exception. Furthermore, certain export control and economic sanctions laws prohibit the shipment of certain products, technology, software and services to embargoed countries and sanctioned governments, entities, and persons. If we fail to comply with the applicable export control laws, customs regulations, economic sanctions or other applicable laws, we could be subject to monetary damages or the imposition of restrictions which could materially adversely affect our business, financial

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condition, results of operations and prospects and could also harm our reputation. Further, there could be criminal penalties for knowing or willful violations, including incarceration for culpable employees and managers. Obtaining the necessary export license or other authorization for a particular sale may be time-consuming and may result in the delay or loss of sales opportunities.

In addition, various countries regulate the import of certain encryption technology and products, including through import permit and license requirements, and have enacted laws that could limit our ability to distribute our products or could limit our customers' ability to implement our products in those countries. Any change in export or import regulations, economic sanctions or related legislation, shift in the enforcement or scope of existing regulations or change in the countries, governments, persons or technologies targeted by such regulations could result in decreased use of our products by, or in our decreased ability to export or sell our products to, existing or potential customers with international operations or create delays in the introduction of our products into international markets. Any decreased use of our products or limitation on our ability to export or sell our products could materially adversely affect our business, financial condition, results of operations and prospects.

Our revenue growth rate in recent periods may not be indicative of our future performance.

Our revenue growth rate in recent periods may not be indicative of our future performance. Our revenue grew 29.0% from the year ended December 31, 2014 to the year ended December 31, 2015 and 18.8% from the nine months ended September 30, 2015 to the nine months ended September 30, 2016. We may not achieve similar revenue growth rates in future periods. You should not rely on our revenue for any prior quarterly or annual period as any indication of our future revenue or revenue growth. If we are unable to maintain consistent revenue or revenue growth, our business, financial condition, results of operations and prospects could be materially adversely affected.

The majority of our revenue growth has occurred since 2013, making it difficult to evaluate our future prospects.

We were founded in 2003 and booked our first revenue in 2006. The majority of our revenue growth has occurred since 2013, making it difficult to evaluate our future prospects, including our ability to plan for and manage future growth. We have encountered and will continue to encounter risks and difficulties frequently experienced by rapidly growing companies in constantly evolving industries, including the risks described in this prospectus. If we do not address these risks successfully, our business, financial condition, results of operations and prospects could be materially adversely affected, and the market price of our common stock could decline.

Our products are necessary for the operation of our customers' broadband service operations. Product quality problems, warranty claims, services disruptions, or other defects, errors or vulnerabilities in our products or services could harm our reputation and materially adversely affect our business, financial condition, results of operations and prospects.

We assist our customers in the operation of their broadband service operations. Failures of our products could result in significant interruptions in our customers' capabilities to maintain their networks and operations. Further, unsatisfactory performance could cause us to lose revenue or market share, increase our service costs, cause us to incur substantial costs in analyzing, correcting or redesigning our products, cause us to lose significant customers, subject us to liability for damages and divert our resources from other tasks, any one of which could materially adversely affect our business, financial condition, results of operations and prospects.

Additionally, errors, failures or bugs in our products could result in warranty claims or claims by customers for losses that they sustain or, in some cases, could allow customers to claim damages. In addition, in the past, we have had to replace certain components of products that we had shipped or provide remediation in response to the discovery of defects or bugs from failures in software protocols.

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Limitation of liability provisions in our standard terms and conditions of sale, and those of our resellers and sales agents, may not be enforceable under some circumstances or may not fully or effectively protect us from end-customer claims and related liabilities and costs. In some cases, including with respect to indemnification obligations under many of our agreements with customers and resellers, our contractual liability may be uncapped. The sale and support of our products also entail the risk of product liability claims. We maintain insurance to protect against certain types of claims associated with the use of our products, but our insurance coverage may not adequately cover any such claims. In addition, even claims that ultimately are unsuccessful could result in expenditures of funds in connection with litigation and divert management's time and other resources.

Our products must interoperate with operating systems, software applications and hardware, and comply with industry standards, that are developed by others, and if we are unable to devote the necessary resources for our products to interoperate with such software and hardware and comply with such standards, we may lose or fail to increase market share and experience a weakening demand for our products.

Generally, our products comprise only a part of and must interoperate with our customers' existing infrastructure, specifically their networks, servers, software and operating systems, which may be manufactured by a wide variety of vendors and original equipment manufacturers. Our products must also comply with industry standards, such as Data Over Cable Service Interface Specification, or DOCSIS, 3.0 and 3.1, which are established by third parties, in order to interoperate with such servers, storage, software and other networking equipment such that all systems function efficiently together. We may depend on other vendors to support prevailing industry standards. Also, some industry standards may not be widely adopted or implemented uniformly, and competing standards and other approaches may emerge that may be preferred by our customers.

In addition, when new or updated versions of these industry standards, software systems or applications are introduced, we must sometimes develop updated versions of our software so that our products will interoperate properly. We may not accomplish these development efforts quickly, cost-effectively or at all. These development efforts require capital investment and the devotion of engineering resources. If we fail to maintain compatibility with these systems and applications, our customers may not be able to adequately utilize our products, and we may lose or fail to increase market share and experience a weakening in demand for our products, among other consequences, which could materially adversely affect our business, financial condition, results of operations and prospects.

Our ability to sell our products is highly dependent on the quality of our support and services offerings, and our failure to offer high-quality support and services could have a material adverse effect on our business, financial condition, results of operations and prospects.

Once our products are deployed within our customers' networks, our customers depend on our support organization to resolve any issues relating to our products. Our provision of high-quality support is critical for the successful marketing and sale of our products. If we do not assist our customers in deploying our products effectively, do not succeed in helping our customers resolve post-deployment issues quickly or do not provide adequate ongoing support, it could adversely affect our ability to sell our products to existing customers and could harm our reputation with potential customers. In addition, our standard sales contracts require us to provide minimum service requirements to our customers on an ongoing basis and our failure to satisfy these requirements could expose us to claims under these contracts. Our failure to maintain high-quality support and services, including compliance with our contractual minimum service obligations, could have a material adverse effect on our business, financial condition, results of operations and prospects.

We base our inventory requirements on our forecasts of future sales. If these forecasts are materially inaccurate, we may procure inventory that we may be unable to use in a timely manner or at all.

We and our contract manufacturers procure components and build our products based on our forecasts. These forecasts are based on estimates of future demand for our products, which are in turn based on historical

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trends and analyses from our sales and marketing organizations, adjusted for overall market conditions. To the extent our forecasts are materially inaccurate or if we otherwise do not need such inventory, we may under- or over-procure inventory, and such inaccuracies in our forecasts could subject us to contractual damages and otherwise materially adversely affect our business, financial condition, results of operations and prospects.

Because we depend on third-party manufacturers to build our hardware, we are susceptible to manufacturing delays and pricing fluctuations that could prevent us from delivering customer orders on time, if at all, or on a cost-effective basis, which may result in the loss of sales and customers.

We depend on third-party contract manufacturers to manufacture our product hardware. A significant portion of our cost of revenue consists of payments to these third-party contract manufacturers. Our reliance on these third-party contract manufacturers reduces our control over the manufacturing process, quality assurance, product costs and product supply and timing, which exposes us to risk. To the extent that our products are manufactured at facilities in foreign countries, we may be subject to additional risks associated with complying with local rules and regulations in those jurisdictions. If we are unable to manage our relationships with our third-party contract manufacturers effectively, or if these third-party manufacturers suffer delays or disruptions for any reason, experience increased manufacturing lead times, capacity constraints or quality control problems in their manufacturing operations or fail to meet our future requirements for timely delivery, our ability to ship products to our customers would be severely impaired, and our business, financial condition, results of operations and prospects could be materially adversely affected.

Our contract manufacturers typically fulfill our supply requirements on the basis of individual orders. We do not have long-term contracts with our third-party manufacturers that guarantee capacity, the continuation of particular pricing terms or the extension of credit limits. Accordingly, they are not obligated to continue to fulfill our supply requirements, which could result in supply shortages, the prices we are charged for manufacturing services could be increased on short notice and we may not be able to develop alternate or second contract manufacturers in a timely manner. If we add or change contract manufacturers, or change any manufacturing plant locations within a contract manufacturer network, we would add additional complexity and risk to our supply chain management.

In addition, we may be subject to significant challenges in ensuring that quality, processes and costs, among other issues, are consistent with our expectations and those of our customers. A new contract manufacturer or manufacturing location may not be able to scale its production of our products at the volumes or quality we require. This could also adversely affect our ability to meet our scheduled product deliveries to our customers, which could damage our customer relationships and cause the loss of sales to existing or potential customers, late delivery penalties, delayed revenue or an increase in our costs which could adversely affect our gross margins. This could also result in increased levels of inventory subjecting us to increased excess and obsolete charges that could have a negative impact on our results of operations.

Because some of the key components in our products come from limited sources of supply, we are susceptible to supply shortages or supply changes, which could disrupt or delay our scheduled product deliveries to our customers and may result in the loss of sales and customers.

Our products rely on key components that our contract manufacturers purchase on our behalf from a limited number of suppliers, including Altera, Bell Power, Broadcom, Maxim, Mini-Circuits, Qorvo and Xilinx. We do not have guaranteed supply contracts with any of our component suppliers, and our suppliers could delay shipments or cease manufacturing such products or selling them to us at any time. The development of alternate sources for those components is time-consuming, difficult and costly. If we are unable to obtain a sufficient quantity of these components on commercially reasonable terms or in a timely manner, sales of our products could be delayed or halted entirely or we may be required to redesign our products. Any of these events could result in lost sales and damage to our customer relationships, which would adversely impact our business, financial condition, results of operations and prospects. In the event of a shortage or supply interruption from our

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component suppliers, we may not be able to develop alternate or second sources in a timely manner, on commercially reasonable terms or at all. In addition, certain of our customer contracts require us to notify our customers of any discontinuation of the products that we supply to them and to provide support for discontinued products, and lack of supply from our suppliers could leave us unable to fulfill our customer support obligations. Adverse changes to our relationships with our sole suppliers could result in lost sales and damage to our customer relationships, which would adversely impact our business, financial condition, results of operations and prospects.

We rely on resellers and sales agents to sell our products into certain international markets, and the loss of such resellers and sales agents could delay or harm our ability to deliver our products to our customers.

We rely upon resellers and sales agents to coordinate sales and distribution of our products in certain international markets. We provide our resellers and sales agents with specific training and programs to assist them in selling our products, but these steps may not be effective. In addition, our resellers and sales agents may be unsuccessful in marketing, selling and supporting our products and services. If we are unable to develop and maintain effective sales incentive programs for our resellers and sales agents, we may not be able to incentivize these resellers and sales agents to sell our products to customers. Any of our resellers and sales agents could elect to consolidate or enter into a strategic partnership with one of our competitors, which could reduce or eliminate our future opportunities with that reseller or sales agent. Our agreements with our resellers and sales agents may generally be terminated for any reason by either party with advance notice. We may be unable to retain these resellers and sales agents or secure additional or replacement resellers and sales agents. The replacement of one or more of our significant resellers or sales agents requires extensive training, and any new or expanded relationship with a reseller or sales agent may take several months or more to achieve productivity. Any of these events could materially adversely affect our business, financial condition, results of operations and prospects.

Our business and operations have experienced rapid growth in recent years, and if we do not appropriately manage any future growth or are unable to improve our systems and processes, our business, financial condition, results of operations and prospects will be adversely affected.

We have experienced rapid growth and increased demand for our products in recent years, which have placed a strain on our management, administrative, operational and financial infrastructure. For example, our revenue increased from \$211.3 million for the year ended December 31, 2014 to \$272.5 million for the year ended December 31, 2015 and from \$182.5 million for the nine months ended September 30, 2015 to \$216.9 million for the nine months ended September 30, 2016. To handle the increase in demand, we have significantly expanded our headcount, from 352 as of December 31, 2014 to 579 as of September 30, 2016, and expect to continue to increase our headcount. As we have grown, we have had to manage an increasingly larger and more complex array of internal systems and processes to scale with all aspects of our business, including our software development, contract manufacturing and purchasing, logistics and fulfillment and sales, maintenance and support. Our success will depend in part upon our ability to manage our growth effectively. To do so, we must continue to increase the productivity of our existing employees and continue to hire, train and manage new employees as needed. To manage domestic and international growth of our operations and personnel, we will need to continue to improve our operational, financial and management controls and our reporting processes and procedures and implement more extensive and integrated financial and business information systems. We may not be able to successfully implement these or other improvements to our systems and processes in an efficient or timely manner, and we may discover deficiencies in their capabilities or effectiveness. Our failure to improve our systems and processes, or their failure to operate effectively and in the intended manner, may result in disruption of our current operations and customer relationships, our inability to manage the growth of our business and our inability to accurately forecast our revenue, expenses and earnings.

If we are unable to hire, retain, train and motivate qualified personnel and senior management, including in particular our founders, our business, financial condition, results of operations and prospects could be adversely affected.

Our future success depends, in part, on our ability to continue to attract and retain highly skilled personnel, particularly software engineering and sales personnel. Competition for highly skilled personnel is often intense, particularly in the greater Boston region where we are headquartered, and we may not be able to attract and retain the highly skilled employees that we need to support our business. Many of the companies with which we compete for experienced personnel have greater resources than we have to provide more attractive compensation packages and other amenities. Research and development personnel are aggressively recruited by startup and growth companies, which are especially active in many of the technical areas and geographic regions in which we conduct product development. In addition, in making employment decisions, particularly in the high-technology industry, job candidates often consider the value of the stock-based compensation they are to receive in connection with their employment. Declines in the market price of our stock could adversely affect our ability to attract, motivate or retain key employees. If we are unable to attract or retain qualified personnel, or if there are delays in hiring required personnel, our business, financial condition, results of operations and prospects could be materially adversely affected.

Also, to the extent we hire personnel from competitors, or from certain customers or other third parties whose employees we have agreed not to solicit, we may be subject to allegations that such personnel have been improperly solicited, that such personnel have divulged proprietary or other confidential information or that former employers own certain inventions or other work product. Such claims could result in litigation.

Our future performance also depends on the continued services and continuing contributions of our founders and senior management to execute our business plan and to identify and pursue new opportunities and product innovations. Our employment arrangements with our employees do not require that they continue to work for us for any specified period, and therefore, they could terminate their employment with us at any time. In particular, the loss of Jerry Guo, our President and Chief Executive Officer, and Weidong Chen, our Chief Technology Officer, could have a material adverse impact on our business. Further, the loss of other members of our senior management team, sales and marketing team or engineering team, or any difficulty attracting or retaining other highly qualified personnel in the future, could significantly delay or prevent the achievement of our development and strategic objectives, which could materially adversely affect our business, financial condition, results of operations and prospects. Except with respect to Mr. Guo, we do not maintain “key person” life insurance on our officers, directors or key employees.

If we do not effectively expand and train our direct sales force, we may be unable to increase sales to our existing customers or add new customers, and our business will be adversely affected.

We depend on our direct sales force to increase sales with existing customers and to obtain new customers. As such, we have invested and will continue to invest substantially in our sales organization. In recent periods, we have been adding personnel to our sales function as we focus on growing our business, entering new markets and increasing our market share, and we expect to incur significant additional expenses in expanding our sales personnel in order to achieve revenue growth. There is significant competition for sales personnel with the skills and technical knowledge that we require. Our ability to achieve significant revenue growth will depend, in large part, on our success in recruiting, training, retaining and integrating sufficient numbers of sales personnel to support our growth, particularly in international markets. In addition, we have significantly increased the number of personnel in our sales and marketing departments in recent periods, with headcount growing from 67 as of December 31, 2014 to 94 as of December 31, 2015 to 114 as of September 30, 2016. New hires require significant training and may take significant time before they achieve full productivity. Our recent hires and planned hires may not become productive as quickly as we expect, and we may be unable to hire, retain or integrate into our corporate culture sufficient numbers of qualified individuals in the markets where we do business or plan to do business. If we are unable to hire, integrate and train a sufficient number of effective sales

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personnel, or the sales personnel we hire are not successful in obtaining new customers or increasing sales to our existing customer base, our business, financial condition, results of operations and prospects could be materially adversely affected.

Adverse economic conditions or reduced broadband infrastructure spending may adversely affect our business, financial condition, results of operations and prospects.

Our business depends on the overall demand for broadband connectivity. Weak domestic or global economic conditions, fear or anticipation of such conditions or a reduction in broadband infrastructure spending even if economic conditions improve, could materially adversely affect our business, financial condition, results of operations and prospects in a number of ways, including longer sales cycles, lower prices for our products and services, reduced sales and lower or no growth. Continued turmoil in the geopolitical environment in many parts of the world may also affect the overall demand for our products and services. Deterioration in global economic or political conditions could materially adversely affect our business, financial condition, results of operations and prospects in the future. A prolonged period of economic uncertainty or a downturn may also significantly affect the availability of capital and the terms and conditions of financing arrangements, including the overall cost of financing as well as the financial health or creditworthiness of our customers. Circumstances may arise in which we need, or desire, to raise additional capital, and such capital may not be available on commercially reasonable terms, or at all.

Breaches of our cybersecurity systems and measures could degrade our ability to conduct our business operations and deliver products and services to our customers, delay our ability to recognize revenue, compromise the integrity of our products, result in significant data losses and the theft of our intellectual property, damage our reputation, expose us to liability to third parties and require us to incur significant additional costs to maintain the security of our networks and data.

We increasingly depend upon our IT systems to conduct virtually all of our business operations, ranging from our internal operations and product development activities to our marketing and sales efforts and communications with our customers and business partners. Certain persons and entities may attempt to penetrate our network, or of the systems hosting our website, or our other networks and systems, and may otherwise seek to misappropriate our proprietary or confidential information or cause interruptions of our service. Because the techniques used by such persons and entities to access or sabotage networks and systems change frequently and may not be recognized until launched against a target, we may be unable to anticipate these techniques. In addition, sophisticated hardware and operating system software and applications that we produce or procure from third parties may contain defects in design or manufacture, including “bugs” and other problems that could unexpectedly interfere with the operation of our networks, system, or products. We have also outsourced a number of our business functions to third-parties, including our manufacturers and logistics providers, and our business operations also depend, in part, on the success of these third parties’ own cybersecurity measures. Additionally, we depend upon our employees and independent contractors to appropriately handle confidential data and deploy our IT resources in a safe and secure fashion that does not expose our network systems to security breaches and the loss of data. Accordingly, if any of our cybersecurity systems, processes or policies, or those of any of our manufacturers, logistics providers, customers or independent contractors fail to protect against unauthorized access, sophisticated hacking or terrorism and the mishandling, misuse, or misappropriation of data by employees, contractors or other persons or entities, our ability to conduct our business effectively could be damaged in a number of ways, including:

- sensitive data regarding our business, including intellectual property, personal information and other confidential and proprietary data, could be stolen;
- our electronic communications systems, including email and other methods, could be disrupted, and our ability to conduct our business operations could be seriously damaged until such systems can be restored;

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- our ability to process customer orders and electronically deliver products and services could be degraded, and our distribution channels could be disrupted, resulting in delays in revenue recognition, damage to our relationships with customers and prospective customers and damage to our reputation;
- defects and security vulnerabilities could be introduced into our software, products, network and systems, thereby damaging our reputation and perceived reliability and security of our products and potentially making the systems of our customers vulnerable to data loss and cyber incidents; and
- personally identifiable data relating to various parties, including end users, employees and business partners could be compromised.

Should any of the above events occur, we could be subject to significant claims for liability from our customers, employees or others and regulatory investigations or actions from governmental agencies. In addition, our ability to protect our intellectual property rights could be compromised and our reputation and competitive position could be significantly harmed. Any regulatory, contractual or other actions, litigations, investigations, fines, penalties and liabilities relating to any actual or alleged misuse or misappropriation of personal data or other confidential or proprietary information could be significant in terms of monetary exposure and reputational impact and necessitate changes to our business operations that may be disruptive to us. Additionally, we could incur significant costs in order to upgrade our cybersecurity systems, processes, policies and procedures and remediate damages. Consequently, our financial performance and results of operations could be materially adversely affected.

If we are unable to obtain, maintain or protect our intellectual property rights, our competitive position could be harmed or we could be required to incur significant expenses to enforce our rights.

Our success depends, in part, on our ability to protect our proprietary technology. We rely on trade secret, patent, copyright and trademark laws and confidentiality agreements with employees and third parties to protect and enforce our rights to our proprietary technology, all of which offer only limited protection.

In order to protect our trade secrets and proprietary information, we rely in significant part on confidentiality arrangements with our employees, licensees, independent contractors, advisers and customers. These arrangements may not be effective to prevent disclosure of confidential information, including trade secrets, and may not provide an adequate remedy in the event of unauthorized disclosure of confidential information. In addition, if others independently discover trade secrets and proprietary information, we would not be able to assert trade secret rights against such parties. Effective trade secret protection may not be available in every country in which our services are available or where we have employees or independent contractors. The loss or unavailability of trade secret protection could make it easier for third parties to compete with our products by copying functionality. In addition, any changes in, or unexpected interpretations of, the trade secret and employment laws in any country in which we operate may compromise our ability to enforce our trade secret and intellectual property rights. Costly and time-consuming litigation could be necessary to enforce and determine the scope of our proprietary rights, and failure to obtain or maintain trade secret protection could adversely affect our competitive business position.

We also rely on patents to protect certain aspects of our proprietary technology in the United States. The process of obtaining patent protection is expensive and time-consuming, and we may not be able to prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. We may choose not to seek patent protection for certain innovations and may choose not to pursue patent protection in certain jurisdictions. Further, we cannot guarantee that any of our pending patent applications will result in the issuance of patents or that any patents that do issue from such applications will have adequate scope to provide us with a competitive advantage. There is no assurance that all potentially relevant prior art relating to our patents and patent applications has been found. To the extent that additional patents are issued from our patent applications, which is not certain, third parties may challenge their validity, enforceability or scope, which may result in such patents being narrowed or invalidated. If third parties have prepared and filed patent applications in the United States

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that also claim technology to which we have rights, we may have to participate in interference proceedings in the United States Patent and Trademark Office to determine priority of invention for patent applications filed before March 16, 2013, or in derivation proceedings to determine inventorship for patent applications filed after such date. In addition, patents have a limited lifespan. In the United States, the natural expiration of a patent is generally 20 years after its effective filing date. Even if patents covering our products are obtained by us or by our licensors, once such patents expire, we may be vulnerable to competition from similar products. Moreover, the rights granted under any issued patents may not provide us with adequate protection or competitive advantages, and, as with any technology, competitors may be able to develop similar or superior technologies to our own now or in the future.

Despite our efforts, the steps we have taken to protect our proprietary rights may not be adequate to preclude misappropriation of our proprietary information or infringement of our intellectual property rights, and our ability to police such misappropriation or infringement is uncertain, particularly in countries outside of the United States. Competitors may use our technologies in jurisdictions where we have not obtained or are unable to adequately enforce intellectual property protection to develop their own products. We are also restricted from asserting our intellectual property rights against certain customers under our contracts with them.

Detecting and protecting against the unauthorized use of our products, technology and proprietary rights is expensive, difficult and, in some cases, impossible. Litigation may be necessary in the future to enforce or defend our intellectual property rights, to protect our trade secrets or to determine the validity and scope of the proprietary rights of others. Such litigation could result in substantial costs and diversion of management resources, either of which could materially adversely affect our business, financial condition, results of operations and prospects, and there is no guarantee that we would be successful. Furthermore, many of our current and potential competitors have the ability to dedicate substantially greater resources to protecting their technology or intellectual property rights than we do. Accordingly, despite our efforts, we may not be able to prevent third parties from infringing upon or misappropriating our intellectual property, which could result in a substantial loss of our market share. Even if we did succeed in enforcing our intellectual property through litigation, this may be costly and divert management resources.

Finally, certain of our license agreements with our third-party licensors provide for joint ownership of developments or inventions that we create that are related to the subject matter of the license. Other agreements to which we are subject, including member agreements with standards bodies and research and development consortia, may require us to disclose and/or grant licenses to technology that is related to the subject matter of the standards body or the consortium and included in our contributions to specifications established by these bodies. These agreements could result in third parties having ownership or license rights to important intellectual property that we otherwise may have elected to maintain exclusive ownership of.

If our trademarks and trade names are not adequately protected, then we may not be able to build name recognition in our markets of interest and our business may be adversely affected.

We have not applied for trademark registration for our name and logo in all geographic markets. In those markets where we have applied for trademark registration, failure to secure those registrations could adversely affect our ability to enforce and defend our trademark rights and result in indemnification claims. Our registered or unregistered trademarks or trade names, as well as the registered or unregistered trademarks or trade names used by our resellers or distributors associated with our products, may be challenged, infringed, circumvented or declared generic or determined to be infringing on other marks. Any claim of infringement by a third party, even those claims without merit, could cause us to incur substantial costs defending against such claim, could divert management attention from our business and could require us to cease use of such intellectual property in certain geographic markets. Over the long term, if we, or our resellers or distributors, are unable to establish name recognition based on our trademarks and trade names, then our business may be adversely affected.

Assertions by third parties of infringement or other violations by us of their intellectual property rights, or other lawsuits asserted against us, could result in significant costs and materially adversely affect our business, financial condition, results of operations and prospects.

Patent and other intellectual property disputes are common in the broadband infrastructure industry and have resulted in protracted and expensive litigation for many companies. Many companies in the broadband infrastructure industry, including our competitors and other third parties, as well as non-practicing entities, own large numbers of patents, copyrights, trademarks and trade secrets, which they may use to assert claims of patent infringement, misappropriation or other violations of intellectual property rights against us. From time to time, they have or may in the future also assert such claims against us, our customers whom we typically indemnify against claims that our products infringe, misappropriate or otherwise violate the intellectual property rights of third parties.

As the number of products and competitors in our market increases and overlaps occur, claims of infringement, misappropriation and other violations of intellectual property rights may increase. Any claim of infringement, misappropriation or other violations of intellectual property rights by a third party, even those without merit, could cause us to incur substantial costs defending against the claim, distract our management from our business and require us to cease use of such intellectual property, which may impact important elements of our business. In addition, some claims for patent infringement may relate to subcomponents that we purchase from third parties. If these third parties are unable or unwilling to indemnify us for these claims, we could be substantially harmed.

The patent portfolios of most of our competitors are larger than ours. This disparity may increase the risk that our competitors may sue us for patent infringement and may limit our ability to counterclaim for patent infringement or settle through patent cross-licenses. In addition, future assertions of patent rights by third parties, and any resulting litigation, may involve patent holding companies or other adverse patent owners who have no relevant product revenue and against whom our own patents may therefore provide little or no deterrence or protection. We cannot guarantee that we are not infringing or otherwise violating any third-party intellectual property rights.

The third-party asserters of intellectual property claims may be unreasonable in their demands, or may simply refuse to settle, which could lead to expensive settlement payments, prolonged periods of litigation and related expenses, additional burdens on employees or other resources, distraction from our business, supply stoppages and lost sales. Moreover, in recent years, individuals and groups that are non-practicing entities, commonly referred to as “patent trolls”, have purchased patents and other intellectual property assets for the purpose of making claims of infringement in order to extract settlements. In the past, we have received threatening letters or notices and have been the subject of claims that our solutions and underlying technology infringe or violate the intellectual property rights of others. Responding to such claims, regardless of their merit, can be time consuming, costly to defend in litigation, divert management’s attention and resources, damage our reputation and brand, and cause us to incur significant expenses.

An adverse outcome of a dispute may require us to pay substantial damages including treble damages if we are found to have willfully infringed a third party’s patents; cease making, licensing or using solutions that are alleged to infringe or misappropriate the intellectual property of others; expend additional development resources to attempt to redesign our products or services or otherwise to develop non-infringing technology, which may not be successful; enter into potentially unfavorable royalty or license agreements in order to obtain the right to use necessary technologies or intellectual property rights; and indemnify our partners and other third parties. Any damages or royalty obligations we may become subject to as a result of an adverse outcome, and any third-party indemnity we may need to provide, could materially adversely affect our business, financial condition, results of operations and prospects. Royalty or licensing agreements, if required or desirable, may be unavailable on terms acceptable to us, or at all, and may require significant royalty payments and other expenditures. Further, there is little or no information publicly available concerning market or fair values for license fees, which can lead to

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overpayment of license or settlement fees. In addition, some licenses may be non-exclusive, and therefore our competitors may have access to the same technology licensed to us. Suppliers subject to third-party intellectual property claims also may choose or be forced to discontinue or alter their arrangements with us, with little or no advance notice to us. Any of these events could materially adversely affect our business, financial condition, results of operations and prospects.

Unavailability, termination or breach of licenses to third-party software and other intellectual property could materially harm our business.

Many of our products and services include software or other intellectual property licensed from third parties, and we otherwise use software and other intellectual property licensed from third parties in our business. We exercise no control over our third-party licensors, and the failure or unsuitability of their software or other intellectual property exposes us to risks that we will have little ability to control. For example, a licensor may have difficulties keeping up with technological changes or may stop supporting the software or other intellectual property that it licenses to us; our licensors may also have the ability to terminate our licenses if the licensed technology becomes the subject of a claim of intellectual property infringement. Also, it will be necessary in the future to renew licenses, expand the scope of existing licenses or seek new licenses, relating to various aspects of these products and services or otherwise relating to our business, which may result in increased license fees. Any new licenses may not be available on acceptable terms, if at all. In addition, a third party may assert that we or our customers are in breach of the terms of a license, which could, among other things, give such third party the right to terminate a license or seek damages from us, or both. The inability to obtain or maintain certain licenses or other rights or to obtain or maintain such licenses or rights on favorable terms, or the need to engage in litigation regarding these matters, could result in delays in releases of products and services and could otherwise disrupt our business, until equivalent technology can be identified, licensed or developed, if at all, and integrated into our products and services or otherwise in the conduct of our business. Moreover, the inclusion in our products and services of software or other intellectual property licensed from third parties on a nonexclusive basis may limit our ability to differentiate our products from those of our competitors. Any of these events could have a material adverse effect on our business, financial condition, results of operations and prospects.

Our products contain third-party open source software components, and failure to comply with the terms of the underlying open source software licenses could restrict our ability to sell our products.

Our products contain software modules licensed to us by third-party authors under “open source” licenses. Use and distribution of open source software may entail greater risks than use of third-party commercial software, as open source licensors generally do not provide warranties or other contractual protections regarding infringement claims or the quality of the code. Some open source licenses contain requirements that we make available source code for modifications or derivative works we create based upon the type of open source software that we use. If we combine our software with open source software in a certain manner, we could, under certain open source licenses, be required to release portions of the source code of our software to the public. This would allow our competitors to create similar products with lower development effort and time and ultimately could result in a loss of product sales for us.

Although we monitor our use of open source software to avoid subjecting our products to undesirable conditions, we do not have a formal open source policy in place that gives our developers written guidance on what open source licenses we deem “safe.” Further, even where we believe an open source license may have acceptable conditions, the terms of many open source licenses have not been interpreted by U.S. courts, and these licenses could be construed in a way that could impose unanticipated conditions or restrictions on our ability to commercialize our products. Moreover, we cannot assure you that our informal processes for controlling our use of open source software in our products will be effective or that our compliance with open source licenses, including notice and attribution requirements, are adequate. If we are held to have breached the terms of an open source software license, we could be required to seek licenses from third parties to continue offering our products on terms that are not economically feasible, to re-engineer our products, to discontinue the sale of our products if

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re-engineering could not be accomplished on a timely basis or to make generally available, in source code form, our proprietary code. We also could face infringement claims. Any of the foregoing could materially adversely affect our business, financial condition, results of operations and prospects.

Our failure to adequately protect personal data and to comply with related laws and regulations could result in material liability.

A wide variety of provincial, state, national, foreign, and international laws and regulations apply to the collection, use, retention, protection, disclosure, transfer (including across national boundaries), and other processing of personal data. These data protection and privacy-related laws and regulations are evolving and being tested in courts and may result in ever-increasing regulatory and public scrutiny and escalating levels of enforcement and sanctions.

Any failure by us to comply with applicable laws and regulations, or to protect such data, could result in enforcement action against us, including fines, imprisonment of company officials and public censure, claims for damages by end-customers and other affected persons and entities, damage to our reputation and loss of goodwill, and other forms of injunctive or operations-limiting relief, any of which could have a material adverse effect on our operations, financial performance, and business.

Definitions of personal data and personal information, and requirements relating to the same under applicable laws and regulations within the European Union, the United States, and elsewhere, change frequently and are subject to new and different interpretations by courts and regulators. Because the interpretation and application of laws and other obligations relating to privacy and data protection are uncertain, it is possible that existing or future laws, regulations, and other obligations may be interpreted and applied in a manner that is inconsistent with our data management practices. We may be required to expend significant resources to modify our products and otherwise adapt to these changes, which we may be unable to do on commercially reasonable terms or at all, and our ability to develop new products and features could be limited. These developments could harm our business, financial condition and results of operations. Even if not subject to legal challenge, the perception of privacy concerns, whether or not valid, may harm our reputation and inhibit adoption of our products by current and prospective customers.

Failure to comply with governmental laws and regulations could materially adversely affect our business, financial condition, results of operations and prospects.

Our business is subject to regulation by various federal, state, local and foreign governmental agencies, including agencies responsible for monitoring and enforcing employment and labor laws, workplace safety, product safety, environmental laws, consumer protection laws, anti-bribery laws, import/export controls, federal securities laws and tax laws and regulations. In certain jurisdictions, these regulatory requirements may be more stringent than those in the United States. From time to time, we may receive inquiries from such governmental agencies or we may make voluntary disclosures regarding our compliance with applicable governmental regulations or requirements. Noncompliance with applicable government regulations or requirements could subject us to sanctions, mandatory product recalls, enforcement actions, disgorgement of profits, fines, damages, civil and criminal penalties or injunctions. If any governmental sanctions are imposed, or if we do not prevail in any possible civil or criminal litigation, our business, financial condition, results of operations and prospects could be materially adversely affected. In addition, responding to any action will likely result in a significant diversion of management's attention and resources and an increase in professional fees. Enforcement actions and sanctions could materially adversely affect our business, financial condition, results of operations and prospects.

We may invest in or acquire other businesses, which could require significant management attention, disrupt our business, dilute stockholder value and adversely affect our business, financial condition, results of operations and prospects.

As part of our growth strategy, we may make investments in or acquire complementary companies, products or technologies. We do not have experience in making investments in other companies nor have we made any

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acquisitions to date, and as a result, our ability as an organization to evaluate and/or complete investments or acquire and integrate other companies, products or technologies in a successful manner is unproven. We may not be able to find suitable investment or acquisition candidates, and we may not be able to complete such investments or acquisitions on favorable terms, if at all. If we do complete investments or acquisitions, we may not ultimately strengthen our competitive position or achieve our goals, and any investments or acquisitions we complete could be viewed negatively by our customers, investors and securities analysts.

In addition, investments and acquisitions may result in unforeseen operating difficulties and expenditures. For example, if we are unsuccessful at integrating any acquisitions or retaining key talent from those acquisitions, or the technologies associated with such acquisitions, into our company, the business, financial condition, results of operations and prospects of the combined company could be materially adversely affected. Any integration process may require significant time and resources, and we may not be able to manage the process successfully. We may not successfully evaluate or utilize the acquired technology or personnel or accurately forecast the financial effects of an acquisition transaction, including accounting charges. We may have to pay cash, incur debt or issue equity securities to pay for any such investment or acquisition, each of which could adversely affect our financial condition or the market price of our common stock. The sale of equity or issuance of debt to finance any such acquisitions could result in dilution to our stockholders. The incurrence of indebtedness would result in increased fixed obligations and could also include covenants or other restrictions that would impede our ability to manage our operations. Moreover, if the investment or acquisition becomes impaired, we may be required to take an impairment charge, which could adversely affect our financial condition or the market price of our common stock.

Our international operations may give rise to potentially adverse tax consequences.

We are expanding our international operations and staff to better support our growth into the international markets. We generally conduct our international operations through wholly-owned subsidiaries and report our taxable income in various jurisdictions worldwide based upon our business operations in those jurisdictions. Our corporate structure and associated transfer pricing policies contemplate the business flows and future growth into the international markets, and consider the functions, risks and assets of the various entities involved in the intercompany transactions. The amount of taxes we pay in different jurisdictions may depend on the application of the tax laws of the various jurisdictions, including the United States, to our international business activities, changes in tax rates, new or revised tax laws or interpretations of existing tax laws and policies and our ability to operate our business in a manner consistent with our corporate structure and intercompany arrangements. The taxing authorities of the jurisdictions in which we operate may challenge our methodologies for pricing intercompany transactions, which are required to be computed on an arm's-length basis pursuant to the intercompany arrangements or disagree with our determinations as to the income and expenses attributable to specific jurisdictions. If such a challenge or disagreement were to occur, and our position was not sustained, we could be required to pay additional taxes, interest and penalties, which could result in one-time tax charges, higher effective tax rates, reduced cash flows and lower overall profitability of our operations. Our financial statements could fail to reflect adequate reserves to cover such a contingency.

Current U.S. tax laws could impact the tax treatment of our foreign earnings by creating limits on the ability of taxpayers to claim and utilize foreign tax credits and deferring certain tax deductions until earnings outside of the United States are repatriated to the United States. Due to our existing, and anticipated expansion of, our international business activities, any changes in the U.S. taxation of such activities may increase our worldwide effective tax rate and adversely affect our financial condition and operating results.

Taxing authorities may successfully assert that we should have collected or in the future should collect sales and use, value added or similar taxes, and we could be subject to liability with respect to past or future sales, which could adversely affect our operating results.

We do not collect sales and use, value added or similar taxes in all jurisdictions in which we have sales, and we have been advised that such taxes are not applicable to our products and services in certain jurisdictions.

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Sales and use, value added and similar tax laws and rates vary greatly by jurisdiction. Certain jurisdictions in which we do not collect such taxes may assert that such taxes are applicable, which could result in tax assessments, penalties and interest, to us or our end-customers for the past amounts, and we may be required to collect such taxes in the future. If we are unsuccessful in collecting such taxes from our end-customers, we could be held liable for such costs. Such tax assessments, penalties and interest, or future requirements may adversely affect our operating results.

If we needed to raise additional capital to expand our operations and invest in new products, our failure to do so on favorable terms could reduce our ability to compete and could materially adversely affect our business, financial condition, results of operations and prospects.

We expect that our existing cash and cash equivalents, together with our net proceeds from this offering, will be sufficient to meet our anticipated cash needs for at least the next 12 months. However, if we need to raise additional funds to expand our operations and invest in new products, we may not be able to obtain additional debt or equity financing on favorable terms, if at all. If we raise additional equity financing, our stockholders may experience significant dilution of their ownership interests, and the market price of our common stock could decline. Furthermore, we intend to engage in a debt financing and the holders of such debt will have priority over the holders of common stock, and we expect to be required to accept terms that will restrict our ability to incur additional indebtedness and impose other restrictions on our business. We also expect to be required to take other actions that would otherwise be in the interests of the debt holders, including maintaining specified liquidity or other ratios, any of which could materially adversely affect our business, financial condition, results of operations and prospects.

Our business is subject to the risks of fire, power outages, floods and other catastrophic events and to interruption by manmade problems such as terrorism.

Our corporate headquarters and the operations of our key manufacturing vendors, as well as many of our customers, are located in areas exposed to risks of natural disasters such as fires and floods. A significant natural disaster, such as a fire, flood or other catastrophic events such as a disease outbreak, could have a material adverse effect on our or their business, which could in turn materially adversely affect our business, financial condition, results of operations and prospects. For example, in the event our manufacturing or logistics abilities are hindered by any of the events discussed above, shipments could be delayed, which could result in missed financial targets, such as revenue and shipment targets, for a particular quarter. Further, if a natural disaster occurs in a region from which we derive a significant portion of our revenue, customers in that region may delay or forego purchases of our products, which could materially adversely affect our business, financial condition, results of operations and prospects. In addition, acts of terrorism could cause disruptions in our business or the business of our manufacturers, logistics providers, partners or customers or the economy as a whole. All of the aforementioned risks may be compounded if our disaster recovery plans and those of our manufacturers, logistics providers or partners prove to be inadequate. To the extent that any of the above results in delays or cancellations of customer orders, or delays in the manufacture, deployment or shipment of our products, our business, financial condition, results of operations and prospects would be adversely affected.

Regulations affecting broadband infrastructure could reduce demand for our products.

Laws and regulations governing the Internet and electronic commerce are emerging but remain largely unsettled, even in the areas where there has been some legislative action. Regulations may focus on, among other things, assessing access or settlement charges, or imposing tariffs or regulations based on the characteristics and quality of products, either of which could restrict our business or increase our cost of doing business. Government regulatory policies are likely to continue to have a major impact on the pricing of existing and new network services and, therefore, are expected to affect demand for those services and the communications products, including our products, supporting those services.

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Any changes to existing laws or the adoption of new regulations by federal or state regulatory authorities or any legal challenges to existing laws or regulations affecting IP networks could materially adversely affect the market for our products. Moreover, customers may require us, or we may otherwise deem it necessary or advisable, to alter our products to address actual or anticipated changes in the regulatory environment. Our inability to alter our products or address any regulatory changes could have a material adverse effect on our consolidated financial position, results of operations or cash flows.

Our credit facility contains restrictive and financial covenants that may limit our operating flexibility.

Our credit facility contains certain restrictive covenants that either limit our ability to, or require a mandatory prepayment in the event we, incur additional indebtedness and liens, merge with other companies or consummate certain changes of control, acquire other companies, engage in new lines of business, change business locations, make certain investments, make any payments on any subordinated debt, transfer or dispose of assets, amend certain material agreements, and enter into various specified transactions. We, therefore, may not be able to engage in any of the foregoing transactions unless we obtain the consent of our lender or prepay the outstanding amount under the credit facility. The credit facility also contains certain financial covenants and financial reporting requirements. Our obligations under the credit facility are secured by substantially all of our assets, excluding intellectual property and investments in foreign subsidiaries. We may not be able to generate or sustain sufficient cash flow or sales to meet the financial covenants or pay the principal and interest under the credit facility. Furthermore, our future working capital, borrowings or equity financing could be unavailable to repay or refinance the amounts outstanding under the credit facility. In the event of a liquidation, our lender would be repaid all outstanding principal and interest prior to distribution of assets to unsecured creditors, and the holders of our common stock would receive a portion of any liquidation proceeds only if all of our creditors, including our lender, were first repaid in full.

Risks Related to Our Common Stock and this Offering

Our results of operations are likely to vary significantly from period to period and be unpredictable. If we fail to meet the expectations of analysts or investors, the market price of our common stock could decline substantially.

Our results of operations have historically varied from period to period, and we expect that this trend will continue. As a result, you should not rely upon our past financial results for any period as indicators of future performance. Our results of operations in any given period can be influenced by a number of factors, many of which are outside of our control and may be difficult to predict, including the factors described above as well as:

- changes in our pricing policies, whether initiated by us or as a result of competition;
- the amount and timing of operating costs and capital expenditures related to the operation and expansion of our business;
- changes in the growth rate of the broadband services market;
- the actual or rumored timing and success of new product and service introductions by us or our competitors or any other change in the competitive landscape of our industry, including consolidation among our competitors or customers;
- our ability to successfully expand our business geographically;
- insolvency or credit difficulties confronting our customers, which could adversely affect their ability to purchase or pay for our products and services, or confronting our key suppliers, including our sole source suppliers, which could disrupt our supply chain;
- our inability to fulfill our customers' orders due to supply chain delays, access to key commodities or technologies or events that impact our manufacturers or their suppliers;
- the cost and possible outcomes of any potential litigation matters;

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- our overall effective tax rate, including impacts caused by any changes in the valuation of our deferred tax assets and any new legislation or regulatory developments;
- increases or decreases in our expenses caused by fluctuations in foreign currency exchange rates; and
- general economic conditions, both domestically and in foreign markets.

Any one of the factors above or the cumulative effect of several of the factors described above may result in significant fluctuations in our financial and other results of operations. This variability and unpredictability could result in our failure to meet expectations of securities analysts or investors for a particular period. If we fail to meet or exceed such expectations for these or any other reasons, the market price of our common stock could decline substantially, and we could face costly lawsuits, including securities class action suits.

An active trading market for our common stock may not develop, and you may not be able to resell your shares of our common stock at or above the initial offering price.

Before this offering, there was no public trading market for our common stock. If a market for our common stock does not develop or is not sustained, it may be difficult for you to sell your shares of common stock at an attractive price, at the time that you would like to sell them, or at all. The initial public offering price of our common stock was determined through negotiations between us and the underwriters. This initial public offering price may not be indicative of the market price of our common stock after the offering. We cannot predict the prices at which our common stock will trade. It is possible that in one or more future periods our results of operations may be below the expectations of public market analysts and investors and, as a result of these and other factors, the price of our common stock may fall.

The market price of our common stock may be volatile, which could result in substantial losses for investors purchasing shares in this offering.

The market price of our common stock could be subject to significant fluctuations after this offering, and it may decline below the initial public offering price. Some of the factors that may cause the market price of our common stock to fluctuate include:

- price and volume fluctuations in the overall stock market from time to time;
- volatility in the market price and trading volume of comparable companies;
- actual or anticipated changes in our earnings or fluctuations in our results of operations or in the expectations of securities analysts;
- announcements of technological innovations, new products, strategic alliances, or significant agreements by us or by competitive vendors;
- announcements by our customers regarding significant increases or decreases in capital expenditures;
- departure of key personnel;
- litigation involving us or that may be perceived as having an impact on our business;
- changes in general economic, industry and market conditions and trends;
- investors' general perception of us;
- sales of large blocks of our stock; and
- announcements regarding further industry consolidation.

In the past, following periods of volatility in the market price of a company's securities, securities class action litigation has often been brought against that company. Because of the potential volatility of our stock

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price, we may become the target of securities litigation in the future. Securities litigation could result in substantial costs and divert management's attention and resources from our business.

We will have broad discretion in the use of the net proceeds from this offering and may not use them effectively.

Our management will have broad discretion to use the net proceeds from this offering, and you will be relying on the judgment of our management regarding the application of these proceeds. We intend to use the net proceeds from this offering for the repayment of outstanding indebtedness of \$ million and for working capital and general corporate purposes. Because we will have broad discretion in the application of the net proceeds from this offering, our management may fail to apply these funds effectively, which could adversely affect our ability to operate and grow our business. You will not have the opportunity to influence our decisions on how to use our net proceeds from this offering.

If securities or industry analysts do not publish, or cease publishing, research or reports about us, our business or our market, or if they publish negative evaluations of our stock or the stock of other companies in our industry, the price of our stock and trading volume could decline.

The trading market for our common stock will be influenced by the research and reports that industry or securities analysts may publish about us, our business, our market or our competitors. We do not currently have and may never obtain research coverage by industry or financial analysts. If no analysts or few analysts commence coverage of us, the trading price of our stock would likely decrease. Even if we do obtain analyst coverage, if one or more of the analysts covering our business downgrade their evaluations of our stock or the stock of other companies in our industry, the price of our stock could decline. If one or more of these analysts cease to cover our stock, we could lose visibility in the market for our stock, which in turn could cause our stock price to decline.

Purchasers in this offering will incur immediate and substantial dilution in the book value of their investment as a result of this offering.

If you purchase common stock in this offering, you will incur immediate and substantial dilution of \$ per share, representing the difference between the assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, and our pro forma as adjusted net tangible book value per share after giving effect to this offering and the automatic conversion of all outstanding shares of our convertible preferred stock into shares of common stock in connection with the closing of this offering. Moreover, to the extent outstanding options are exercised, you will incur further dilution. See "Dilution".

Because we do not expect to declare any dividends on our common stock for the foreseeable future following this offering, investors in this offering may never receive a return on their investment.

Although we have paid special dividends in the past, you should not rely on an investment in our common stock to provide dividend income. Following this offering, we do not anticipate that we will declare any cash dividends to holders of our common stock in the foreseeable future. Instead, we plan to retain any earnings to maintain and expand our existing operations. Accordingly, investors must rely on sales of their common stock after price appreciation, which may never occur, as the only way to realize any return on their investment. As a result, investors seeking cash dividends should not purchase our common stock.

Insiders will continue to have substantial control over us after this offering, which could limit your ability to influence the outcome of key transactions, including a change of control.

After this offering, our directors and executive officers and their affiliates will beneficially own, in the aggregate, approximately % of our outstanding common stock, assuming no exercise of the underwriters' option to purchase additional shares of our common stock in this offering. As a result, these stockholders could

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have significant influence over the outcome of matters submitted to our stockholders for approval, including the election of directors and any merger, consolidation or sale of all or substantially all of our assets, and over the management and affairs of our company. This concentration of ownership may have the effect of delaying or preventing a change in control of our company and might affect the market price of our common stock.

Some of these persons or entities may have interests different than yours. For example, because many of these stockholders purchased their shares at prices substantially below the price at which shares are being sold in this offering and have held their shares for a longer period, they may be more interested in selling our company to an acquirer than other investors or may want us to pursue strategies that deviate from the interests of other stockholders.

A significant portion of our total outstanding shares may be sold into the public market in the near future, which could cause the market price of our common stock to drop significantly, even if our business is doing well.

Sales of a substantial number of shares of our common stock in the public market could occur at any time after the expiration of the lock-up agreements described in the “Underwriters” section of this prospectus. These sales, or the market perception that the holders of a large number of shares intend to sell shares, could reduce the market price of our common stock. After this offering and after giving effect to the conversion of all outstanding shares of our convertible preferred stock into 8,076,394 shares of our common stock upon the closing of this offering, we will have _____ shares of common stock outstanding based on the number of shares outstanding as of December 1, 2016. This includes the _____ shares that we are selling in this offering, which may be resold in the public market immediately. The remaining 14,666,720 shares, or _____ % of our outstanding shares after this offering, are currently, and will be following the closing of this offering, restricted as a result of securities laws or lock-up agreements but will be able to be sold, subject to any applicable volume limitations under federal securities laws with respect to affiliate sales, in the near future as described in the “Shares Eligible for Future Sale” and “Underwriters” sections of this prospectus.

In addition, as of December 1, 2016, there were 2,958,113 shares subject to outstanding options, 279,740 shares subject to outstanding restricted stock unit awards, or RSUs, and an additional 664,131 shares reserved for future issuance under our equity incentive plans that will become eligible for sale in the public market to the extent permitted by any applicable vesting requirements, lock-up agreements and Rules 144 and 701 under the Securities Act of 1933, as amended. Moreover, after this offering, holders of an aggregate of approximately 6,590,326 shares of our common stock as of December 1, 2016, will have rights, subject to some conditions, to require us to file registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or other stockholders. We also intend to register all shares of common stock that we may issue under our equity incentive plans. Once we register these shares, they can be freely sold in the public market upon issuance, subject to the lock-up agreements and the restrictions imposed on our affiliates under Rule 144.

Anti-takeover provisions in our restated certificate of incorporation and our amended and restated bylaws, as well as provisions of Delaware law, might discourage, delay or prevent a change in control of our company or changes in our management and, therefore, depress the trading price of our common stock.

Our restated certificate of incorporation and amended and restated bylaws and Delaware law contain provisions that may discourage, delay or prevent a merger, acquisition or other change in control that stockholders may consider favorable, including transactions in which you might otherwise receive a premium for your shares of our common stock. These provisions may also prevent or delay attempts by our stockholders to replace or remove our management. Our corporate governance documents include provisions:

- establishing a classified board of directors with staggered three-year terms so that not all members of our board are elected at one time;

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- providing that directors may be removed by stockholders only for cause and only with a vote of the holders of at least _____ of the issued and outstanding shares of common stock;
- limiting the ability of our stockholders to call and bring business before special meetings and to take action by written consent in lieu of a meeting;
- requiring advance notice of stockholder proposals for business to be conducted at meetings of our stockholders and for nominations of candidates for election to our board of directors;
- authorizing blank check preferred stock, which could be issued with voting, liquidation, dividend and other rights superior to our common stock; and
- limiting the liability of, and providing indemnification to, our directors and officers.

As a Delaware corporation, we are also subject to provisions of Delaware law, including Section 203 of the Delaware General Corporation Law, which limits the ability of stockholders holding more than 15% of our outstanding common stock from engaging in certain business combinations with us. Any provision of our restated certificate of incorporation or amended and restated bylaws or Delaware law that has the effect of delaying or deterring a change in control could limit the opportunity for our stockholders to receive a premium for their shares of our common stock, and could also affect the price that some investors are willing to pay for our common stock.

The existence of the foregoing provisions and anti-takeover measures could limit the price that investors might be willing to pay in the future for shares of our common stock. They could also deter potential acquirers of our company, thereby reducing the likelihood that you could receive a premium for your common stock in an acquisition.

Our restated certificate of incorporation provides that the Court of Chancery of the State of Delaware will be the exclusive forum for substantially all disputes between us and our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees.

Our restated certificate of incorporation provides that the Court of Chancery of the State of Delaware is the exclusive forum for any derivative action or proceeding brought on our behalf; any action asserting a breach of fiduciary duty; any action asserting a claim against us arising pursuant to the Delaware General Corporation Law, our certificate of incorporation or our bylaws; or any action asserting a claim against us that is governed by the internal affairs doctrine. The choice of forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage such lawsuits against us and our directors, officers and other employees. Alternatively, if a court were to find the choice of forum provision contained in our certificate of incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could materially adversely affect our business, financial condition, results of operations and prospects.

We are an "emerging growth company," and the reduced disclosure requirements applicable to emerging growth companies may make our common stock less attractive to investors.

We are an "emerging growth company," as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act, and may remain an emerging growth company until the last day of our fiscal year following the fifth anniversary of this offering, subject to specified conditions. For so long as we remain an emerging growth company, we are permitted, and intend, to rely on exemptions from certain disclosure requirements that are applicable to other public companies that are not emerging growth companies. These exemptions include being permitted to provide reduced disclosure regarding executive compensation and exemptions from the requirements to hold non-binding advisory votes on executive compensation and golden parachute payments, not

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being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002 related to our internal control over financial reporting, and not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements. In this prospectus, we have not included all of the executive compensation related information that would be required if we were not an emerging growth company. We cannot predict whether investors will find our common stock less attractive if we rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile.

We will remain an emerging growth company until the last day of the fiscal year following the fifth anniversary of this offering or such earlier time that we are no longer an emerging growth company. We would cease to be an emerging growth company if we have more than \$1 billion in annual revenue, we have more than \$700 million in market value of our stock held by non-affiliates (and we have been a public company for at least 12 months and have filed one annual report on Form 10-K) or we issue more than \$1 billion of non-convertible debt securities over a three-year period.

In addition, the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. This allows an emerging growth company to delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have irrevocably elected not to avail ourselves of this exemption from new or revised accounting standards and, therefore, we will be subject to new or revised accounting standards at the same time that they become applicable to other public companies that are not emerging growth companies.

Our management team has limited experience managing a public company.

Most members of our management team have limited experience managing a publicly traded company, interacting with public company investors and complying with the increasingly complex laws pertaining to public companies. Our management team may not successfully or efficiently manage our transition to being a public company subject to significant regulatory oversight and reporting obligations under the federal securities laws and the scrutiny of securities analysts and investors. These new obligations and constituents will require significant attention from our management team and could divert their attention away from the day-to-day management of our business, which could materially adversely affect our business, financial condition, results of operations and prospects.

The requirements of being a public company may strain our resources, divert management's attention and affect our ability to attract and retain qualified board members.

As a public company, we will be subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, or the Exchange Act, the listing requirements of the Nasdaq Stock Market and other applicable securities rules and regulations. Compliance with these rules and regulations will increase our legal and financial compliance costs, make some activities more difficult, time-consuming or costly, and increase demand on our systems and resources, particularly after we are no longer an emerging growth company. Among other things, the Exchange Act requires that we file annual, quarterly and current reports with respect to our business and results of operations and maintain effective disclosure controls and procedures and internal control over financial reporting. In order to maintain and, if required, improve our disclosure controls and procedures and internal control over financial reporting to meet this standard, significant resources and management oversight may be required. As a result, management's attention may be diverted from other business concerns, which could harm our business and results of operations. Although we have already hired additional employees to comply with these requirements, we may need to hire even more employees in the future, which will increase our costs and expenses.

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We are currently evaluating our internal controls, identifying and remediating any deficiencies in those internal controls and documenting the results of our evaluation, testing and remediation. We may not be able to complete our evaluation, testing and any required remediation in a timely fashion. During the evaluation and testing process, if we identify one or more material weaknesses in our internal control over financial reporting that we are unable to remediate before the end of the same fiscal year in which the material weakness is identified, we will be unable to assert that our internal controls are effective. If we are unable to assert that our internal control over financial reporting is effective, or if our auditors are unable to attest to management's report on the effectiveness of our internal controls, which will be required after we are no longer an emerging growth company, we could lose investor confidence in the accuracy and completeness of our financial reports, which would cause the price of our common stock to decline.

In addition, changing laws, regulations and standards relating to corporate governance and public disclosure are increasing legal and financial compliance costs and making some activities more time consuming. We intend to invest resources to comply with evolving laws, regulations and standards, and this investment may result in increased general and administrative expense and a diversion of management's time and attention from revenue-generating activities to compliance activities. If our efforts to comply with new laws, regulations and standards differ from the activities intended by regulatory or governing bodies, regulatory authorities may initiate legal proceedings against us and our business may be harmed.

We also expect that being a public company will make it more expensive for us to obtain director and officer liability insurance, and we may be required to accept reduced coverage or incur substantially higher costs to obtain coverage. These factors could also make it more difficult for us to attract and retain qualified members of our board of directors and qualified executive officers.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements. All statements other than statements of historical fact contained in this prospectus, including statements regarding our future results of operations and financial position, business strategy and plans and objectives of management for future operations, are forward-looking statements. These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.

In some cases, you can identify forward-looking statements by terms such as “may,” “should,” “expects,” “plans,” “anticipates,” “could,” “intends,” “target,” “projects,” “contemplates,” “believes,” “estimates,” “predicts,” “potential” or “continue” or the negative of these terms or other similar expressions. The forward-looking statements in this prospectus are only predictions. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our business, financial condition and results of operations. These forward-looking statements speak only as of the date of this prospectus and are subject to a number of risks, uncertainties and assumptions described in the “Risk Factors” section and elsewhere in this prospectus. Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified, you should not rely on these forward-looking statements as predictions of future events. The events and circumstances reflected in our forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Some of the key factors that could cause actual results to differ from our expectations include:

- our ability to anticipate technological shifts;
- our ability to generate positive returns on our research and development;
- changes in the rate of broadband service providers’ deployment of, and investment in, ultra-broadband network capabilities;
- the lack of predictability of revenue due to lengthy sales cycles and the volatility in capital expenditure budgets of broadband service providers;
- our ability to maintain and expand gross profit and net income;
- the sufficiency of our cash resources and needs for additional financing;
- our ability to further penetrate our existing customer base and obtain new customers;
- changes in our pricing policies, whether initiated by us or as a result of competition;
- the amount and timing of operating costs and capital expenditures related to the operation and expansion of our business;
- the actual or rumored timing and success of new product and service introductions by us or our competitors or any other change in the competitive landscape of our industry, including consolidation among our competitors or customers;
- our ability to successfully expand our business domestically and internationally;
- insolvency or credit difficulties confronting our customers, which could adversely affect their ability to purchase or pay for our products and services, or confronting our key suppliers, which could disrupt our supply chain;
- our inability to fulfill our customers’ orders due to supply chain delays, access to key commodities or technologies or events that impact our manufacturers or their suppliers;
- future accounting pronouncements or changes in our accounting policies;
- stock-based compensation expense;

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- the cost and possible outcomes of any potential litigation matters;
- our overall effective tax rate, including impacts caused by any changes in the valuation of our deferred tax assets and any new legislation or regulatory developments;
- increases or decreases in our expenses caused by fluctuations in foreign currency exchange rates;
- general economic conditions, both domestically and in foreign markets;
- our ability to obtain and maintain intellectual property protection for our products; and
- our use of proceeds from this offering.

Except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained herein until after we distribute this prospectus, whether as a result of any new information, future events or otherwise.

INDUSTRY AND OTHER DATA

Unless otherwise indicated, information contained in this prospectus concerning our industry and the markets in which we operate, including our general expectations and market position, is based on information from independent industry analysts and third-party sources and management estimates. Management estimates are derived from publicly available information released by independent industry analysts and third-party sources, as well as data from our internal research, and are based on assumptions, which we believe to be reasonable, made by us based on such data, as well as our knowledge of our industry and solutions. This information involves a number of assumptions and limitations, and we caution you not to give undue weight to such estimates. Projections, assumptions and estimates of our future performance and the future performance of the industry in which we operate are necessarily subject to a high degree of uncertainty and risk due to a variety of factors, including those described in “Risk Factors” and elsewhere in this prospectus. These and other factors could cause results to differ materially from those expressed in the estimates made by the independent parties or us and contained in this prospectus.

USE OF PROCEEDS

We estimate that the net proceeds from the sale of our common stock in this offering will be approximately \$ million, based upon an assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and offering expenses payable by us. If the underwriters fully exercise their option to purchase additional shares in this offering, we estimate that our net proceeds will be approximately \$ million.

Each \$1.00 increase (decrease) in the assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase (decrease) the net proceeds from this offering by \$ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, each 1,000,000 share increase (decrease) in the number of shares offered by us would increase (decrease) the net proceeds from this offering by \$ million, assuming no change in the assumed initial public offering price per share and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The principal purposes of this offering are to create a public market for our common stock, facilitate access to the public equity markets, increase our visibility in the marketplace and obtain additional capital.

We intend to use the net proceeds from this offering to repay \$ million of outstanding indebtedness under our Term Loan B and for working capital and general corporate purposes. In addition, we believe that opportunities may exist from time to time to expand our current business through acquisitions of or investments in complementary products, technologies or businesses. While we have no current agreements, commitments or understandings for any specific acquisitions at this time, we may use a portion of the net proceeds from this offering for these purposes.

On , 2016, we entered into a Term Loan B providing for . We intend to use the proceeds from our Term Loan B to fund the payment of a special dividend of \$ million, which was declared by our board of directors on . For additional information related to our outstanding indebtedness, see “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources—Term Loan B.”

Our management will have broad discretion in the application of the net proceeds from this offering, and investors will be relying on the judgment of our management regarding the application of the net proceeds. The timing and amount of our actual expenditures will be based on many factors, including cash flows from operations, the anticipated growth of our business, and the availability and terms of alternative financing sources to fund our growth. Pending use of the net proceeds as described above, we intend to invest the proceeds in short-term, interest-bearing obligations, investment-grade securities, certificates of deposit or direct or guaranteed obligations of the U.S. government. The goal with respect to the investment of these net proceeds will be capital preservation and liquidity so that these funds are readily available to fund our operations.

DIVIDEND POLICY

We declared special dividends in the amount of \$30.0 million in November 2014 and \$50.0 million in June 2016 to provide a return of capital to stockholders, and we intend to declare an additional special dividend of \$ million prior to the closing of this offering. We do not anticipate declaring cash dividends following this offering. Any future determination to declare dividends will be made at the discretion of our board of directors and will depend on a number of factors, including future earnings, capital requirements, financial conditions, future prospects, contractual restrictions and covenants and other factors that our board of directors may deem relevant. Our credit facility contains covenants that could limit our ability to pay dividends on our capital stock.

CAPITALIZATION

The following table sets forth our cash and cash equivalents and our capitalization as of September 30, 2016:

- on an actual basis;
- on a pro forma basis, giving effect to:
 - the automatic conversion of all outstanding shares of our convertible preferred stock into 8,076,394 shares of common stock upon the closing of this offering;
 - our borrowing in _____, 2016 of \$ _____ million under our Term Loan B;
 - the accrual of a special dividend of \$ _____ million, which was declared by our board of directors on _____; and
 - the filing and effectiveness of our restated certificate of incorporation; and
- on a pro forma as adjusted basis, giving further effect to the sale of _____ shares of our common stock in this offering at an assumed initial public offering price of \$ _____ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The pro forma as adjusted information set forth in the table below is illustrative only and will be adjusted based on the actual initial public offering price and other terms of this offering determined at pricing.

This information should be read in conjunction with our consolidated financial statements and the related notes appearing at the end of this prospectus and the “Management’s Discussion and Analysis of Financial Condition and Results of Operations” section of and other financial information contained in this prospectus.

| | As of September 30, 2016 | | |
|---|--|-----------|--------------------------|
| | Actual | Pro Forma | Pro Forma As Adjusted |
| | (in thousands, except per share amounts) | | |
| Cash and cash equivalents | \$161,706 | \$ | \$ |
| Long-term debt, including current portion | \$ 7,593 | \$ | \$ |
| Convertible preferred stock (Series A, B and C), \$0.001 par value; 5,502 shares authorized, 4,038 shares issued and outstanding, actual; no shares authorized, issued or outstanding, pro forma and pro forma as adjusted | 97,479 | — | — |
| Stockholders’ equity: | | | |
| Preferred stock, \$0.001 par value; no shares authorized, issued or outstanding, actual; _____ shares authorized, no shares issued or outstanding, pro forma and pro forma as adjusted | — | — | — |
| Common stock, \$0.001 par value; 20,000 shares authorized, 6,587 shares issued and outstanding, actual; _____ shares authorized, 14,663 shares issued and outstanding, pro forma; _____ shares authorized, _____ shares issued and outstanding, pro forma as adjusted | 6 | | |
| Additional paid-in capital | 20,298 | | |
| Accumulated other comprehensive loss | (788) | | |
| Retained earnings | 66,857 | | |
| Total stockholders’ equity | 86,373 | | |
| Total capitalization | \$191,445 | \$ | \$ |

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Each \$1.00 increase (decrease) in the assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase (decrease) the pro forma as adjusted amount of cash and cash equivalents, additional paid-in capital, total stockholders' equity and total capitalization by \$ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, each 1,000,000 share increase (decrease) in the number of shares offered by us would increase (decrease) the pro forma as adjusted amount of cash and cash equivalents, additional paid-in capital, total stockholders' equity and total capitalization by \$ million, assuming no change in the assumed initial public offering price per share and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The table above does not include:

- 40,000 shares of common stock issuable upon the exercise of stock options outstanding under our 2003 Stock Incentive Plan as of September 30, 2016, with a weighted-average exercise price of \$1.05 per share;
- 2,925,378 shares of common stock issuable upon the exercise of stock options outstanding under our 2011 Stock Incentive Plan as of September 30, 2016, with a weighted-average exercise price of \$18.40 per share;
- 279,740 shares of common stock issuable upon the vesting of restricted stock units outstanding under our 2011 Stock Incentive Plan as of September 30, 2016;
- 660,220 shares of common stock reserved for future issuance under our 2011 Stock Incentive Plan as of September 30, 2016, which plan will terminate as to new awards upon the closing of this offering; and
- additional shares of common stock that will become available for issuance in connection with this offering under our 2017 Stock Incentive Plan.

DILUTION

If you invest in our common stock in this offering, your ownership interest will be immediately diluted to the extent of the difference between the initial public offering price per share of our common stock and the pro forma as adjusted net tangible book value per share of our common stock immediately after this offering.

Our historical net tangible book value as of September 30, 2016 was \$86.4 million, or \$13.11 per share of our common stock. Our historical net tangible book value is the amount of our total tangible assets less our total liabilities and convertible preferred stock, which is not included within our stockholders' equity. Historical net tangible book value per share represents historical net tangible book value divided by the 6,586,972 shares of our common stock outstanding as of September 30, 2016.

Our pro forma net tangible book value as of September 30, 2016 was \$ million, or \$ per share of our common stock. Pro forma net tangible book value represents the amount of our total tangible assets less our total liabilities, after giving effect to the automatic conversion of all outstanding shares of our convertible preferred stock into 8,076,394 shares of our common stock upon the closing of this offering, our borrowing in , 2016 of \$ million under our Term Loan B and the accrual of a special dividend of \$ million, which was declared by our board of directors on . Pro forma net tangible book value per share represents our pro forma net tangible book value divided by the total number of shares outstanding as of September 30, 2016, after giving effect to the automatic conversion of all outstanding shares of convertible preferred stock upon the closing of this offering.

After giving further effect to our issuance and sale of shares of common stock in this offering at an assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us and the repayment of \$ million of indebtedness under our Term Loan B, our pro forma as adjusted net tangible book value as of September 30, 2016 would have been \$ million, or \$ per share. This represents an immediate increase in pro forma as adjusted net tangible book value per share of \$ to existing stockholders and immediate dilution per share of \$ to new investors purchasing common stock in this offering. Dilution per share to new investors is determined by subtracting pro forma as adjusted net tangible book value per share after this offering from the initial public offering price per share paid by new investors. The following table illustrates this dilution on a per share basis:

| | |
|--|----------|
| Assumed initial public offering price per share | \$ |
| Historical net tangible book value per share as of September 30, 2016 | \$13.11 |
| Decrease per share attributable to the pro forma adjustments described above | _____ |
| Pro forma net tangible book value per share as of September 30, 2016 | _____ |
| Increase in pro forma as adjusted net tangible book value per share attributable to new investors purchasing common stock in this offering and the repayment of \$ million of indebtedness under our Term Loan B | _____ |
| Pro forma as adjusted net tangible book value per share after this offering | _____ |
| Dilution per share to new investors purchasing common stock in this offering | \$ _____ |

Each \$1.00 increase (decrease) in the assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase (decrease) the pro forma as adjusted amount of cash and cash equivalents, working capital, total assets and total stockholders' equity by \$ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, each 1,000,000 share increase (decrease) in the number of shares offered by us would increase (decrease) the pro forma as adjusted amount of cash and cash equivalents,

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working capital, total assets and total stockholders' equity by \$ million, assuming no change in the assumed initial public offering price per share and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

If the underwriters fully exercise their option to purchase additional shares of common stock in this offering, our pro forma as adjusted net tangible book value per share after this offering would be \$ per share, and the dilution per share to new investors purchasing common stock in this offering would be \$ per share, in each case assuming an assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The following table summarizes, on the pro forma as adjusted basis described above, the total number of shares of common stock purchased from us after giving effect to the conversion of our convertible preferred stock into common stock, the total consideration paid or to be paid, and the average price per share paid or to be paid by existing stockholders and by new investors in this offering at an assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, before deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

| | Shares Purchased | | Total Consideration | | Average Price |
|-----------------------|------------------|---------|---------------------|---------|---------------|
| | Number | Percent | Amount | Percent | Per Share |
| Existing stockholders | 14,663,366 | % | \$105,223,727 | % | \$ 7.18 |
| New investors | | | | | \$ |
| Total | | 100.0% | \$ | 100.0% | |

The table above assumes no exercise of the underwriters' option to purchase additional shares in this offering. If the underwriters fully exercise their option to purchase additional shares in this offering, the number of shares of our common stock held by new investors purchasing common stock in this offering would be increased to % of the total number of shares of common stock outstanding after this offering, and the number of shares held by existing stockholders would be reduced to % of the total number of shares of common stock outstanding after this offering.

The table above does not include:

- 40,000 shares of common stock issuable upon the exercise of stock options outstanding under our 2003 Stock Incentive Plan as of September 30, 2016, with a weighted-average exercise price of \$1.05 per share;
- 2,925,378 shares of common stock issuable upon the exercise of stock options outstanding under our 2011 Stock Incentive Plan as of September 30, 2016, with a weighted-average exercise price of \$18.40 per share;
- 279,740 shares of common stock issuable upon the vesting of restricted stock units outstanding under our 2011 Stock Incentive Plan as of September 30, 2016;
- 660,220 shares of common stock reserved for future issuance under our 2011 Stock Incentive Plan as of September 30, 2016, which plan will terminate as to new awards upon the closing of this offering; and
- additional shares of common stock that will become available for issuance in connection with this offering under our 2017 Stock Incentive Plan.

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To the extent any of these outstanding options are exercised, you will experience further dilution, which may be significant. To the extent all of such outstanding options had been exercised as of September 30, 2016, the pro forma as adjusted net tangible book value per share after this offering would be \$, and the total dilution per share to new investors purchasing common stock in this offering would be \$.

In addition, we may choose to raise additional capital due to market conditions or strategic considerations, even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or securities convertible into equity, the issuance of these securities may result in further dilution to our stockholders.

SELECTED CONSOLIDATED FINANCIAL DATA

The following tables present selected consolidated financial and other financial data for our business. The selected consolidated statement of operations data presented below for the years ended December 31, 2014 and 2015 and the selected consolidated balance sheet data as of December 31, 2014 and 2015 have been derived from our audited consolidated financial statements included elsewhere in this prospectus. The selected consolidated statement of operations data for the nine months ended September 30, 2015 and 2016 and the selected consolidated balance sheet data as of September 30, 2016 have been derived from our unaudited condensed consolidated financial statements included elsewhere in this prospectus and have been prepared on a basis consistent with our audited consolidated financial statements. In the opinion of management, the unaudited data reflects all adjustments, consisting only of normal recurring adjustments, necessary for a fair presentation of the financial information in those statements. Our historical results are not necessarily indicative of the results to be expected in any future period, and the results for any interim period are not necessarily indicative of the results to be expected for the full year. You should read the following selected consolidated financial data in conjunction with the section of this prospectus titled “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our consolidated financial statements and the related notes appearing elsewhere in this prospectus.

| | Year Ended December 31, | | Nine Months Ended September 30, | |
|---|----------------------------|------------------|------------------------------------|------------------|
| | 2014 | 2015 | 2015 | 2016 |
| (in thousands, except per share amounts) | | | | |
| Consolidated Statement of Operations Data: | | | | |
| Revenue: | | | | |
| Product | \$ 194,358 | \$ 247,588 | \$ 166,167 | \$ 191,763 |
| Service | 16,920 | 24,862 | 16,376 | 25,139 |
| Total revenue | <u>211,278</u> | <u>272,450</u> | <u>182,543</u> | <u>216,902</u> |
| Cost of revenue ⁽¹⁾ : | | | | |
| Product | 59,088 | 74,349 | 48,484 | 68,793 |
| Service | 5,917 | 5,265 | 3,652 | 5,983 |
| Total cost of revenue | <u>65,005</u> | <u>79,614</u> | <u>52,136</u> | <u>74,776</u> |
| Gross profit | <u>146,273</u> | <u>192,836</u> | <u>130,407</u> | <u>142,126</u> |
| Operating expenses: | | | | |
| Research and development ⁽¹⁾ | 25,481 | 37,155 | 27,408 | 37,213 |
| Sales and marketing ⁽¹⁾ | 21,409 | 36,157 | 23,876 | 27,289 |
| General and administrative ⁽¹⁾ | 10,346 | 16,453 | 12,558 | 13,532 |
| Total operating expenses | <u>57,236</u> | <u>89,765</u> | <u>63,842</u> | <u>78,034</u> |
| Income from operations | 89,037 | 103,071 | 66,565 | 64,092 |
| Other income (expense), net | (2,942) | (1,408) | (1,561) | 953 |
| Income before provision for income taxes | 86,095 | 101,663 | 65,004 | 65,045 |
| Provision for income taxes | 26,387 | 33,742 | 23,405 | 16,228 |
| Net income | <u>\$ 59,708</u> | <u>\$ 67,921</u> | <u>\$ 41,599</u> | <u>\$ 48,817</u> |
| Cash dividends declared per common share or common share equivalent | <u>\$ 1.9173</u> | <u>\$ —</u> | <u>\$ —</u> | <u>\$ 2.9455</u> |
| Net income attributable to common stockholders ⁽²⁾ : | | | | |
| Basic | <u>\$ 23,287</u> | <u>\$ 27,302</u> | <u>\$ 16,365</u> | <u>\$ 19,928</u> |
| Diluted | <u>\$ 23,843</u> | <u>\$ 30,402</u> | <u>\$ 18,144</u> | <u>\$ 20,006</u> |

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| | Year Ended December 31, | | Nine Months Ended September 30, | |
|---|----------------------------|-----------|------------------------------------|----------|
| | 2014 | 2015 | 2015 | 2016 |
| (in thousands, except per share amounts) | | | | |
| Net income per share attributable to common stockholders(2): | | | | |
| Basic | \$ 3.88 | \$ 4.30 | \$ 2.58 | \$ 3.04 |
| Diluted | \$ 3.65 | \$ 3.92 | \$ 2.36 | \$ 2.37 |
| Weighted-average shares used to compute net income per share attributable to common stockholders(2): | | | | |
| Basic | 5,997 | 6,348 | 6,344 | 6,564 |
| Diluted | 6,537 | 7,761 | 7,690 | 8,427 |
| Pro forma net income per share attributable to common stockholders (unaudited)(2): | | | | |
| Basic | | \$ | | \$ |
| Diluted | | \$ | | \$ |
| Weighted-average shares used to compute pro forma net income per share attributable to common stockholders (unaudited)(2): | | | | |
| Basic | | | | |
| Diluted | | | | |
| Other Financial Data: | | | | |
| Non-GAAP net income(3) | \$62,145 | \$ 72,812 | \$45,059 | \$53,301 |
| Adjusted EBITDA(3) | \$94,632 | \$115,541 | \$75,685 | \$74,517 |

(1) Includes stock-based compensation expense related to stock options, stock appreciation rights and restricted stock units granted to employees and non-employee consultants as follows:

| | Year Ended December 31, | | Nine Months Ended September 30, | |
|--|----------------------------|---------|---------------------------------------|---------|
| | 2014 | 2015 | 2015 | 2016 |
| (in thousands) | | | | |
| Cost of revenue | \$ 161 | \$ 143 | \$ 103 | \$ 178 |
| Research and development expense | 852 | 1,843 | 1,422 | 1,637 |
| Sales and marketing expense | 598 | 775 | 542 | 846 |
| General and administrative expense | 380 | 4,560 | 3,340 | 3,313 |
| Total stock-based compensation expense | \$1,991 | \$7,321 | \$5,407 | \$5,974 |

(2) See Note 13 to our consolidated financial statements and Note 12 to our unaudited condensed consolidated financial statements, both included elsewhere in this prospectus, for an explanation of the calculations of basic and diluted net income per share attributable to common stockholders and pro forma basic and diluted net income per share attributable to common stockholders.

(3) See “—Non-GAAP Financial Measures” for information regarding our use of these non-GAAP financial measures and a reconciliation of such measures to comparable financial measures calculated and presented in accordance with GAAP.

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| | As of December 31, | | As of |
|---|--------------------|-----------|-----------------------|
| | 2014 | 2015 | September 30, 2016 |
| | (in thousands) | | |
| Consolidated Balance Sheet Data: | | | |
| Cash and cash equivalents | \$ 77,155 | \$ 92,496 | \$ 161,706 |
| Working capital ⁽¹⁾ | 99,237 | 162,981 | 158,675 |
| Total assets | 230,815 | 283,097 | 331,668 |
| Long-term debt, including current portion | — | 7,795 | 7,593 |
| Total liabilities | 124,636 | 103,160 | 147,816 |
| Convertible preferred stock | 97,479 | 97,479 | 97,479 |
| Total stockholders' equity | 8,700 | 82,458 | 86,373 |

(1) We define working capital as current assets less current liabilities.

Non-GAAP Financial Measures

To supplement our consolidated financial statements presented in accordance with generally accepted accounting principles, or GAAP, we monitor and consider non-GAAP net income and adjusted EBITDA. These non-GAAP financial measures are not based on any standardized methodology prescribed by GAAP and are not necessarily comparable to similarly titled measures presented by other companies.

Non-GAAP net income. We define non-GAAP net income as net income as reported in our consolidated statements of operations, excluding the impact of stock-based compensation expense and changes in the fair value of the warrant liability, both of which are non-cash charges, and the tax effect on those excluded items applied using our effective income tax rate for the period. We have presented non-GAAP net income because it is a key measure used by our management and board of directors to understand and evaluate our operating performance, to establish budgets and to develop operational goals for managing our business. The presentation of non-GAAP net income also allows our management and board of directors to make additional comparisons of our results of operations to other companies in our industry.

Adjusted EBITDA. We define adjusted EBITDA as our net income, excluding the impact of stock-based compensation expense; other income (expense), net, which includes changes in the fair value of the warrant liability; depreciation and amortization expense; and our provision for income taxes. We have presented adjusted EBITDA because it is a key measure used by our management and board of directors to understand and evaluate our operating performance, to establish budgets and to develop operational goals for managing our business. In particular, we believe that excluding the impact of these expenses in calculating adjusted EBITDA can provide a useful measure for period-to-period comparisons of our core operating performance.

We use these non-GAAP financial measures to evaluate our operating performance and trends and make planning decisions. We believe that each of these non-GAAP financial measures helps identify underlying trends in our business that could otherwise be masked by the effect of the expenses that we exclude in the calculations of each non-GAAP financial measure. Accordingly, we believe that these financial measures provide useful information to investors and others in understanding and evaluating our operating results, enhancing the overall understanding of our past performance and future prospects.

Our non-GAAP financial measures are not prepared in accordance with GAAP, and should not be considered in isolation of, or as an alternative to, measures prepared in accordance with GAAP. There are a number of limitations related to the use of these non-GAAP financial measures rather than net income, which is the most directly comparable financial measure calculated and presented in accordance with GAAP. Some of these limitations are:

- we exclude stock-based compensation expense from each of our non-GAAP financial measures as it has recently been, and will continue to be for the foreseeable future, a significant recurring non-cash expense for our business and an important part of our compensation strategy;

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- we exclude the changes in the fair value of a warrant liability from our non-GAAP net income and adjusted EBITDA measures as it had been a recurring non-cash charge in our statement of operations until the warrant was exercised in March 2014;
- adjusted EBITDA excludes depreciation and amortization expense and, although this is a non-cash expense, the assets being depreciated and amortized may have to be replaced in the future;
- adjusted EBITDA does not reflect the cash requirements necessary to service interest or the cash received from our interest bearing financial assets, both of which impact the cash available to us, and does not reflect foreign currency transaction gains and losses, all of which are reflected in other income (expense), net;
- adjusted EBITDA does not reflect income tax payments that reduce cash available to us; and
- the expenses and other items that we exclude in our calculations of non-GAAP net income and adjusted EBITDA may differ from the expenses and other items, if any, that other companies may exclude from non-GAAP net income and adjusted EBITDA when they report their operating results.

In addition, other companies may use other measures to evaluate their performance, all of which could reduce the usefulness of our non-GAAP financial measures as tools for comparison.

The following tables reconcile non-GAAP net income and adjusted EBITDA to net income, the most directly comparable financial measure calculated and presented in accordance with GAAP.

| | Year Ended December 31, | | Nine Months Ended September 30, | |
|---|----------------------------|-----------------|------------------------------------|-----------------|
| | 2014 | 2015 | 2015 | 2016 |
| (in thousands) | | | | |
| Reconciliation of Net Income to Non-GAAP Net Income: | | | | |
| Net income | \$59,708 | \$67,921 | \$41,599 | \$48,817 |
| Stock-based compensation | 1,991 | 7,321 | 5,407 | 5,974 |
| Change in fair value of warrant liability | 1,523 | — | — | — |
| Tax effect of excluded items | (1,077) | (2,430) | (1,947) | (1,490) |
| Non-GAAP net income | <u>\$62,145</u> | <u>\$72,812</u> | <u>\$45,059</u> | <u>\$53,301</u> |

| | Year Ended December 31, | | Nine Months Ended September 30, | |
|---|----------------------------|------------------|------------------------------------|-----------------|
| | 2014 | 2015 | 2015 | 2016 |
| (in thousands) | | | | |
| Reconciliation of Net Income to Adjusted EBITDA: | | | | |
| Net income | \$59,708 | \$ 67,921 | \$41,599 | \$48,817 |
| Stock-based compensation | 1,991 | 7,321 | 5,407 | 5,974 |
| Depreciation and amortization | 3,604 | 5,149 | 3,713 | 4,451 |
| Other income (expense), net | 2,942 | 1,408 | 1,561 | (953) |
| Provision for income taxes | 26,387 | 33,742 | 23,405 | 16,228 |
| Adjusted EBITDA | <u>\$94,632</u> | <u>\$115,541</u> | <u>\$75,685</u> | <u>\$74,517</u> |

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion of our financial condition and results of operations should be read together with our consolidated financial statements and related notes and other financial information included elsewhere in this prospectus. The following discussion contains forward-looking statements that reflect our plans, estimates and beliefs. Our actual results could differ materially from those discussed in the forward-looking statements. Factors that could cause or contribute to these differences include those discussed below and elsewhere in this prospectus, particularly in the section titled "Risk Factors." In this discussion, we use financial measures that are considered non-GAAP financial measures under Securities and Exchange Commission rules. These rules require supplemental explanation and reconciliation, which is included elsewhere in this prospectus. Investors should not consider non-GAAP financial measures in isolation from, or in substitution for, financial information presented in compliance with GAAP.

Overview

We provide a suite of software-centric infrastructure solutions that allow cable service providers to deliver voice, video and data services over a single platform at multi-gigabit speeds. In addition, we offer solutions for next-generation distributed and virtualized architectures in cable operator, fixed telecom and wireless networks. Our innovative solutions enable customers to cost-effectively and dynamically increase network speed, add bandwidth capacity and new services for consumers and enterprises, reduce network complexity and reduce operating and capital expenditures.

We were founded in 2003 with the vision of enabling consumers and enterprises to enjoy ultra-fast speeds and enhanced digital content experiences through their phones, tablets, TVs and other connected devices at home or on the go with ubiquitous and seamless access, regardless of how the user is accessing the Internet. Our forward-looking design and investment approach, coupled with our proven product development track record, has enabled us to deliver fully featured next-generation solutions in advance of competitors. For example, we believe we were:

- the first to market (2005) with a software-centric cable solution leveraging the programmability of field programmable gate arrays, or FPGAs, and general purpose processors;
- the first to market (2008) with a commercially deployed, fully qualified Data Over Cable Service Interface Specification, or DOCSIS, cable modem termination system;
- the first to market (2012) with a commercially deployed converged cable access platform, or CCAP, delivering IP voice, digital video and data over a single port;
- the first to market (2015) with commercially deployed DOCSIS 3.1-compliant solutions supporting speeds of up to 10 gigabits per second; and
- the first to market (2016) with a commercially deployable remote-PHY, or R-PHY, solution.

Our solutions are commercially deployed in more than 60 countries by more than 350 customers, including regional service providers as well as some of the world's largest Tier 1 broadband service providers, serving millions of subscribers.

We believe that the shift to software-centric ultra-broadband networks and fixed and wireless network convergence presents us with a compelling market opportunity. We intend to maintain our technological leadership through the enhancement of existing products and the development of new products in both our current and adjacent markets. By investing in research and development, we believe we will be well positioned to continue our rapid growth and take advantage of the large market opportunity across fixed and wireless networks. We also intend to continue to expand our sales and marketing initiatives in key geographies.

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We have achieved significant growth and profitability. For the year ended December 31, 2015, we generated revenue of \$272.5 million, net income of \$67.9 million and adjusted EBITDA of \$115.5 million, representing increases of 29.0%, 13.8% and 22.1%, respectively, from the amounts for the year ended December 31, 2014. For the nine months ended September 30, 2016, we generated revenue of \$216.9 million, net income of \$48.8 million and adjusted EBITDA of \$74.5 million, representing increases of 18.8% and 17.4% and a decrease of 1.5%, respectively, from the amounts for the nine months ended September 30, 2015.

Our Business Model

We derive revenue from sales of our products and services. We generate product revenue primarily from sales of our broadband products. The majority of our product revenue is derived from sales of our CCAP solutions, particularly our C100G CCAP. We generate service revenue primarily from sales of maintenance and support services, which end customers typically purchase in conjunction with our products, and, to a lesser extent, from sales of professional services and extended warranty services.

Since shipping our first products in 2005, our cumulative end-customer base has grown significantly. Our revenue and installed base of equipment has increased significantly with the introduction of our CCAP solution in 2012 and our DOCSIS 3.1 capabilities in 2015, both of which run on our Axyom software platform.

We offer a scalable broadband solution that can meet the evolving bandwidth needs of our customers and their subscribers.

Our sales model focuses on the following key areas:

- *Adding New Customers.* With several thousand broadband service providers existing globally, we believe that we have opportunities for growth by acquiring new customers in all of the geographic regions in which we compete. Potential new customers include broadband service providers that provide fixed or wireless services or both. We intend to add new customers over time by continuing to invest in our technology and our sales team to capitalize on these new opportunities. Our sales team works closely with prospective customers to educate them on and demonstrate to them the technical and business merits of our products, including the ability to capture new revenue opportunities and realize cost savings through the use of our broadband solutions. We build relationships with prospective customers at multiple levels and within numerous departments in a customer's organization and, through the sales process, we strive to be a strategic business partner for our customers. We believe that the technological strengths and capabilities of our broadband solutions and the introduction and implementation of next-generation standards, such as DOCSIS 3.1, have been, and will continue to be, an important factor in our ability to add new customers.
- *Expanding Sales to Our Existing Customer Base.* Our first installation in a cable service provider's network frequently involves deploying our broadband products in only a portion of the provider's network and with only a fraction of the capacity of our products enabled at the time of initial installation. Over time, our customers have generally expanded the use of our solutions to other areas of their networks to increase network capacity. Capacity expansions are accomplished either by deploying additional systems or line cards, or by our remote enablement of additional channels through the use of software. Sales of additional line cards and software-based capacity expansions generate higher gross margins than our initial hardware-based deployments.

We work with our existing customers to identify expansion and cross selling opportunities. Existing customers are familiar with and have benefited from the operational and economic benefits of our broadband products, and therefore, sales cycles for existing customers are generally shorter. We believe expansion and cross selling opportunities with existing customers are significant given their existing and expected infrastructure spend as service providers leverage their investment in our platform to deliver new services to their customers. Our top 20 customers over the period from 2013 to 2016 made subsequent purchases of our products in a majority of the fiscal quarters following their initial purchases. As of September 30, 2016, our customers that have been with us for at least one year

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have, in subsequent years in the aggregate, generally purchased more than the initial amount of purchases made in the first year. The first year of purchases is typically the beginning of the deployment of our broadband products. This analysis is based on billings, which represent amounts invoiced to customers for products shipped, or for services performed or to be performed, which will be recorded as either revenue or deferred revenue depending on the nature of the arrangement.

Our solutions are commercially deployed in over 60 countries by more than 350 customers. We expect that a substantial portion of our future sales will be follow-on sales to existing customers. During the years ended December 31, 2014 and 2015 and the nine months ended September 30, 2016, sales to existing customers represented 78%, 63% and 74% of our revenue, respectively. Our business and results of operations will depend on our ability to sell additional products to our existing customer base.

- *Selling New Products.* Our results of operations have been, and we believe will continue to be, affected by our ability to quickly and effectively design and sell products with improved performance and increased functionality. As networks and standards for broadband solutions evolve, we aim to deliver new products prior to our competition. For example, the introduction of our DOCSIS 3.0 broadband solution, our CCAP solution and our DOCSIS 3.1 capabilities allowed us to obtain new customers, increase our sales to existing customers, increase our revenue and capture market share. We aim to increase our revenue by enabling customers to transition from previously deployed data and video solutions to our integrated CCAP solutions, which can incorporate DOCSIS 3.1 standards as well as our remote-PHY distributed access solution. Over the last several years, we have made substantial investments to extend our Axyom software platform to serve the wireless market. We are currently engaged in several trials with potential customers for our wireless solutions and expect to generate revenue in the future from sales of wireless solutions to new and existing customers. We have also developed solutions for telecommunications service providers. Our ability to sustain our revenue growth will depend, in part, upon our sales of new products.

We market and sell our products and services through our direct global sales force, supported by sales agents, and through resellers. A majority of our revenue is derived from direct sales, which generate higher gross margins than sales made through resellers. Our sales organization includes systems engineers with deep technical expertise that provide pre-sales technical support. These systems engineers also assist with post-sales support. Our resellers receive an order from an end customer prior to placing an order with us, and we confirm the identification of or are aware of the end customer prior to accepting such orders. We use sales agents to assist our direct global sales force in the sales process with certain customers primarily located in the Latin America and Asia-Pacific regions. If a sales agent is engaged in the sales process, we receive the order directly from and sell the products and services directly to the end customer, and we pay a commission to the sales agent, calculated as a percentage of the related customer payment.

Each of our sales teams is responsible for a geographic territory and/or has responsibility for a number of major direct end-customer accounts. We have a diverse, global customer base and our revenue by geographic region fluctuates from period to period based on the timing of customer projects. The percentages of our revenue derived from customers in each geographic region were as follows:

| | Year Ended December 31, | | Nine Months Ended September 30, | |
|--------------------------------|----------------------------|---------------|------------------------------------|---------------|
| | 2014 | 2015 | 2015 | 2016 |
| Revenue by geographic region: | | | | |
| North America | 50.8% | 20.0% | 24.6% | 59.2% |
| Latin America | 14.2% | 32.1% | 26.6% | 15.2% |
| Europe, Middle East and Africa | 15.3% | 27.8% | 27.6% | 12.6% |
| Asia-Pacific | 19.7% | 20.1% | 21.2% | 13.0% |
| Total | <u>100.0%</u> | <u>100.0%</u> | <u>100.0%</u> | <u>100.0%</u> |

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Non-GAAP Financial Measures

In addition to the measures presented in our consolidated financial statements, we use the following non-GAAP financial measures to evaluate our operating performance, to identify trends affecting our business, and to establish budgets and develop operational goals for managing our business.

| | Year Ended December 31, | | Nine Months Ended September 30, | |
|---------------------|----------------------------|-----------|------------------------------------|----------|
| | 2014 | 2015 | 2015 | 2016 |
| | (in thousands) | | | |
| Non-GAAP net income | \$62,145 | \$ 72,812 | \$45,059 | \$53,301 |
| Adjusted EBITDA | \$94,632 | \$115,541 | \$75,685 | \$74,517 |

These financial measures are non-GAAP financial measures. Please see “Selected Consolidated Financial Data—Non-GAAP Financial Measures” for information regarding the limitations of using these financial measures and for reconciliations of non-GAAP net income and adjusted EBITDA to net income, the most directly comparable financial measure calculated and presented in accordance with GAAP.

Key Components of Our Results of Operations

Revenue

We generate product revenue from sales of our software-centric broadband products, including our CCAP solution and our DOCSIS 3.1 capabilities. The majority of our revenue is derived from sales of our CCAP solutions, particularly our C100G CCAP. We also generate product revenue from sales of additional line cards and software-based capacity expansions.

We generate service revenue from sales of initial maintenance and support services contracts, which are typically purchased by end customers in conjunction with our products, and from our customers’ subsequent annual renewals of those contracts. We offer maintenance and support services under renewable, fee-based contracts, which include telephone support and unspecified software upgrades and updates provided on a when-and-if-available basis. To a lesser extent, we generate service revenue from sales of professional services, such as installation and configuration, and extended warranty services.

The sale of our software-centric broadband products generally includes a 90-day warranty on the software and a one-year warranty on the hardware component of the products, which includes repair or replacement of the applicable hardware. We record a warranty accrual for the initial software and hardware warranty included with our product sales and do not defer revenue. In addition, in conjunction with customers’ renewals of maintenance and support services contracts, we offer an extended warranty for periods typically of one to three years for agreed-upon fees, which we record as service revenue.

Cost of Revenue

Our cost of product revenue consists primarily of the costs of procuring goods, such as chassis and line cards embedded with FPGAs, from our contract manufacturers and other suppliers. In addition, cost of product revenue includes salary and benefit expenses, including stock-based compensation, for manufacturing and supply-chain management personnel, allocated facilities-related costs, estimated warranty costs, third-party logistics costs, and estimated costs associated with excess and obsolete inventory.

Our cost of service revenue includes salary and benefit expenses, including stock-based compensation, for our maintenance and support services and professional services personnel, fees incurred for subcontracted professional services provided to our customers, and allocated facilities-related costs.

Gross Profit

Our product gross profit and gross margin have been, and may in the future be, influenced by several factors, including changes in the volume of our software-centric broadband products sold, product configuration, sales of capacity expansions, geographic location of our customers, pricing due to competitive pressure, estimated warranty costs, inventory obsolescence, and favorable and unfavorable changes in inventory production volume and component costs. As some products mature, the average selling prices of those products may decline. We expect that over time our product mix will move toward a higher percentage of sales of software-based capacity expansions and incremental line cards, which generate higher gross margins than sales of our initial hardware-based deployments.

Our service gross profit and gross margin have been, and may in the future be, influenced by the amount and timing of renewals of maintenance and support services contracts by customers and, to a lesser extent, the amount of professional services ordered by customers and performed by us.

Operating Expenses

Our operating expenses consist of research and development, sales and marketing, and general and administrative expenses.

Research and Development Expenses

Research and development expenses consist primarily of salary and benefit expenses, including stock-based compensation, for our employees engaged in research, design and development activities. Research and development expenses also include project-specific engineering services purchased from external vendors, prototype costs, depreciation expense, amortization of purchased intellectual property, allocated facilities-related costs and travel expenses.

We expect our research and development costs to continue to increase in absolute dollars as we continue to make significant investments to enhance our software-centric broadband products and develop new software-centric broadband products and technologies, including our new wireless solutions.

Sales and Marketing Expenses

Sales and marketing expenses include salary and benefit expenses, including stock-based compensation, for employees and costs for contractors engaged in sales and marketing activities. Sales and marketing expenses also include commissions, calculated as a percentage of the related customer payment, to sales agents that assist us in the sales process with certain customers primarily located in the Latin America and Asia-Pacific regions. These sales agent commissions fluctuate from period to period based on the amount and timing of sales to the customers subject to sales agent commissions. Sales and marketing expenses also include marketing activities, such as trade shows, marketing programs and promotional materials, as well as allocated facilities-related costs. We are also establishing a new sales force to sell and undertake new marketing programs to promote our new wireless solutions.

We expect our sales and marketing expenses to increase in absolute dollars as we continue to make investments in our sales and marketing organizations and expand our marketing programs and efforts to increase the market awareness and sales of our products and services.

General and Administrative Expenses

General and administrative expenses include salary and benefit expenses, including stock-based compensation, for employees engaged in general and administrative activities, as well as professional service fees, allocated facilities-related costs, insurance, travel and bad debt expenses related to accounts receivable.

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We expect our general and administrative expenses to increase in absolute dollars primarily due to our continued growth and the increased cost of compliance associated with being a public company.

Other Income (Expense), Net

Other income (expense), net consists of interest income from our investments in short-term financial instruments, such as certificates of deposits, money market mutual funds and commercial paper, and interest expense associated with the mortgage on our corporate office and debt maintenance costs related to our working capital line of credit. Other income (expense), net also includes realized and unrealized gains and losses from foreign currency transactions. We hedge certain significant transactions denominated in currencies other than the U.S. dollar, and we expect to continue to do so to minimize our exposure to foreign currency fluctuations.

We classified warrants for the purchase of shares of our common stock as a liability on our consolidated balance sheets due to the anti-dilution provisions in those warrants. The warrants were initially recorded at fair value on date of issuance and were subsequently remeasured to fair value at each balance sheet date. Changes in fair value of these warrants were recognized as a component of other income (expense), net in our consolidated statements of operations and comprehensive income, and we continued to adjust the liability for changes in fair value until the warrants were exercised on March 31, 2014.

Provision for Income Taxes

We are subject to income taxes in the United States and the foreign jurisdictions in which we do business. These foreign jurisdictions have statutory tax rates different from those in the United States. Our effective tax rates will vary depending on the relative proportion of foreign to U.S. income, the utilization of foreign tax and research and development credits, changes in corporate structure, the amount and timing of certain employee stock-based compensation transactions, changes in the valuation of our deferred tax assets and liabilities and changes in tax laws and interpretations. We plan to regularly assess the likelihood of outcomes that could result from the examination of our tax returns by the U.S. Internal Revenue Service, or IRS, and other tax authorities to determine the adequacy of our income tax reserves and expense. Should actual events or results differ from our then-current expectations, charges or credits to our provision for income taxes may become necessary. Any such adjustments could have a significant effect on our results of operations.

In the third quarter of 2016, we began the process of restructuring our international operations and, as a result, we expect that our future effective tax rates may be lower than our historical effective tax rates. However, due to the timing and status of this restructuring program as of September 30, 2016, the impact on our effective tax rate in the third quarter of 2016 was insignificant.

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Results of Operations

The following tables set forth our consolidated results of operations in dollar amounts and as percentage of total revenue for the periods shown:

| | Year Ended December 31, | | Nine Months Ended September 30, | |
|---|----------------------------|------------------|------------------------------------|------------------|
| | 2014 | 2015 | 2015 | 2016 |
| (in thousands) | | | | |
| Consolidated Statement of Operations Data: | | | | |
| Revenue: | | | | |
| Product | \$ 194,358 | \$ 247,588 | \$ 166,167 | \$ 191,763 |
| Service | 16,920 | 24,862 | 16,376 | 25,139 |
| Total revenue | <u>211,278</u> | <u>272,450</u> | <u>182,543</u> | <u>216,902</u> |
| Cost of revenue(1): | | | | |
| Product | 59,088 | 74,349 | 48,484 | 68,793 |
| Service | 5,917 | 5,265 | 3,652 | 5,983 |
| Total cost of revenue | <u>65,005</u> | <u>79,614</u> | <u>52,136</u> | <u>74,776</u> |
| Gross profit | <u>146,273</u> | <u>192,836</u> | <u>130,407</u> | <u>142,126</u> |
| Operating expenses: | | | | |
| Research and development(1) | 25,481 | 37,155 | 27,408 | 37,213 |
| Sales and marketing(1) | 21,409 | 36,157 | 23,876 | 27,289 |
| General and administrative(1) | 10,346 | 16,453 | 12,558 | 13,532 |
| Total operating expenses | <u>57,236</u> | <u>89,765</u> | <u>63,842</u> | <u>78,034</u> |
| Income from operations | 89,037 | 103,071 | 66,565 | 64,092 |
| Other income (expense), net | (2,942) | (1,408) | (1,561) | 953 |
| Income before provision for income taxes | 86,095 | 101,663 | 65,004 | 65,045 |
| Provision for income taxes | 26,387 | 33,742 | 23,405 | 16,228 |
| Net income | <u>\$ 59,708</u> | <u>\$ 67,921</u> | <u>\$ 41,599</u> | <u>\$ 48,817</u> |

(1) Includes stock-based compensation expense related to stock options, stock appreciation rights and restricted stock units granted to employees and non-employee consultants as follows:

| | Year Ended December 31, | | Nine Months Ended September 30, | |
|--|----------------------------|-----------------|------------------------------------|-----------------|
| | 2014 | 2015 | 2015 | 2016 |
| (in thousands) | | | | |
| Cost of revenue | \$ 161 | \$ 143 | \$ 103 | \$ 178 |
| Research and development expense | 852 | 1,843 | 1,422 | 1,637 |
| Sales and marketing expense | 598 | 775 | 542 | 846 |
| General and administrative expense | 380 | 4,560 | 3,340 | 3,313 |
| Total stock-based compensation expense | <u>\$ 1,991</u> | <u>\$ 7,321</u> | <u>\$ 5,407</u> | <u>\$ 5,974</u> |

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| | Year Ended December 31, | | Nine Months Ended September 30, | |
|--|------------------------------------|------|------------------------------------|------|
| | 2014 | 2015 | 2015 | 2016 |
| | (as a percentage of total revenue) | | | |
| Revenue: | | | | |
| Product | 92% | 91% | 91% | 88% |
| Service | 8 | 9 | 9 | 12 |
| Total revenue | 100 | 100 | 100 | 100 |
| Cost of revenue: | | | | |
| Product | 28 | 27 | 27 | 32 |
| Service | 3 | 2 | 2 | 3 |
| Total cost of revenue | 31 | 29 | 29 | 34 |
| Gross profit | 69 | 71 | 71 | 66 |
| Operating expenses: | | | | |
| Research and development | 12 | 14 | 15 | 17 |
| Sales and marketing | 10 | 13 | 13 | 13 |
| General and administrative | 5 | 6 | 7 | 6 |
| Total operating expenses | 27 | 33 | 35 | 36 |
| Income from operations | 42 | 38 | 36 | 30 |
| Other income (expense), net | (1) | (1) | (1) | — |
| Income before provision for income taxes | 41 | 37 | 36 | 30 |
| Provision for income taxes | 12 | 12 | 13 | 7 |
| Net income | 28% | 25% | 23% | 23% |

Percentages in the table above are based on actual values. As a result, some totals may not sum due to rounding.

Nine Months Ended September 30, 2015 Compared to Nine Months Ended September 30, 2016

Revenue

| | Nine Months Ended September 30, | | | | Change | |
|--------------------------------------|---------------------------------|------------|-----------|------------|-----------|---------|
| | 2015 | | 2016 | | Amount | % |
| | Amount | % of Total | Amount | % of Total | | |
| | (dollars in thousands) | | | | | |
| Revenue: | | | | | | |
| Product | \$166,167 | 91.0% | \$191,763 | 88.4% | \$ 25,596 | 15.4% |
| Service | 16,376 | 9.0% | 25,139 | 11.6% | 8,763 | 53.5% |
| Total revenue | \$182,543 | 100.0% | \$216,902 | 100.0% | \$ 34,359 | 18.8% |
| Revenue by geographic region: | | | | | | |
| North America | \$ 44,820 | 24.6% | \$128,298 | 59.2% | \$ 83,478 | 186.3% |
| Latin America | 48,636 | 26.6% | 33,043 | 15.2% | (15,593) | (32.1)% |
| Europe, Middle East and Africa | 50,351 | 27.6% | 27,377 | 12.6% | (22,974) | (45.6)% |
| Asia-Pacific | 38,736 | 21.2% | 28,184 | 13.0% | (10,552) | (27.2)% |
| Total revenue | \$182,543 | 100.0% | \$216,902 | 100.0% | \$ 34,359 | 18.8% |

The increase in product revenue was due to an increase in sales of our software-centric broadband products in North America primarily due to an increase of \$50.4 million in sales to new customers, which predominantly

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deployed our CCAP solution that includes DOCSIS 3.1 capabilities, and an increase of \$26.6 million in sales of our CCAP solutions to existing customers to increase the proportion of their networks using our products to provide their subscribers with greater bandwidth capacity through capacity expansions. These increases were partially offset by an aggregate decrease of \$51.4 million in sales in all other regions resulting from decreases in purchases in those regions due to the timing of their network upgrade and expansion projects.

The increase in service revenue was primarily due to a \$7.0 million increase in maintenance and support services revenue due to an increase in our installed base of customers from both new customers and existing customers renewing their maintenance and support service contracts as well as a \$1.8 million increase in professional services revenue related to new customer installations to deploy our DOCSIS 3.1 capabilities.

Cost of Revenue and Gross Profit

| | Nine Months Ended September 30, | | Change | |
|------------------------|------------------------------------|-----------------|-----------------|-------|
| | 2015 | 2016 | Amount | % |
| (dollars in thousands) | | | | |
| Cost of revenue: | | | | |
| Product | \$48,484 | \$68,793 | \$20,309 | 41.9% |
| Service | 3,652 | 5,983 | 2,331 | 63.8% |
| Total cost of revenue | <u>\$52,136</u> | <u>\$74,776</u> | <u>\$22,640</u> | 43.4% |

The increase in cost of product revenue was primarily due to an increase in the quantity of our software-centric broadband products sold and an increase in personnel-related costs resulting from hiring additional employees.

The increase in cost of service revenue was primarily due to a \$1.7 million increase in subcontracted professional services related to new customer deployments of our DOCSIS 3.1 capabilities and a \$0.6 million increase in personnel-related costs resulting from hiring additional employees.

| | Nine Months Ended September 30, | | | | Change | |
|------------------------|---------------------------------|--------------|------------------|--------------|-----------------|--------------------|
| | 2015 | | 2016 | | Amount | Gross Margin (bps) |
| | Amount | Gross Margin | Amount | Gross Margin | | |
| (dollars in thousands) | | | | | | |
| Gross profit: | | | | | | |
| Product | \$117,683 | 70.8% | \$122,970 | 64.1% | \$ 5,287 | (670) |
| Service | 12,724 | 77.7% | 19,156 | 76.2% | 6,432 | (150) |
| Total gross profit | <u>\$130,407</u> | 71.4% | <u>\$142,126</u> | 65.5% | <u>\$11,719</u> | (590) |

The decrease in product gross margin was primarily due to higher cost of goods related to initial sales of our software-centric broadband products as a result of the significant amount of hardware in these sales.

Service gross margin declined slightly due to an increase in professional services revenue as a percentage of total service revenue during the nine months ended September 30, 2016.

Research and Development

| | Nine Months Ended September 30, | | Change | |
|--------------------------|------------------------------------|----------|---------|-------|
| | 2015 | 2016 | Amount | % |
| (dollars in thousands) | | | | |
| Research and development | \$27,408 | \$37,213 | \$9,805 | 35.8% |
| Percentage of revenue | 15.0% | 17.2% | | |

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The increase in research and development expense was due to a \$7.7 million increase in personnel-related costs (including a \$0.2 million increase in stock-based compensation expense) as a result of the increase in the headcount of our research and development personnel from 243 to 321 to support the development of our new wireless and software-centric broadband products and to enhance our existing software-centric broadband products, a \$0.9 million increase in facilities and infrastructure expenses and a \$0.7 million increase in prototype development costs for new broadband products.

Sales and Marketing

| | Nine Months Ended September 30, | | Change | |
|-----------------------|------------------------------------|----------|---------|-------|
| | 2015 | 2016 | Amount | % |
| | (dollars in thousands) | | | |
| Sales and marketing | \$23,876 | \$27,289 | \$3,413 | 14.3% |
| Percentage of revenue | 13.1% | 12.6% | | |

The increase in sales and marketing expense was due to a \$6.2 million increase in personnel-related costs (including a \$0.3 million increase in stock-based compensation expense) as a result of the increase in the headcount of our sales and marketing personnel from 90 to 114 in order to increase the sales force associated with our software-centric broadband products and to develop a new sales force assigned to our new wireless solutions and a \$1.2 million increase in marketing costs related to trade shows and events to promote our solutions, both partially offset by a \$4.3 million decrease in sales agent commissions related to a decrease in sales in Latin America.

General and Administrative

| | Nine Months Ended September 30, | | Change | |
|----------------------------|------------------------------------|----------|--------|------|
| | 2015 | 2016 | Amount | % |
| | (dollars in thousands) | | | |
| General and administrative | \$12,558 | \$13,532 | \$ 974 | 7.8% |
| Percentage of revenue | 6.9% | 6.2% | | |

The increase in general and administrative expense was primarily due to a \$1.5 million increase in personnel-related costs (which reflected no change in stock-based compensation expense) to support the continued growth in our business, partially offset by a \$0.3 million decrease in professional fees.

Other Income (Expense), Net

| | Nine Months Ended September 30, | | Change | |
|-----------------------------|------------------------------------|--------|---------|--------|
| | 2015 | 2016 | Amount | % |
| | (dollars in thousands) | | | |
| Other income (expense), net | \$(1,561) | \$ 953 | \$2,514 | 161.1% |
| Percentage of revenue | 0.9% | 0.4% | | |

The change from a net other expense of \$1.6 million to a net other income of \$1.0 million was primarily due to a lower carrying value of foreign-denominated cash and receivables during the nine months ended September 30, 2016 as compared to the nine months ended September 30, 2015 and the related absence of foreign currency transaction losses arising from the depreciation of the euro.

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Provision for Income Taxes

| | Nine Months Ended September 30, | | Change | |
|----------------------------|------------------------------------|----------|-----------|---------|
| | 2015 | 2016 | Amount | % |
| Provision for income taxes | \$23,405 | \$16,228 | \$(7,177) | (30.7)% |
| Effective tax rate | 36.0% | 24.9% | | |

The 11.1% decrease in our effective tax rate primarily resulted from the tax benefits from certain employee stock-based compensation transactions during the nine months ended September 30, 2016 related to our adoption effective as of January 1, 2016 of a new share-based payment accounting standard, a decrease in the foreign tax rate differential, and the timing of the enactment of the U.S. federal research and development credit, which was effective as of September 30, 2016 but not effective as of September 30, 2015.

Year Ended December 31, 2014 Compared to Year Ended December 31, 2015

Revenue

| | Year Ended December 31, | | | | Change | |
|--------------------------------|-------------------------|---------------|------------------|---------------|------------------|--------------|
| | 2014 | | 2015 | | Amount | % |
| | Amount | % of Total | Amount | % of Total | | |
| | (dollars in thousands) | | | | | |
| Revenue: | | | | | | |
| Product | \$194,358 | 92.0% | \$247,588 | 90.9% | \$ 53,230 | 27.4% |
| Service | 16,920 | 8.0% | 24,862 | 9.1% | 7,942 | 46.9% |
| Total revenue | <u>\$211,278</u> | <u>100.0%</u> | <u>\$272,450</u> | <u>100.0%</u> | <u>\$ 61,172</u> | <u>29.0%</u> |
| Revenue by geographic region: | | | | | | |
| North America | \$107,376 | 50.8% | \$ 54,518 | 20.0% | \$(52,858) | (49.2)% |
| Latin America | 29,915 | 14.2% | 87,382 | 32.1% | 57,467 | 192.1% |
| Europe, Middle East and Africa | 32,407 | 15.3% | 75,767 | 27.8% | 43,360 | 133.8% |
| Asia-Pacific | 41,580 | 19.7% | 54,783 | 20.1% | 13,203 | 31.8% |
| Total revenue | <u>\$211,278</u> | <u>100.0%</u> | <u>\$272,450</u> | <u>100.0%</u> | <u>\$ 61,172</u> | <u>29.0%</u> |

The increase in product revenue was primarily due to product sales to new customers that deployed our CCAP solution of \$42.4 million in Latin America, \$16.8 million in Europe, Middle East and Africa, and \$13.8 million in Asia-Pacific; an increase in product sales of \$8.9 million to existing customers in such regions; and recognition of previously deferred revenue of \$23.1 million upon the product acceptance by a new customer in Europe that deployed our CCAP solution. These increases were partially offset by a decrease in product sales in North America of \$51.9 million due to the timing of customer network upgrade and expansion projects.

The increase in service revenue was primarily due to a \$12.7 million increase in maintenance and support services as a result of an increase in our installed base of customers from both new customers and existing customers renewing their maintenance and support service contracts, which was partially offset by a \$4.7 million decrease in professional services due to the timing of customer network upgrade and expansion projects.

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Cost of Revenue and Gross Profit

| | Year Ended December 31, | | Change | |
|------------------------|-------------------------|-----------------|-----------------|---------|
| | 2014 | 2015 | Amount | % |
| (dollars in thousands) | | | | |
| Cost of revenue: | | | | |
| Product | \$59,088 | \$74,349 | \$15,261 | 25.8% |
| Service | 5,917 | 5,265 | (652) | (11.0)% |
| Total cost of revenue | <u>\$65,005</u> | <u>\$79,614</u> | <u>\$14,609</u> | 22.5% |

The increase in cost of product revenue was primarily due to an increase in the quantity of our software-centric broadband products sold and an increase in personnel-related costs resulting from hiring additional employees.

The decrease in cost of service revenue was primarily due to a \$1.8 million decrease in subcontracted professional services related to new customer deployments of our CCAP solution, partially offset by a \$0.9 million increase in personnel-related costs resulting from hiring additional employees.

| | Year Ended December 31, | | | | Change | |
|------------------------|-------------------------|--------------|------------------|--------------|-----------------|--------------------|
| | 2014 | | 2015 | | Amount | Gross Margin (bps) |
| | Amount | Gross Margin | Amount | Gross Margin | | |
| (dollars in thousands) | | | | | | |
| Gross profit: | | | | | | |
| Product | \$135,270 | 69.6% | \$173,239 | 70.0% | \$37,969 | 40 |
| Service | 11,003 | 65.0% | 19,597 | 78.8% | 8,594 | 1,380 |
| Total gross profit | <u>\$146,273</u> | 69.2% | <u>\$192,836</u> | 70.8% | <u>\$46,563</u> | 160 |

The slight increase in product gross margin was primarily due to an increase in sales of software-based capacity expansions during the year ended December 31, 2015.

The increase in service gross margin was due to a decrease in sales of lower-margin professional services related to new customer deployments of our CCAP solution during 2015 as compared to 2014.

Research and Development

| | Year Ended December 31, | | Change | |
|--------------------------|-------------------------|----------|----------|-------|
| | 2014 | 2015 | Amount | % |
| (dollars in thousands) | | | | |
| Research and development | \$25,481 | \$37,155 | \$11,674 | 45.8% |
| Percentage of revenue | 12.1% | 13.6% | | |

The increase in research and development expense was due to a \$8.9 million increase in personnel-related costs (including a \$1.0 million increase in stock-based compensation expense) as a result of the increase in headcount of our research and development personnel from 187 to 256 to support the development of our new wireless and software-centric broadband products and to enhance our existing software-centric broadband products, a \$1.5 million increase in facilities and infrastructure expenses and a \$1.1 million increase in hardware prototype development costs for new broadband products.

[Table of Contents](#)**Sales and Marketing**

| | Year Ended December 31, | | Change | |
|-----------------------|----------------------------|----------|----------|-------|
| | 2014 | 2015 | Amount | % |
| | (dollars in thousands) | | | |
| Sales and marketing | \$21,409 | \$36,157 | \$14,748 | 68.9% |
| Percentage of revenue | 10.1% | 13.3% | | |

The increase in sales and marketing expense was due to a \$7.5 million increase in sales agent commissions related to an increase in sales in Latin America, a \$5.7 million increase in personnel-related costs (including a \$0.2 million increase in stock-based compensation expense) as a result of the increase in the headcount of our sales and marketing personnel from 67 to 94 in order to increase the sales force associated with our software-centric broadband products and to start the development a new sales force assigned to our new wireless solutions, a \$0.8 million increase in facilities and infrastructure expenses and a \$0.5 million increase in marketing costs related to trade shows and events to promote our solutions.

General and Administrative

| | Year Ended December 31, | | Change | |
|----------------------------|----------------------------|----------|---------|-------|
| | 2014 | 2015 | Amount | % |
| | (dollars in thousands) | | | |
| General and administrative | \$10,346 | \$16,453 | \$6,107 | 59.0% |
| Percentage of revenue | 4.9% | 6.0% | | |

The increase in general and administrative expense was primarily due to a \$4.0 million increase in stock-based compensation expense, a \$1.3 million increase in personnel-related costs due to an increase in the headcount of personnel in our general and administrative functions due to the growth in our business and a \$0.7 million increase in professional fees.

Other Income (Expense), Net

| | Year Ended December 31, | | Change | |
|-----------------------------|----------------------------|-----------|---------|-------|
| | 2014 | 2015 | Amount | % |
| | (dollars in thousands) | | | |
| Other income (expense), net | \$(2,942) | \$(1,408) | \$1,534 | 52.1% |
| Percentage of revenue | 1.4% | 0.5% | | |

The change from a net other expense of \$2.9 million to a net other expense of \$1.4 million was due to a \$1.5 million decrease in other expense associated with our revaluation in 2014 of a liability for a common stock warrant, which was exercised on March 31, 2014.

Provision for Income Taxes

| | Year Ended December 31, | | Change | |
|----------------------------|----------------------------|----------|---------|-------|
| | 2014 | 2015 | Amount | % |
| | (dollars in thousands) | | | |
| Provision for income taxes | \$26,387 | \$33,742 | \$7,355 | 27.9% |
| Effective tax rate | 30.6% | 33.2% | | |

The increase in the effective tax rate of 2.6% primarily resulted from an increase in the foreign tax rate differential.

Consolidated Quarterly Results of Operations

The following table sets forth our unaudited quarterly consolidated statement of operations data, in both dollar amounts and as a percentage of total revenue, for each of the seven fiscal quarters in the period ended September 30, 2016. In management's opinion, the quarterly statement of operations data has been prepared on the same basis as the audited consolidated financial statements included in this prospectus and reflect all adjustments, consisting only of normal recurring adjustments, necessary for a fair presentation of this data. This information should be read together with our consolidated financial statements and related notes appearing elsewhere in this prospectus. Our operating results may fluctuate due to a variety of factors. The results of historical periods are not necessarily indicative of the results of operations for a full year or any future period.

| | Three Months Ended | | | | | | |
|--|--------------------|------------------|-------------------|------------------|------------------|------------------|-------------------|
| | Mar. 31, 2015 | June 30, 2015 | Sept. 30, 2015 | Dec. 31, 2015 | Mar. 31, 2016 | June 30, 2016 | Sept. 30, 2016 |
| | (in thousands) | | | | | | |
| Revenue: | | | | | | | |
| Product | \$ 55,884 | \$ 68,276 | \$ 42,007 | \$ 81,421 | \$ 76,433 | \$ 56,777 | \$ 58,553 |
| Service | 3,505 | 6,814 | 6,057 | 8,486 | 6,996 | 8,148 | 9,995 |
| Total revenue | <u>59,389</u> | <u>75,090</u> | <u>48,064</u> | <u>89,907</u> | <u>83,429</u> | <u>64,925</u> | <u>68,548</u> |
| Cost of revenue: | | | | | | | |
| Product | 16,379 | 18,783 | 13,322 | 25,865 | 27,103 | 22,427 | 19,263 |
| Services | 1,141 | 1,233 | 1,278 | 1,613 | 1,408 | 1,997 | 2,578 |
| Total cost of revenue | <u>17,520</u> | <u>20,016</u> | <u>14,600</u> | <u>27,478</u> | <u>28,511</u> | <u>24,424</u> | <u>21,841</u> |
| Gross profit | <u>41,869</u> | <u>55,074</u> | <u>33,464</u> | <u>62,429</u> | <u>54,918</u> | <u>40,501</u> | <u>46,707</u> |
| Operating expenses: | | | | | | | |
| Research and development | 8,270 | 9,284 | 9,854 | 9,747 | 12,189 | 12,573 | 12,451 |
| Sales and marketing | 7,129 | 7,155 | 9,592 | 12,281 | 8,644 | 9,125 | 9,520 |
| General and administrative | 3,600 | 4,671 | 4,287 | 3,895 | 4,347 | 4,665 | 4,520 |
| Total operating expenses | <u>18,999</u> | <u>21,110</u> | <u>23,733</u> | <u>25,923</u> | <u>25,180</u> | <u>26,363</u> | <u>26,491</u> |
| Income from operations | 22,870 | 33,964 | 9,731 | 36,506 | 29,738 | 14,138 | 20,216 |
| Other income (expense), net | (3,464) | 2,016 | (113) | 153 | 319 | 278 | 356 |
| Income before provision for income taxes | 19,406 | 35,980 | 9,618 | 36,659 | 30,057 | 14,416 | 20,572 |
| Provision for income taxes | 6,757 | 13,278 | 3,370 | 10,337 | 8,345 | 2,412 | 5,471 |
| Net income | <u>\$ 12,649</u> | <u>\$ 22,702</u> | <u>\$ 6,248</u> | <u>\$ 26,322</u> | <u>\$ 21,712</u> | <u>\$ 12,004</u> | <u>\$ 15,101</u> |

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| | Three Months Ended | | | | | | |
|--|--------------------|------------------|-------------------|------------------|------------------|------------------|-------------------|
| | Mar. 31, 2015 | June 30, 2015 | Sept. 30, 2015 | Dec. 31, 2015 | Mar. 31, 2016 | June 30, 2016 | Sept. 30, 2016 |
| (as a percentage of total revenue) | | | | | | | |
| Revenue: | | | | | | | |
| Product | 94% | 91% | 87% | 91% | 92% | 87% | 85% |
| Service | 6 | 9 | 13 | 9 | 8 | 13 | 15 |
| Total revenue | <u>100</u> | <u>100</u> | <u>100</u> | <u>100</u> | <u>100</u> | <u>100</u> | <u>100</u> |
| Cost of revenue: | | | | | | | |
| Product | 28 | 25 | 28 | 29 | 32 | 35 | 28 |
| Service | 2 | 2 | 3 | 2 | 2 | 3 | 4 |
| Total cost of revenue | <u>30</u> | <u>27</u> | <u>30</u> | <u>31</u> | <u>34</u> | <u>38</u> | <u>32</u> |
| Gross profit | <u>70</u> | <u>73</u> | <u>70</u> | <u>69</u> | <u>66</u> | <u>62</u> | <u>68</u> |
| Operating expenses: | | | | | | | |
| Research and development | 14 | 12 | 21 | 11 | 15 | 19 | 18 |
| Sales and marketing | 12 | 10 | 20 | 14 | 10 | 14 | 14 |
| General and administrative | 6 | 6 | 9 | 4 | 5 | 7 | 7 |
| Total operating expenses | <u>32</u> | <u>28</u> | <u>49</u> | <u>29</u> | <u>30</u> | <u>41</u> | <u>39</u> |
| Income from operations | 39 | 45 | 20 | 41 | 36 | 22 | 29 |
| Other income (expense), net | (6) | 3 | — | — | — | — | 1 |
| Income before provision for income taxes | 33 | 48 | 20 | 41 | 36 | 22 | 30 |
| Provision for income taxes | 11 | 18 | 7 | 11 | 10 | 4 | 8 |
| Net income | <u>21%</u> | <u>30%</u> | <u>13%</u> | <u>29%</u> | <u>26%</u> | <u>18%</u> | <u>22%</u> |

Percentages in the table above are based on actual values. As a result, some totals may not sum due to rounding.

Quarterly Revenue and Cost of Revenue

Our revenue has been influenced over the periods presented by demand for and sales of our software-centric broadband products, including our CCAP solution and DOCSIS 3.1 capabilities, an increase in our sales of software-based capacity expansions, and an increase in our maintenance and support services revenue due to an increase in the supported installed base of equipment. An overall increase in demand for our products over the periods presented, combined with the introduction of new products, has contributed to the overall increase in our revenue.

We believe that seasonality generally causes product revenue to be greater for the first and fourth quarters of our year as compared to the second and third quarters. We believe that this seasonality results primarily from the procurement, budgeting and deployment cycles of many of our customers.

Product revenue during the three months ended June 30, 2015 included the recognition of previously deferred product revenue of \$23.1 million upon the product acceptance by a new customer in Europe that deployed our CCAP solution. The cost of product revenue for the same period also included the recognition of previously deferred inventory costs related to this product acceptance.

Quarterly Gross Profit

Our gross profit and gross margin are primarily driven by the mix of products sold, the amount of capacity expansions sold, and the amount of maintenance and support services revenue recognized for the period. The

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decreases in gross profit and gross margin during the three months ended March 31, 2016 and June 30, 2016 were primarily due to lower gross profit from the initial sales to new customers of our broadband products as a result of the amount of hardware in these sales.

Quarterly Operating Expenses

Our operating expenses have generally increased over the periods presented primarily related to the increase in personnel and the related salary and benefit costs to support the growth of our business and the development of new products. Our total headcount was 352, 481 and 579 as of December 31, 2014 and 2015 and September 30, 2016, respectively. The increase in research and development costs was primarily attributable to increased personnel added throughout each of the quarters presented to support the development of our new wireless and software-centric broadband products and to enhance our existing software-centric broadband products. Sales and marketing expenses and general and administrative expenses have increased over the periods presented primarily due to increases in personnel to support the growth of our business.

Sales and marketing expenses during the three months ended September 30, 2015 and December 31, 2015 included sales agent commissions of \$3.5 million and \$4.4 million, respectively, related to sales to certain customers in the Latin America and Asia-Pacific regions.

Liquidity and Capital Resources

Since our inception, we have primarily funded our operations through issuances of shares of our convertible preferred stock and cash flows from operations. The following tables set forth our cash and cash equivalents and working capital as of December 31, 2014 and 2015 and September 30, 2016 as well as our net cash flows for the years ended December 31, 2014 and 2015 and the nine months ended September 30, 2015 and 2016:

| | <u>As of December 31,</u> | | <u>As of</u> |
|---|---------------------------|-------------|----------------------|
| | <u>2014</u> | <u>2015</u> | <u>September 30,</u> |
| | <u>(in thousands)</u> | | |
| Consolidated Balance Sheet Data: | | | |
| Cash and cash equivalents | \$77,155 | \$ 92,496 | \$ 161,706 |
| Working capital | 99,237 | 162,981 | 158,675 |

| | <u>Year Ended</u> | | <u>Nine Months Ended</u> | |
|---|-----------------------|-------------|--------------------------|-------------|
| | <u>December 31,</u> | | <u>September 30,</u> | |
| | <u>2014</u> | <u>2015</u> | <u>2015</u> | <u>2016</u> |
| | <u>(in thousands)</u> | | | |
| Consolidated Cash Flow Data: | | | | |
| Net cash provided by operating activities | \$ 60,348 | \$ 24,602 | \$ 27,086 | \$124,069 |
| Net cash used in investing activities | (4,030) | (15,503) | (14,009) | (6,159) |
| Net cash provided by (used in) financing activities | (21,695) | 7,304 | 7,428 | (48,146) |

As of September 30, 2016, we had cash and cash equivalents of \$161.7 million and accounts receivable of \$74.9 million. We maintain a \$25.0 million working capital line of credit under which \$24.0 million was available and \$1.0 million was used as collateral for a standby letter of credit as of September 30, 2016.

We believe our existing cash and cash equivalents and anticipated cash flows from future operations and liquidity available from our line of credit will be sufficient to meet our working capital and capital expenditure needs for at least the next 12 months. Our future capital requirements may vary materially from those currently planned and will depend on many factors, including our rate of revenue growth, the timing and extent of spending on research and development efforts and other business initiatives, purchases of capital equipment to support our growth, the expansion of sales and marketing activities, expansion of our business through acquisitions or our investments in complementary products, technologies or businesses, the use of working capital to purchase additional inventory, the timing of new product introductions, market acceptance of our

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products and overall economic conditions. To the extent that current and anticipated future sources of liquidity are insufficient to fund our future business activities and requirements, we may be required to seek additional equity or debt financing. In the event additional financing is required from outside sources, we may not be able to raise it on terms acceptable to us or at all.

Our board of directors has declared a special dividend on two separate occasions since our inception to provide a return of capital to stockholders. The dividend payments totaled \$28.9 million and \$0.7 million in the years ended December 31, 2014 and 2015, respectively, and totaled \$47.8 million in the nine months ended September 30, 2016. We do not anticipate declaring cash dividends following the closing of this offering. Any future determination to declare dividends will be subject to the discretion of our board of directors and applicable law, and will depend on various factors, including our results of operations, financial condition, prospects and any other factors deemed relevant by our board of directors.

Cash Flows

Operating Activities

Our primary source of cash from operating activities has been from cash collections from our customers. We expect cash inflows from operating activities to be affected by increases in sales and timing of collections and by purchases and shipments of inventory. Our primary uses of cash from operating activities have been for personnel costs and investment in sales and marketing and research and development. We expect cash outflows from operating activities to increase as a result of further investment in research and development and sales and marketing and increases in personnel costs as we continue to enhance our products and introduce new products in an effort to continue to expand our business.

During the nine months ended September 30, 2016, cash provided by operating activities was \$124.1 million, primarily resulting from our net income of \$48.8 million, net non-cash charges of \$6.4 million and net cash provided by changes in our operating assets and liabilities of \$68.9 million. The net cash provided by changes in our operating assets and liabilities during the nine months ended September 30, 2016 was primarily due to a \$25.8 million decrease in accounts receivable due to the timing of billings and collections during the period and a higher proportion of our sales in geographic regions with shorter payment terms, a \$22.3 million increase in deferred revenue due to the deferral of the revenue recognition for certain sales transactions resulting from the customer acceptance provisions of those arrangements and an increase in sales of maintenance and support service contracts as a result of an increase in our installed base, a \$15.6 million increase in accounts payable primarily attributable to the timing of our payments for the purchases of inventory, and a \$10.3 million increase in accrued expenses and other current liabilities, which included an increase of \$13.9 million for accrued customer incentives, all partially offset by a \$4.9 million increase in accrued income taxes as a result of increased taxable income.

During the nine months ended September 30, 2015, cash provided by operating activities was \$27.1 million, primarily resulting from net income of \$41.6 million and net non-cash charges of \$9.2 million, both partially offset by net cash used by changes in our operating assets and liabilities of \$23.7 million. The net cash used by changes in our operating assets and liabilities during the nine months ended September 30, 2015 was primarily due to a \$27.9 million increase in inventory due to the anticipated growth in our business, a \$15.7 million decrease in accrued income taxes due to the timing of tax payments and an \$11.7 million decrease in deferred revenue primarily due to recognition of \$23.1 million of revenue upon the product acceptance by a new customer in Europe that deployed our CCAP solution, which was partially offset by a \$12.3 million increase in deferred revenue due primarily to the deferral of revenue recognition related to the finalization of a contractual arrangement with a customer in Europe. These uses of cash were partially offset by a \$24.2 million decrease in accounts receivable due to the timing of billings and collections during the period and a high concentration of our sales in geographic regions with shorter payment terms, and a \$9.4 million increase in accounts payable primarily attributable to timing of vendor payments.

During the year ended December 31, 2015, cash provided by operating activities was \$24.6 million, primarily resulting from our net income of \$67.9 million and net non-cash charges of \$12.7 million, both partially offset by net cash used by changes in our operating assets and liabilities of \$56.0 million. The net cash used by changes in our operating assets and liabilities during the year ended December 31, 2015 was primarily

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due to a \$28.6 million decrease in deferred revenue primarily due to recognition of \$23.1 million of revenue upon the product acceptance by a new customer in Europe that deployed our CCAP solution, a \$10.8 million decrease in accrued income taxes due to the timing of tax payments, a \$17.4 million increase in inventory for anticipated growth in our business and a \$9.7 million increase in accounts receivable due to an increase in sales and timing of the related collections. These uses of cash were partially offset by a \$2.7 million increase in accounts payable primarily attributable to the timing of our payments for the purchases of inventory and an \$8.0 million increase in accrued expenses and other current liabilities, which included an increase of \$3.4 million for personnel-related accrued liabilities, such as accrued salaries and bonuses, due to the growth in headcount.

During the year ended December 31, 2014, cash provided by operating activities was \$60.3 million, primarily resulting from our net income of \$59.7 million and net cash provided by changes in our operating assets and liabilities of \$1.9 million, both partially offset by net non-cash gains of \$1.2 million. The net cash provided by changes in our net operating assets and liabilities during the year ended December 31, 2014 was primarily due to a \$46.6 million increase in accounts receivable as a result of an increase in sales, the timing of our billings and a higher proportion of our sales in geographic regions with shorter payment terms; a \$22.1 million increase in inventory due to anticipated growth in our business; and a \$6.6 million decrease in accounts payable primarily attributable to the timing of our payments for the purchases of inventory. These uses of cash were partially offset by a \$59.4 million increase in deferred revenue due primarily to the deferral of the revenue recognition for several sales transactions resulting from the customer acceptance provisions of those arrangements, a \$13.9 million increase in accrued income taxes and an \$8.0 million increase in accrued expenses and other current liabilities, which included an increase of \$6.6 million for personnel-related accrued liabilities, such as accrued salaries and bonuses, due to the growth in headcount.

Investing Activities

Our investing activities have consisted primarily of expenditures for lab and computer equipment and software to support the development of new products and increase our manufacturing capacity to meet customer demand for our products. In addition, our investing activities include expansion of, improvements to, and the purchase of our facilities. As our business expands, we expect that we will continue to invest in these areas.

Net cash used in investing activities during the nine months ended September 30, 2016 was \$6.2 million for purchases of property and equipment.

Net cash used in investing activities during the nine months ended September 30, 2015 was \$14.0 million for purchases of property and equipment, consisting primarily of the purchase of and improvements to our corporate offices totaling \$10.3 million during that period.

Net cash used in investing activities during the year ended December 31, 2015 was \$15.5 million for purchases of property and equipment, consisting primarily of the purchase of and improvements to our corporate offices totaling \$10.4 million during that period.

Net cash used in investing activities during year ended December 31, 2014 was \$4.0 million for purchases of property and equipment.

Financing Activities

Net cash used in financing activities during the nine months ended September 30, 2016 was \$48.1 million and consisted primarily of dividend payments of \$47.8 million.

Net cash provided by financing activities during the nine months ended September 30, 2015 was \$7.4 million and consisted primarily of proceeds of \$7.9 million from the commercial mortgage on our corporate offices, partially offset by \$0.6 million of dividends paid.

Net cash provided by financing activities during the year ended December 31, 2015 was \$7.3 million and consisted primarily of proceeds of \$7.9 million from the commercial mortgage on our corporate offices, partially offset by \$0.7 million of dividends paid.

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Net cash used in financing activities during the year ended December 31, 2014 was \$21.7 million and primarily consisted of dividend payments of \$28.9 million, partially offset by proceeds from the exercise of stock options and a common stock warrant totaling \$6.7 million.

Working Capital Facility and Commercial Mortgage

In April 2014, we entered into a revolving credit agreement with Bank of America, which, as amended in 2016, provides for borrowings of up to \$25.0 million, subject to certain limitations. Borrowings under the revolver accrue interest, at our election, at either (1) the bank's prime rate or (2) LIBOR plus two percentage points, due quarterly in arrears. We are required to pay a fee of 0.20% per year, payable quarterly in arrears, on the unused amount of the revolver. The revolver matures on June 30, 2019.

Borrowings under the revolver are secured by substantially all of our assets, excluding intellectual property and investments in foreign subsidiaries. In connection with the revolver, we are subject to various affirmative, negative and financial covenants, including a funded debt to consolidated EBITDA ratio and a basic fixed charge coverage ratio. We were in compliance with all the covenants of the revolver as of December 31, 2015 and September 30, 2016. As of December 31, 2015 and September 30, 2016, we did not have any borrowings under the revolver, but we used \$1.0 million as collateral for a stand-by letter of credit to guarantee our contractual performance with a customer.

In July 2015, we entered into an \$8.0 million commercial mortgage loan agreement. The annual interest rate on the loan is 3.5%, and the loan is repayable in 60 monthly installments of principal and interest based on a 20-year amortization schedule. The loan is secured by the land and building, which are our corporate offices, purchased in March 2015, and contains annual affirmative, negative and financial covenants, including maintenance of a minimum debt service ratio. We were in compliance with all the covenants of the loan as of December 31, 2015 and September 30, 2016. As of December 31, 2015 and September 30, 2016, the outstanding principal amount under the loan was \$7.8 million and \$7.6 million, respectively.

Term Loan B

On _____, 2016, we entered into a Term Loan B providing for _____.

Contractual Obligations and Commitments

The following table summarizes our contractual obligations and commitments as of December 31, 2015.

| | Payments Due by Period | | | | |
|---------------------------------|------------------------|---------------------|-----------------|-----------------|----------------------|
| | Total | Less than 1 Year | 1 to 3 Years | 4 to 5 Years | More than 5 Years |
| Commercial mortgage | \$ 7,835 | \$ 282 | \$ 595 | \$6,958 | \$ — |
| Interest expense ⁽¹⁾ | 1,168 | 274 | 516 | 378 | — |
| Operating lease ⁽²⁾ | 1,124 | 291 | 612 | 204 | 17 |
| Total | <u>\$10,127</u> | <u>\$ 847</u> | <u>\$1,723</u> | <u>\$7,540</u> | <u>\$ 17</u> |

(1) Reflects contractual obligations to pay interest on the commercial mortgage until the maturity date.

(2) In January 2016, we leased 9,000 square feet of manufacturing space in China through 2019. In September 2016, we leased 29,880 square feet of manufacturing, warehouse and office space in Ireland through 2026, with a right to terminate in 2021. Aggregate payments due under these leases are \$40,000 during the year ending December 31, 2016, \$747,000 in total during the years ending December 31, 2017 and 2018, \$820,000 in total during the years ending December 31, 2019 and 2020, and \$305,000 thereafter. Such amounts are not reflected in the table.

We enter into purchase agreements with our contract manufacturers and suppliers, generally with terms of a year or more. We have no minimum purchase requirements under these agreements.

Critical Accounting Policies and Significant Judgments and Estimates

Our management's discussion and analysis of financial condition and results of operations is based on our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America, or GAAP. In preparing our consolidated financial statements, we make estimates, assumptions and judgments that can have a significant effect on our reported revenue, results of operations and net income or loss, as well as on the value of certain assets and liabilities on our balance sheet during and as of the reporting periods. These estimates, assumptions and judgments are necessary because future events and their effects on our results and the value of our assets cannot be determined with certainty, and are made based on our historical experience and on other assumptions that we believe to be reasonable under the circumstances. We evaluate our estimates and assumptions on an ongoing basis. These estimates may change as new events occur or additional information is obtained, and we may periodically be faced with uncertainties, the outcomes of which are not within our control and may not be known for a prolonged period of time. As the use of estimates is inherent in the financial reporting process, actual results could differ from those estimates.

While our significant accounting policies are described in more detail in Note 2 to our consolidated financial statements appearing at the end of this prospectus, we believe that the following accounting policies are those most critical to the judgments and estimates used in the preparation of our consolidated financial statements.

Revenue Recognition

We generate revenue from sales of our broadband products, along with associated maintenance and support services, and, to a lesser extent, from sales of professional services and extended warranty services. We also generate revenue from sales of additional line cards and software-based capacity expansions. Maintenance and support services include telephone support and unspecified software upgrades and updates provided on a when-and-if-available basis.

We recognize revenue from sales when the following revenue recognition criteria are met:

- *Persuasive evidence of an arrangement exists.* Binding contracts and/or customer purchase orders are generally evidence of an arrangement. For professional services, evidence of an arrangement may also include information documenting the scope of work to be performed, and customer acceptance terms, if any.
- *Delivery has occurred.* For broadband products, shipping documents and customer acceptance, if applicable, verify that delivery has occurred. For software-enabled capacity expansions, delivery occurs when the additional bandwidth capacity is made available to the customer. For professional services, delivery occurs as the services are completed.
- *The sales price is fixed or determinable.* The sales price is considered fixed or determinable when the fees have been contractually agreed with the customer and are not deemed to be subject to refund, adjustment or future discounts, and when the payment terms of the transaction do not extend beyond our customary payment terms, which are one year or less.
- *Collectibility is reasonably assured.* We assess the ability to collect from our customers based on a number of factors that generally include information supplied by credit agencies, references and/or analysis of customer accounts and payment history. If collection from a customer is not considered reasonably assured, all revenue related to the customer arrangement is deferred until payment is received and all other revenue recognition criteria have been met.

When customer acceptance of the product is required and is other than perfunctory, revenue for the entire customer arrangement is deferred until the acceptance has been received.

Our products have both software and non-software (i.e., hardware) components that function together to deliver the products' essential functionality. In addition, the hardware sold generally cannot be used apart from

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the embedded software. As a result, all of our product and service offerings are excluded from the scope of software revenue recognition requirements and instead fall within the scope of Accounting Standards Codification, or ASC, Topic 605, *Revenue Recognition*.

Many of our sales involve multiple-deliverable arrangements that include products and maintenance and support services and, on a limited basis, may also include professional services and extended warranty services. We have determined that our products, maintenance and support services, professional services and extended warranty services have standalone value to the customer because each of these elements is sold separately to our customers or, in the case of professional services, is sold separately by other vendors. As a result, we treat each of these elements as a separate unit of accounting for purposes of allocating the arrangement fee and recognizing the revenue of each unit.

For our multiple-deliverable arrangements, we allocate the arrangement fee to each deliverable based on the relative selling prices of each of the deliverables in the arrangement using the selling price hierarchy. In such circumstances, we determine the selling price of each deliverable based on vendor-specific objective evidence, or VSOE, of selling price, if it exists; otherwise, third-party evidence, or TPE, of selling price. If neither VSOE nor TPE exists, we use our best estimate of the selling price, or BEBP, for the deliverable. We limit the amount of the arrangement fee allocated to deliverables to the amount that is not contingent on the future delivery of products or services or future performance obligations and the amount that is not subject to customer-specific return or refund privileges.

To date, we have not been able to establish VSOE of selling price of any of our products, maintenance and support services, professional services or extended warranty services because we have not established a history of consistently pricing each product or service within a narrow range. In addition, we are not able to determine TPE of selling price for our products or services because our various product and service offerings contain a significant level of differentiation and, therefore, comparable pricing of competitors' products and services with similar functionality cannot be obtained. As we are unable to establish selling price using VSOE or TPE, we use BEBP to allocate the arrangement fee to products, maintenance and support services, professional services and extended warranty services in multiple-deliverable arrangements. The objective of BEBP is to determine the price at which we would transact a sale if a product or service was sold on a standalone basis. We determine BEBP of selling price for our products and services by considering multiple factors, including, but not limited to, our historical pricing practices by customer type and geographic-specific market factors.

Revenue from product sales is recognized upon delivery to the customer, or upon the later receipt of customer acceptance of the product when such acceptance is required.

Revenue from maintenance and support services is recognized ratably over the contract period, which is typically one year, but can be as long as three or five years. When customer acceptance of a product is required, the recognition of any associated maintenance and support services revenue commences only upon customer acceptance of the associated product. Revenue from extended warranty services is recognized ratably over the contract period, which is typically one to three years.

Revenue from professional services is recognized as the services are performed. Professional services generally include installation or configuration services that are not deemed to be essential to the functionality of the products. When customer acceptance is required, the recognition of any associated professional services revenue is deferred until the associated product and/or professional service is accepted by the customer.

Resellers

We market and sell our products through our direct global sales force, supported by sales agents, and through resellers. Our resellers receive an order from an end customer prior to placing an order with us, and we confirm the identification of or are aware of the end customer prior to accepting such order. We invoice the reseller and record revenue based on the amount set forth in the reseller's purchase order submitted to us. Our resellers do not stock inventory received from us.

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When we transact with a reseller, our contractual arrangement is with the reseller and not with the end customer. Whether we transact business with and receive the order from a reseller or directly from an end customer, our revenue recognition policy and resulting pattern of revenue recognition for the order are the same.

We also use sales agents that assist us in the sales process with certain customers primarily located in the Latin America and Asia-Pacific regions. Sales agents are not resellers. If a sales agent is engaged in the sales process, we receive the order directly from and sell the products and services directly to the end customer, and we pay a commission to the sales agent, calculated as a percentage of the related customer payment. Sales agent commissions are recorded as expenses when incurred and are classified as sales and marketing expenses in our consolidated statements of operations and comprehensive income.

Deferred Revenue

Amounts billed in excess of revenue recognized are recorded as deferred revenue. Deferred revenue includes customer deposits, amounts billed for maintenance and support services contracts in advance of services being performed, amounts for trade-in right liabilities and amounts related to arrangements that have been deferred as a result of not meeting the required revenue recognition criteria as of the end of the reporting period. Deferred revenue expected to be recognized as revenue more than one year subsequent to the balance sheet date is reported within long-term liabilities in our consolidated balance sheets.

When the payment terms of a customer order extend beyond our customary payment terms, which are one year or less, we consider the arrangement to be an extended payment term arrangement and conclude that the sales price is not fixed or determinable for revenue recognition purposes. In these circumstances, we defer all revenue of the arrangement and only recognize revenue to the extent of the payment amounts that become due, provided that all other revenue recognition criteria have been met.

We defer recognition of incremental direct costs, such as cost of goods and services, until recognition of the related revenue. Such costs are classified as current assets if the related deferred revenue is classified as current, and such costs are classified as non-current assets if the related deferred revenue is classified as non-current.

Other Revenue Recognition Policies

In limited instances, we have offered future rebates to customers based on a fixed or variable percentage of actual sales volumes over specified periods. The future rebates earned based on the customer's purchasing from us in one period may be used as credits to be applied by them against accounts receivable due to us in later periods. We account for these future rebates as a reduction of the revenue recorded for the customer's current purchasing activity giving rise to the future rebates. The liability for these future rebates is recorded as accrued customer incentives until the credits have been applied by the customer against accounts receivable due to us or the credits expire.

When future trade-in rights are granted to customers at the time of sale, we defer a portion of the revenue recognized for the sale and account for it as a guarantee at fair value until the trade-in right is exercised or the right expires, in accordance with ASC Topic 460, *Guarantees*. Determining the fair value of the trade-in right requires us to estimate the probability of the trade-in right being exercised and the future value of the product upon trade-in. We assess and update these estimates at each reporting period, and our updates to these estimates may result in either an increase or decrease in the amount of revenue deferred.

Billings to customers for shipping costs and reimbursement of out-of-pocket expenses are recorded as revenue, and the associated costs incurred by us for those items are recorded as cost of revenue.

We exclude any taxes assessed by a governmental authority that are directly imposed on a revenue-producing transaction (e.g., sales, use and value added taxes) from our revenue and costs.

Inventories

Inventories are valued at the lower of cost or market value. Cost is computed using the first-in first-out convention. Inventories are composed of hardware and related component parts of finished goods. We establish provisions for excess and obsolete inventories after evaluating historical sales, future demand, market conditions, expected product life cycles, and current inventory levels to reduce such inventories to their estimated net realizable value. Such provisions are made in the normal course of business and charged to cost of revenue in our consolidated statements of operations and comprehensive income.

Deferred inventory costs are included within inventory in our consolidated balance sheets. Deferred inventory costs represent the cost of products that have been delivered to the customer for which revenue associated with the arrangement has been deferred as a result of not meeting all of the required revenue recognition criteria, such as receipt of customer acceptance. Until the revenue recognition criteria are met, we retain the right to a return of the underlying inventory. Deferred inventory costs are recognized as cost of revenue in our consolidated statement of operations and comprehensive income when the related revenue is recognized.

Product Warranties

Substantially all of our products are covered by a warranty for software and hardware for periods ranging from 90 days to one year. In addition, in conjunction with customers' renewals of maintenance and support services contracts, we offer an extended warranty for periods typically of one to three years for agreed-upon fees. In the event of a failure of a hardware product or software covered by these warranties, we must repair or replace the software or hardware or, if those remedies are insufficient, provide a refund at our discretion. Our warranty reserve, which is included in accrued expenses and other current liabilities in our consolidated balance sheets, reflects estimated material, labor and other costs related to potential or actual software and hardware warranty claims for which we expect to incur an obligation. Our estimates of anticipated rates of warranty claims and the costs associated therewith are primarily based on historical information and future forecasts. We periodically assess the adequacy of the warranty reserve and adjust the amount as necessary. If the historical data used to calculate the adequacy of the warranty reserve are not indicative of future requirements, additional or reduced warranty reserves may be required.

Derivative Instruments

We have certain international customers that are billed in foreign currencies. To mitigate the volatility related to fluctuations in the foreign exchange rates for accounts receivable denominated in foreign currencies, we enter into foreign currency forward contracts. We do not use derivative financial instruments for speculative purposes. As of September 30, 2016, we had foreign currency forward contracts outstanding with notional amounts totaling 2.3 million euros maturing in the fourth quarter of 2016. There were no outstanding derivative instruments as of December 31, 2015.

Our foreign currency forward contracts economically hedge certain risk but are not designated as hedges for financial reporting purposes, and accordingly, all changes in the fair value of these derivative instruments are recorded as unrealized foreign currency transaction gains or losses and are included in our consolidated statements of operations and comprehensive income. We record all derivative instruments on the balance sheet at fair value and had a liability of \$12,000 related to foreign currency forward contracts outstanding as of September 30, 2016, which was included in accrued expenses and other current liabilities in our consolidated balance sheet.

Income Taxes

We account for income taxes using the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of temporary differences between the financial statement and tax basis of assets and liabilities, as measured by enacted tax rates anticipated to be in effect when these differences reverse. This method also requires the recognition of future tax benefits to the extent that

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realization of such benefits is more likely than not. Deferred tax expense or benefit is the result of changes in the deferred tax assets and liabilities. We assess the likelihood that our deferred tax assets will be recovered from future taxable income and, to the extent we believe, based upon the weight of available evidence, that it is more likely than not that all or a portion of the deferred tax assets will not be realized, we establish a valuation allowance through a charge to income tax expense. We evaluate the potential for recovery of deferred tax assets by estimating the future taxable profits expected and considering prudent and feasible tax planning strategies.

We record a liability for potential payments of taxes to various tax authorities related to uncertain tax positions and other tax matters. The recorded liability is based on a determination of whether and how much of a tax benefit in our tax filings or positions is more likely than not to be realized. The amount of the benefit that may be recognized in the financial statements is the largest amount that has a greater than 50% likelihood of being realized upon ultimate settlement. To the extent that the assessment of such tax positions changes, the change in estimate is recorded in the period in which the determination is made. We establish a liability, which is included in accrued income taxes in our consolidated balance sheets, for tax-related uncertainties based on estimates of whether, and the extent to which, additional taxes will be due. These liabilities are established when we believe that certain positions might be challenged despite our belief that the tax return positions are fully supportable. We adjust the recorded liability in light of changing facts and circumstances. Our provision for income taxes includes the impact of the recorded liability and changes thereto.

We recognize interest and penalties related to uncertain tax positions within other income (expense) in our consolidated statements of operations and comprehensive income. Accrued interest and penalties are included in accrued income taxes in our consolidated balance sheets.

Stock-Based Compensation

We measure stock options and other stock-based awards granted to employees and directors based on the fair value on the date of the grant and recognize compensation expense of those awards, net of estimated forfeitures, over the requisite service period, which is generally the vesting period of the respective award. Generally, we issue stock options with only service-based vesting conditions and record the expense for these awards using the straight-line method.

For stock-based awards granted to non-employee consultants, compensation expense is recognized over the period during which services are rendered by such non-employee consultants until completed. At the end of each financial reporting period prior to completion of the service, the fair value of these awards is remeasured using the then-current fair value of our common stock and updated assumption inputs in the Black-Scholes option-pricing model.

We have also granted stock appreciation rights, or SARs, to certain employees, which require us to pay in cash upon exercise an amount equal to the product of the excess of the per share fair market value of our common stock on the date of exercise over the exercise price, multiplied by the number of shares of common stock with respect to which the stock appreciation right is exercised. Because these awards may require us to settle the awards in cash, they are accounted for as a liability in our consolidated balance sheets. The liability related to these awards, as well as related compensation expense, is recognized over the period during which services are rendered until completed. Changes in the fair value of the SAR liability are recorded in our consolidated statements of operations and comprehensive income. After vesting is completed, we will continue to remeasure the fair market value of the liability until the award is either exercised or cancelled, with changes in the fair value of the liability recorded in our consolidated statements of operations and comprehensive income.

We estimate the fair value of each stock option and SAR grant using the Black-Scholes option-pricing model, which uses as inputs the fair value of our common stock and assumptions we make for the volatility of our common stock, the expected term of the award, the risk-free interest rate for a period that approximates the expected term of our stock options and our expected dividend yield.

Valuation of Common Stock

Given the absence of an active market for our common stock prior to our initial public offering, the estimated fair value of our common stock has been determined by our board of directors at the time of each award grant based upon several factors, including its consideration of input from management, our most recently available third-party valuations of common stock and our board of directors' assessment of additional objective and subjective factors that it believed were relevant and which may have changed from the date of the most recent valuation through the date of the grant. These third-party valuations were performed in accordance with the guidance outlined in the American Institute of Certified Public Accountants' Accounting and Valuation Guide, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation* and used a combination of income and market approaches to estimate our enterprise value. Cash is added and interest bearing debt is subtracted from the estimated enterprise value in order to estimate the underlying equity value. Once the equity value is estimated, it is then allocated among the various classes of securities to arrive at the fair value of the common stock. These allocations were prepared using the option-pricing method, or OPM. The OPM treats common stock and preferred stock as call options on the total equity value of a company, with exercise prices based on the value thresholds at which the allocation among the various holders of a company's securities changes. Under this method, the common stock has value only if the funds available for distribution to stockholders exceed the value of the preferred stock liquidation preferences at the time of a liquidity event, such as a strategic sale or merger.

The third-party valuations were performed at various dates, which resulted in valuations of our common stock of \$41.97 per share as of October 23, 2015 and \$54.22 per share as of April 30, 2016. In addition to considering the results of these third-party valuations, our board of directors considered various objective and subjective factors to determine the fair value of our common stock as of each grant date, which may be a date later than the most recent third-party valuation date, including:

- our historical operating and financial performance;
- the market performance of comparable publicly traded companies within our industry;
- external market conditions affecting the networking industry, and trends within the networking industry;
- the identification and analysis of mergers and acquisitions of comparable companies;
- the prices, rights, preferences and privileges of our convertible preferred stock relative to the common stock;
- the likelihood of achieving a liquidity event such as an initial public offering or sale given prevailing market conditions and the nature and history of our business;
- any adjustments necessary to recognize a lack of marketability for our common stock;
- our financial position, including cash on hand, and our historical and forecasted performance and operating results; and
- U.S. and global economic market conditions.

The assumptions underlying these valuations represent management's best estimates. There are significant judgments and estimates inherent in the determination of the fair value of our common stock. These judgments and estimates include assumptions regarding our future operating performance, the timing of a potential IPO or other liquidity event and the determination of the appropriate valuation method at each valuation date. If we had made different assumptions, our stock-based compensation expense, net income and net income per share attributable to common stockholders could have been significantly different.

Once a public trading market for our common stock has been established in connection with the closing of this offering, it will no longer be necessary for our board of directors to estimate the fair value of our common stock in connection with our accounting for stock-based awards, as the fair value of our common stock will be its trading price in the public market.

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Awards Granted

The following table summarizes by grant date the number of shares of common stock subject to stock options, restricted stock units, or RSUs, and SARs granted from January 1, 2016 through the date of this prospectus, as well as the associated per share exercise price or reference price and the estimated fair value per share of our common stock on each grant date:

| Grant Date | Type of Award | Number of Shares Underlying Awards | Per Share Exercise Price of Options or SARs | Per Share Fair Value of Common Stock on Grant Date | Per Share Estimated Fair Value of Awards |
|-------------------|----------------------|---|--|---|---|
| March 26, 2016 | Options | 165,463 | \$ 41.97 | \$ 41.97 | \$ 16.80 |
| March 26, 2016 | RSUs | 48,894 | N/A | \$ 41.97 | \$ 41.97 |
| March 28, 2016 | Options | 60,500 | \$ 41.97 | \$ 41.97 | \$ 17.09 |
| July 7, 2016 | Options | 79,500 | \$ 54.22 | \$ 54.22 | \$ 21.84 |
| September 6, 2016 | Options | 50,340 | \$ 54.22 | \$ 54.22 | \$ 20.84 |
| September 6, 2016 | SARs | 6,000 | \$ 54.22 | \$ 54.22 | \$ 20.52 |

Emerging Growth Company Status

The JOBS Act provides that an “emerging growth company” can take advantage of the extended transition period afforded by the JOBS Act for the implementation of new or revised accounting standards. However, we are choosing to “opt out” of such extended transition period, and as a result, we will comply with new or revised accounting standards on the relevant dates on which adoption of such standards is required for non-emerging growth companies. The JOBS Act provides that our decision to not take advantage of the extended transition period for complying with new or revised accounting standards is irrevocable.

Off-Balance Sheet Arrangements

As of December 31, 2015 and September 30, 2016, we did not have any off-balance sheet arrangements, as defined in Item 303(a)(4)(ii) of Regulation S-K, such as the use of unconsolidated subsidiaries, structured finance, special purpose entities or variable interest entities.

Recent Accounting Pronouncements

We have reviewed all recently issued standards and have determined that, other than as disclosed in Note 2 to our audited consolidated financial statements appearing at the end of this prospectus, such standards will not have a material impact on our consolidated financial statements or do not otherwise apply to our operations.

Quantitative and Qualitative Disclosures about Market Risks

Market risk is the risk of loss to future earnings, values or future cash flows that may result from changes in the price of a financial instrument. The value of a financial instrument may change as a result of changes in interest rates, exchange rates, commodity prices, equity prices and other market changes. We are exposed to market risk related to changes in foreign currency exchange rates. We do not use derivative financial instruments for speculative or trading purposes. However, we have entered into, and in the future expect to continue to enter into, exchange rate hedging arrangements to manage the risks described below.

Foreign Currency Exchange Risk

We have accounts receivables denominated in foreign currencies, and our operations outside of the United States incur their operating expenses in foreign currencies. To date, the majority of our product sales and inventory purchases have been denominated in U.S. dollars. The functional currency of our international subsidiaries, except for our subsidiary in Ireland, is their local currency. During the years ended December 31,

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2014 and 2015 and the nine months ended September 30, 2015 and 2016, we incurred foreign currency transaction losses of \$3.2 million, \$3.0 million, \$2.6 million and \$45,000, respectively, primarily related to unrealized and realized foreign currency losses for accounts receivables denominated in foreign currencies. These foreign currency transaction losses were recorded as a component of other income (expense), net in our consolidated statements of operations and comprehensive income. We believe that a 5% change in the exchange rate between the U.S. dollar and euro would not materially impact our operating results or financial position. We entered into foreign currency exchange contracts during the nine months ended September 30, 2016, and we expect to continue to hedge certain significant transactions denominated in currencies other than the U.S. dollar in the future.

Interest Rate Sensitivity

Our cash and cash equivalents as of September 30, 2016 consisted of cash maintained in FDIC-insured operating accounts as well as investments in money market funds, certificates of deposits and commercial paper. Our primary exposure to market risk for our cash and cash equivalents is interest income sensitivity, which is affected by changes in the general level of U.S. interest rates. However, we do not believe a sudden change in the interest rates would have a material impact on our financial condition or results of operations.

Our revolving credit agreement with Bank of America provides for aggregate borrowings of up to \$25.0 million, under which, as of September 30, 2016, \$1.0 million was pledged as collateral for a stand-by letter of credit to guarantee our contractual performance with a customer and reduced the aggregate amount of borrowings available to us. Borrowings under the revolving line of credit accrue interest, at our election, at either (1) the bank's prime rate or (2) LIBOR plus two percentage points. A 10% increase or decrease in interest rates would not result in a material change in our obligations under the line of credit, even at the borrowing limit.

Inflation Risk

We do not believe that inflation has had a material effect on our business. However, if global demand for the base materials utilized in our suppliers' components were to significantly increase for the components we purchase from our suppliers to manufacture our products, our costs could become subject to significant inflationary pressures, and we may not be able to fully offset such higher costs through price increases. Our inability or failure to do so could harm our business, operating results and financial condition.

BUSINESS

Our Vision

Our products help our customers provide and manage broadband connectivity. We believe consumers and enterprises should be able to enjoy ultra-fast speeds and enhanced digital content experiences through their phones, tablets, computers, TVs and other connected devices at home or on the go. We believe that connectivity should be ubiquitous and seamless; it should not matter whether the user is accessing the Internet through wireless or fixed connections, and it should not matter whether that service is being provided by a cable operator, fixed telecom carrier or wireless services provider. Our innovative, software-centric products are designed to help achieve this vision.

Overview

We provide a suite of software-centric infrastructure solutions that allow cable service providers to deliver voice, video and data services over a single platform at multi-gigabit speeds. In addition, we offer solutions for next-generation distributed and virtualized architectures in cable operator, fixed telecom and wireless networks. Our innovative solutions enable customers to cost-effectively and dynamically increase network speed, add bandwidth capacity and new services for consumers and enterprises, reduce network complexity and reduce operating and capital expenditures.

We focus our development efforts on innovation and being the first to market with new products at each generational shift in cable network technology. We pioneered the use of a software-centric approach to leverage the programmability of field programmable gate arrays, or FPGAs, and general purpose processors for use in the cable industry. In addition, we believe we were the first to provide each of the following to our customers: a solution enabling cable service providers to deliver IP voice, digital video and data over a single port; a solution enabling cable service providers to deliver multi-gigabit speeds to their subscribers; and a remote node solution to enable distributed broadband cable access at gigabit speeds.

We have created a software-centric, multi-service portfolio that enables a broad range of core and access network functions for fixed and wireless networks. These networks share a common set of core and access network functions that enable network services such as subscriber management, session management, transport security and radio frequency, or RF, management. Our Axyom software architecture allows the deconstruction of core and access network functions into modular building blocks so that they can be applied to a particular end-user service, across fixed and wireless networks, which enables us to be a leader in network transformation. While we have historically focused on cable service providers, our Axyom software platform allows us to improve and expand the functionality of wireless service provider networks.

We offer a scalable solution that can meet the evolving bandwidth needs of our customers and their subscribers. Our first installation in a cable service provider's network frequently involves deploying our broadband products in only a portion of the provider's network and with only a fraction of the capacity of our products enabled at the time of initial installation. Over time, our customers have generally expanded the use of our solutions to other areas of their networks to increase network capacity. Capacity expansions are accomplished either by deploying additional systems or line cards, or by our remote enablement of additional channels through the use of software. Sales of additional line cards and software-based capacity expansions generate higher gross margins than our initial hardware-based deployments.

Our solutions are commercially deployed in over 60 countries by more than 350 customers, including regional service providers as well as some of the world's largest Tier 1 broadband service providers, serving millions of subscribers. Our principal customers include Charter/Time Warner Cable, Rogers and Mediacom in North America; Liberty Global, Vodafone and DNA Oyj in Europe; and Jupiter Communications and Beijing Gehua CATV Networks in Asia-Pacific.

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One of our largest customers, Time Warner Cable, launched its flagship “TWC Maxx” initiative in the New York City metropolitan area in 2014 using our solution. Our solution enabled Time Warner Cable to triple the maximum speed offered to its customers. The deployment of our solution also enabled Time Warner Cable to reduce power consumption by nearly 30%, or approximately 11GWh per year, which we estimate is enough power for over 1,800 residential homes. Our solution also enabled Time Warner Cable to reduce facility space and remove over 140 miles of coaxial copper cable.

We have achieved significant growth and profitability. For the year ended December 31, 2015, we generated revenue of \$272.5 million, net income of \$67.9 million and adjusted EBITDA of \$115.5 million, representing increases of 29.0%, 13.8% and 22.1%, respectively, from the amounts for the year ended December 31, 2014. For the nine months ended September 30, 2016, we generated revenue of \$216.9 million, net income of \$48.8 million and adjusted EBITDA of \$74.5 million, representing increases of 18.8% and 17.4% and a decrease of 1.5%, respectively, from the amounts for the nine months ended September 30, 2015.

Adjusted EBITDA is a non-GAAP financial measure. Please see “Selected Consolidated Financial Data—Non-GAAP Financial Measures” for information regarding the limitations of using adjusted EBITDA and for a reconciliation of adjusted EBITDA to net income, the most directly comparable financial measure calculated and presented in accordance with GAAP.

Industry Background and Broadband Service Provider Challenges

As broadband service providers look to address the rapidly evolving demands of consumers and enterprises, we believe they must address several key challenges.

Rapidly Increasing Bandwidth Demand

Bandwidth demand has grown substantially and is expected to continue to increase. Key drivers of this increased demand include:

- more users with more connected devices and applications;
- more time spent online by users;
- the increased use of bandwidth-intensive streaming media services, such as Amazon Prime Video, Netflix and YouTube; cloud applications, such as iCloud and Dropbox; and augmented and virtual reality applications;
- Internet of Things, or IoT, solutions, as already seen in connected homes, business and industries; connected devices such as Amazon Alexa or Google Assistant; machine-to-machine connectivity; car connectivity and smart cities;
- the backhaul demand by wireless service providers; and
- the rise of data consumption by enterprises with strict latency requirements on mission-critical and public safety-related applications.

According to a July 2016 Cisco Systems Visual Networking Index report, global IP traffic per capita per month is forecast to grow 150% from 2015 to 2020, from 10GB to 25GB, and the number of connected devices per capita in North America is expected to reach 12 in 2020, up from 7 in 2015, representing an increase of more than 70%.

Competition Fueled by Increasing Breadth of Service Offerings

Consumers and enterprises enjoy increased choice among broadband service providers, including cable service providers such as Charter and Comcast, diversified telecommunications companies such as AT&T and Verizon, and mobile-only network operators such as Sprint and T-Mobile. As a result, broadband service providers are facing increasing pressure to develop differentiated service offerings with higher levels of

performance at lower cost to consumers and enterprises. They are also under competitive pressure to offer a wider range of services, from Internet access, television, telephone and wireless services to additional services such as voice over Wi-Fi, video calling and, in general, smart Internet and security-related services. Moreover, the increasing popularity of over-the-top services puts additional pressure on the traditional video business of broadband service providers. In this new environment, fixed service providers have deployed fiber and Wi-Fi networks and have been exploring ways to provide mobile service offerings.

Increasing Network Complexity

Historically, broadband service providers have deployed separate systems within their fixed broadband networks for video and data services and have operated separate networks for fixed, Wi-Fi and mobile services. This traditional model requires service providers to maintain separate network infrastructure and personnel for each service. As network capacity and coverage have increased, and the diversity of service offerings has grown, the lack of interoperability of these separate networks has resulted in increasing network complexity and inefficient parallel network infrastructure.

Need to Control Operating and Capital Expenditures

The operation of network infrastructure is space, power and personnel intensive. In addition, the lack of interoperability between networks means that broadband service providers cannot optimize bandwidth usage by allocating traffic from networks experiencing high demand to those experiencing low demand, which can result in unused capacity and an unsatisfactory user experience.

Hardware-centric networks can also be expensive to update or replace. With frequent technology shifts and introductions of new service offerings, competition in the broadband industry is constantly changing. To remain competitive, service providers are regularly required to incur significant capital expenditures to upgrade existing equipment.

Opportunity to Transform Broadband Networks

Given the challenges they face, broadband service providers are undertaking three key technology initiatives to help build next-generation networks.

Densification

Increasing demand for bandwidth and user expectations for ubiquitous and seamless connectivity require, among other things, the addition of more end points for users to access broadband networks, also known as network densification. Consequently, broadband service providers are shifting from centralized to more distributed architectures. Densification requires extending network connectivity and distributing access aggregation solutions closer to end users. This results in the deployment of additional hardware, such as access aggregation nodes, small cells and related gateways.

Network Convergence

Many traditional service providers have historically either operated just one network type or operated fixed and wireless networks as separate businesses. However, more and more service providers that may have started out providing just fixed or wireless services are recognizing the benefits, especially those associated with quality of experience, of being able to provide both services to their subscribers. For example, cable service providers in the United States have formed a joint consortium, Cable WiFi, that provides Wi-Fi access to broadband cable subscribers at over 500,000 access points. Continued acquisition activity, such as Altice's acquisitions of Cablevision and SuddenLink and Vodafone's acquisition of Kabel Deutschland, has accelerated fixed and wireless convergence. This consolidation trend has caused a heightened focus on the economics of maintaining

two networks. Broadband service providers are seeking to integrate their separate delivery modes with all-IP architectures, shared transport and a common suite of software-centric core and access network functions.

Virtualization

Service providers are re-thinking traditional network architectures and moving toward more software-driven architectures. The use of software permits a fundamental change in the way broadband service providers deliver critical network functions. Software-enabled architectures that are decoupled from underlying hardware allow for increased efficiencies, upgradability, configuration flexibility, service agility and scalability not feasible with hardware-centric approaches.

Our Solutions

We offer solutions for fixed and wireless networks. Our software-centric, multi-service broadband platform, Axyom, enables ultra-broadband delivery and convergence.

We engineered our platform from the ground-up to be high performance, flexible and adaptable, and to allow our customers to seamlessly address the growing demand for bandwidth and connectivity and competitive need for service agility. Axyom also enables our customers to efficiently manage their networks and provide their subscribers with additional services.

Our software-centric broadband platform provides the following key benefits to broadband service providers:

Addition of Critical Bandwidth Capacity

Our solutions enable broadband service providers to offer multi-gigabit speeds to meet the growing demand for bandwidth. Our platform permits software-centric expansion of network capacity to enable rapid bandwidth and service provisioning, helping broadband service providers to respond flexibly to increased customer demands.

Flexibility to Add New and Expand Existing Services

Our platform provides us with the flexibility to adapt to changing industry standards and customer needs. We designed our Axyom software platform using what we refer to as Network Function Virtualization 2.0, or NFV 2.0, principles, which allow us to deconstruct core and access network functions into modular building blocks for rapid end-user service creation and optimization. This provides us flexibility and allows us to extend our platform to new applications leveraging a common infrastructure. When possible, we also seek to implement new features and enhanced customization through the use of FPGAs, which can be re-programmed in the field as service needs evolve. This software-centric approach enables our customers, in turn, to commercialize new features faster than they could with hardware-centric solutions. For example, our solutions enable broadband service providers to efficiently add new services and features, such as wholesale connectivity services for wireless service providers, enterprise-class connectivity services and interactive communication services, such as voice over Wi-Fi and video calling.

Ability to Upgrade Networks Remotely

Our programmable architecture allows us to deploy technology updates to our customers remotely without the expense, disruption or network downtime caused by hardware replacements or field visits by personnel, while minimizing network downtime. Similarly, we can remotely turn on additional features or capacity in order to scale our solutions to meet the needs of our customers as they look to broaden the use and capabilities of our products. Similarly, we are often able to troubleshoot and assist our customers with technical issues through seamless software updates.

Reduced Network Complexity, Operating Costs and Capital Expenditures

Our converged software platform allows broadband service providers to significantly reduce the complexity and costs of their networks by reducing parallel and otherwise redundant network architecture. The large capacity increases that our solutions enable, and the ability of our solutions to deliver voice, video and data over a single platform, mean fewer pieces of equipment in the network, and lower energy usage, operating costs and capital expenditures. For example, our solutions permit our customers to transition from DOCSIS 3.0 to DOCSIS 3.1 with less network downtime and fewer hardware replacements that result in lower costs than those of our competitors.

Ability to Densify Networks

Our products help broadband service providers deploy more capacity at the network edge, closer to where end users and devices are accessing the network, thereby increasing available bandwidth and reducing latency to improve quality of service. For example, our solutions allow cable service providers to take advantage of new technologies and standards such as distributed access remote-PHY, or R-PHY, to address network densification.

Common Platform Capabilities to Address the Needs of Both Fixed and Wireless Networks

Our software-centric, multi-service platform enables a broad range of network services for fixed and wireless networks, allowing for the delivery of diverse consumer and enterprise applications. Both fixed and wireless networks share a common set of core and access network functions that enable network services, such as subscriber management, session management, transport security, access aggregation and RF management. Our Axyom software architecture allows the deconstruction of these core and access network functions into modular building blocks so that they can be applied to a particular end-user service, across fixed and wireless networks, which enables us to be a leader in network transformation.

Our Competitive Strengths

The following competitive strengths have helped us become a market leader:

Highly Flexible, Software-Centric Architecture

We have designed our product portfolio from the ground up to be software-centric and modular in nature. Our proprietary software is at the heart of our products. Our software allows us to leverage the programmability of FPGAs and general purpose processors in our solutions. Our software-centric architecture allows us to virtualize core network and access functions allowing these functions to be decoupled from underlying hardware, which is not feasible with hardware-centric approaches. As a result, our software-centric architecture allows for increased efficiencies, upgradability, configuration flexibility, service agility and scalability.

Proven Engineering and Product Development Track Record

We have a proven history of anticipating network evolutions and developing solutions that enable next-generation networks. Our forward-looking design and investment approach, coupled with our proven product development track record, has enabled us to deliver fully featured next-generation solutions in advance of competitors. For example, we believe we were:

- first to market (2005) with a software-centric cable solution leveraging the programmability of FPGAs and general purpose processors;
- first to market (2008) with a commercially deployed, fully qualified DOCSIS 3.0 cable modem termination system, or CMTS;
- first to market (2012) with a commercially deployed converged cable access platform, or CCAP, delivering IP voice, digital video and data over a single port;

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- first to market (2015) with commercially deployed DOCSIS 3.1-compliant solutions supporting speeds of up to 10 gigabits per second; and
- first to market (2016) with a commercially deployable remote-PHY solution.

Strong Management and Engineering Team with a Culture of Innovation

We pride ourselves on our culture of innovation, which is driven by our management team of experienced executives and engineers with deep industry expertise. As of September 30, 2016, approximately 85% of our employees were engineers or had other technical backgrounds. With our talented and passionate engineering-led organization, we aim to be an industry visionary and are committed to delivering products based on next-generation technology before our competitors do. By providing customers with direct access to our engineers for product feedback and assistance, we believe our engineering expertise contributes to an enhanced customer experience.

Customer Focus

We have a passion to serve our customers and the agility and flexibility to offer solutions to meet their evolving requirements. Our sales, sales engineering, development and support teams work directly with customers to design, develop and implement new solutions and to resolve customer problems, even if another provider is the root cause of the problem. Our product development roadmap is based on our vision for the future but heavily influenced by near-term and mid-term customer requirements. This market insight helps us meet customer demands and achieve faster time to market with new features.

Diversified and Established Customer Base

Our solutions are commercially deployed in more than 60 countries by more than 350 customers, including regional service providers as well as some of the largest Tier 1 broadband service providers, serving millions of subscribers. Our wireless solutions are currently being commercially deployed by one customer and are deployed in over 20 prospective customer field trials, and we are in negotiations with several broadband service providers for commercial deployment of our small cell-related solutions.

Market Opportunity

We believe that the shift to software-centric ultra-broadband networks and fixed and wireless convergence presents us with a compelling market opportunity. Because fixed and wireless networks share a common set of core and access network functions, our platform is capable of addressing the needs of both fixed and wireless networks.

Our current CCAP solution addresses the service delivery needs of cable service providers. As fixed and wireless networks continue to converge, we believe there is an opportunity for us to take advantage of this fundamental shift. Although we currently only generate revenue from the fixed broadband CCAP market, we are currently engaged in over 20 trials with potential customers for our wireless solutions and expect to generate revenue in the future from sales of wireless solutions to new and existing customers. Our current wireless products consist of small cells, Wi-Fi and related gateways as well as evolved packet core products. Our small cells and related products enable wireless access, routing and traffic management functions to support the delivery of a number of services to end users. Our evolved packet core products enable subscriber and session management, security and data exchange between the core wireless network and wireless subscribers.

We believe the total addressable market for our fixed and wireless solutions will grow from \$10.6 billion in 2016 to \$18.3 billion in 2020, based on the following:

- According to S&L Global Market Intelligence, the CCAP market is projected to grow from \$1.9 billion in 2016 to \$2.4 billion in 2020, representing a 6% compound annual growth rate. This market currently accounts for all of our revenue.

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- According to Gartner, the small cells market is projected to grow from \$4.0 billion in 2016 to \$8.5 billion in 2020, representing a 21% compound annual growth rate.¹ Our small cell-related solutions are currently being implemented for commercial deployment by one customer and are deployed in 20 field trials, and we are in negotiations with several broadband service providers for commercial deployment of our small cell-related solutions.
- According to ABI Research, the evolved packet core market is expected to grow from \$4.7 billion in 2016 to \$7.4 billion in 2020, representing a 12% compound annual growth rate. Components of our evolved packet core application are currently deployed in two field trials.

Our Growth Strategy

The key elements of our growth strategy are:

Continue to Innovate and Extend Technology Leadership Through R&D Investment

We believe that we offer market-leading broadband infrastructure products today. We intend to continue to enhance our existing products and develop new products in both our current and adjacent markets. For example, we have invested in and launched distributed access architecture solutions to allow our cable customers to densify their networks, providing higher bandwidth, which enhances user experience.

Further Penetrate Existing Customers

Our customers often deploy our products in a specific region or for a specific application, which may only account for a portion of their overall network infrastructure needs. We plan to expand our footprint within the networks of existing customers as they realize the technological and financial benefits of our solutions. Our software-centric approach, which is embedded in our products already deployed in our customers' networks, allows those customers to expand network capacity to address increasing bandwidth demand and serve additional users through software.

Expand Our Customer Base

We intend to continue to invest in our sales and marketing organization to increase awareness of our products and services and expand our customer base. We believe our focus on hiring, training and retaining a knowledgeable and technical sales team helps us build better relationships with customers. We added 24 customers in the nine months ended September 30, 2016.

Expand the Breadth of Solutions Sold to Customers

We intend to sell additional products and solutions to our growing installed base of broadband service providers. We have invested in developing a virtualized platform that allows us to rapidly provide new applications and services to our customers.

Leverage Our Core Technology for the Cable Industry into Adjacent Wireless Markets

While we have historically focused on cable service providers, we are able to leverage our Axyom software platform to improve and expand the functionality of wireless service provider networks as those networks continue to densify and become more software-centric. Our platform is able to deliver virtualized core and access network functions for these networks. We have trials underway with several wireless providers and continue to invest in wireless research and development.

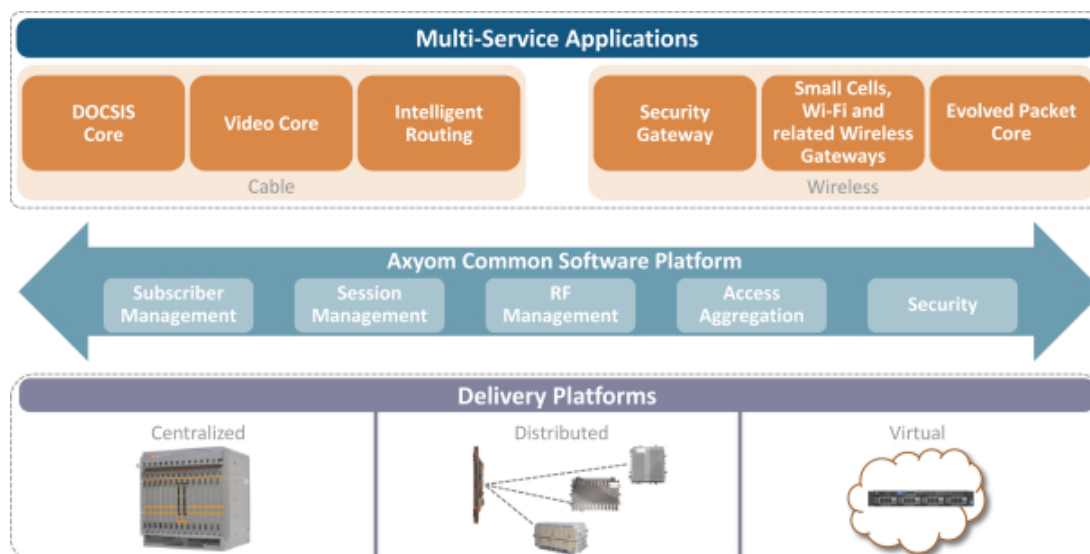
¹ Source: Gartner, Forecast: Communications Service Provider Operational Technology 3Q16 Update, 21 September 2016 (the "Gartner Report"). The Gartner Report represents research opinion or viewpoints published, as part of a syndicated subscription service, by Gartner, Inc. ("Gartner"), and are not representations of fact. The Gartner Report speaks as of its original publication date (and not as of the date of this prospectus) and the opinions expressed in the Gartner Report are subject to change without notice.

Invest in Our Platform through Selective Acquisitions

We may selectively pursue acquisitions that enhance our existing platform capabilities and are consistent with our overall growth strategy.

Products and Technology

We offer physical and virtual network solutions that enable our customers to provide fixed and wireless broadband services to consumers and enterprises.



Axyom Software Platform

Our Axyom software platform is central to our multi-service, ultra-broadband delivery architecture, integrating multiple core and access network functions. Axyom is Linux-based and is designed to provide high performance, programmability, scalability and flexibility. We designed Axyom using NFV 2.0 principles, which allow us to deconstruct network functions into modular building blocks for rapid end-user service creation and optimization. This provides flexibility and allows us to extend our platform to new applications leveraging a common infrastructure. Axyom has predominantly been integrated into our physical products to date and is increasingly being deployed in virtual environments.

Our Axyom software platform performs several critical network services:

- **Subscriber Management.** Enables dynamic management of subscriber authentication, provisioning, policy enforcement and allocation of network resources based on specific end-user service requirements to enhance quality of service
- **Session Management.** Intelligently manages application layer data streams to enable service creation and delivery and enhance quality of service
- **RF Management.** Efficiently manages RF signal generation (modulation/demodulation) while reducing noise to increase available RF spectrum and maximize data throughput over the network link in both fixed and wireless applications
- **Access Aggregation.** Manages and combines high volume data streams, regardless of connection type, including fixed broadband, Wi-Fi, LTE and 5G

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- *Security.* Enables end-to-end secure connectivity between users, devices and networks without sacrificing performance

Axyom can be deployed on a centralized basis on one of our hardware chassis, over distributed network hardware or as a virtualized solution, allowing operators to place network functions where they choose, whether close to the network edge or at a centralized location or data center.

Delivery Platforms

Depending on customer preference, network requirements and current network configuration, our solutions can be deployed in either a centralized, distributed or virtual environment. While centralized deployments allow our customers to deploy all critical CCAP functions in a single location, distributed and virtual deployments enable our customers to densify the access network by distributing access deeper into the network, away from existing data centers.

Centralized Deployment. Our C100G CCAP combines Cable Modem Termination System, or CMTS, functionality that enables IP data transport from data centers to end-users over cable networks, including voice over IP and edge-quadrature amplitude modulation, or Edge-QAM, functionality to enable video delivery over cable networks in one integrated chassis. We believe our C100G CCAP solution was the industry's first fully integrated CCAP and DOCSIS 3.1 solution. Our C100G CCAP is capable of supporting downstream speeds of 10 gigabits per second. Our C100G CCAP also features high downstream and upstream channel capacity, and low space and energy consumption requirements. Using our C100G CCAP, our customers whose networks are configured for DOCSIS 3.0 can adopt DOCSIS 3.1 through either a software upgrade or a simple line card addition, while continuing to service their end customers who use DOCSIS 3.0 modems. We are also able to increase capacity for our C100G CCAP through channel expansions, which are remotely installed software-enabled increases in the bandwidth capacity, regardless of whether it is configured for DOCSIS 3.0 or 3.1. We believe that our software-centric approach will enable us to seamlessly provide our customers with future upgrades as standards evolve. In addition to our C100G CCAP, we also offer our C40G CCAP, that provides per rack unit performance comparable to that of our C100G CCAP, but in a smaller form factor.

Distributed Deployment. We offer two solutions for distributed deployment:

- *Remote-PHY Solution.* Our R-PHY solution for cable networks consists of remotely deployable hardware that primarily performs RF modulation and connects to a CCAP at the network core to provide subscriber management, session management, access aggregation and security functions. The remotely deployed R-PHY nodes aggregate end user traffic for delivery back to the central data center. The software at the central data center can run on our C100G CCAP chassis or in a virtual environment. Our R-PHY solution allows broadband service providers that have implemented fiber-deep architectures to deploy ultra-fast fiber connections closer to the end user. By retaining software-driven network control and intelligence functions at the network core and placing physical layer functions remotely in a fiber node, broadband services providers can densify their networks to increase operational efficiencies and network capacity.
- *Apex Small Cell Solution.* Our Apex small cell solution consists of remotely deployable access points that provide cellular connectivity services at the network edge in conjunction with transport security functions to address coverage and capacity challenges. It allows a number of connectivity options including LTE and 3G. The Apex small cell solution allows broadband service providers to more cost-effectively densify cellular networks.

Virtual Deployment. Using our NFV 2.0 software architecture, all of the multi-service applications supported across fixed and wireless by our Axyom software platform can be delivered on a virtualized basis utilizing commodity servers. We are in trials with 20 wireless service providers to deliver multi-service applications virtually.

Multi-Service Applications

Our Axyom software platform initially focused on supporting applications enabling fixed broadband delivery. We have focused our recent development efforts on expanding Axyom's capabilities to support wireless applications. We refer to multi-service to describe a set of applications that are able to support requirements for both fixed and wireless networks.

Cable Network Applications

We believe our CCAP was the first solution offering full CCAP functionality, allowing the delivery of voice, video and data on a single platform. Our CCAP enables three key applications over a single cable network:

- *DOCSIS Core.* Provides high-speed delivery of IP data for broadband connectivity services, including voice over IP
- *Video Core.* Delivers high speed video processing, including for HD and 4K
- *Intelligent Routing.* Intelligently manages network traffic to optimize service quality

Wireless Network Applications

Our Axyom software platform also enables a number of applications addressing the evolving needs of fixed-mobile convergence as well as mobile network operators:

- *Security Gateway.* Enables secure encrypted access for subscribers roaming between trusted and untrusted networks, while providing high levels of density and performance.
- *Small Cells, Wi-Fi and Related Wireless Gateways.* Enables routing and security functions as well as traffic management to provide secure connectivity for wireless endpoints and enable broadband services such as LTE over Wi-Fi, including Wi-Fi calling.
- *Evolved Packet Core.* Enables subscriber management, session management and authentication, security and data exchange between the core network and subscribers.

Capacity Expansion Products

Our CCAP's flexible design allows our customers to rapidly increase service capabilities and tailor our solution to meet their evolving service needs.

Our software platform permits additional capacity and features to be provisioned remotely, as compared to hardware-centric solutions, which require wholesale hardware replacements. As new standards and services evolve and broadband networks become increasingly virtualized, we expect we will be able to deliver additional capabilities as software-only updates.

Our line card expansion options allow our customers to rapidly add new service interfaces and physical connection capacity without the need for chassis replacements. In addition, our expansion cards can cost-effectively enable support for our distributed access R-PHY solution utilizing the same C100G CCAP chassis.

Our Customers

Our solutions are commercially deployed by more than 350 customers, including some of the world's largest Tier 1 broadband service providers:

- in North America: Charter/Time Warner Cable, Rogers and Mediacom
- in Europe: Liberty Global, Vodafone and DNA Oyj
- in Asia-Pacific: Jupiter Communications and Beijing Gehua CATV Networks

Customer Case Studies

The following case studies illustrate why and how our customers deploy our solutions and the impact of our solutions on their businesses.

Time Warner Cable

Challenge: In 2014, Time Warner Cable, or TWC, launched its “TWC Maxx” initiative in the New York City metropolitan area. The goal of the initiative was to provide increasingly competitive service offerings, deliver a superior customer experience with ultra-fast Internet speeds and prepare for continued growth in demand. TWC needed a solution that increased bandwidth and consolidated IP voice, digital video and data services while minimizing space and energy requirements.

Solution and results: TWC implemented our C100G CCAP solution across the New York City metropolitan area, representing the first commercial deployment of full integrated CCAP services including voice, video and data over a single port. The implementation enabled TWC to increase bandwidth to customers by a factor of up to three. In addition, deployment of our solution permitted TWC to reduce power consumption by nearly 30%, or approximately 11 GWh per year, which we estimate is enough power for over 1,800 residential homes, to reduce facility space, and remove over 140 miles of coaxial copper cable, yielding substantial energy and operational savings.

Tier 1 Cable Service Provider in North America

Challenge: In the fourth quarter of 2015, a Tier 1 cable service provider in North America launched an initiative to make 1 gigabit per second service available across its entire cable footprint.

Solution and results: The customer recognized that a CCAP solution was necessary to offer 1 gigabit per second service. The customer required a DOCSIS 3.1-compliant solution and initially considered purchasing solutions from multiple vendors; however, after evaluating our technology compared to that of our competitors, the customer selected us to complete 100% of the project, citing our rapid deployment timelines. The customer deployed our C100G CCAP solution to service its entire footprint, replacing its existing third-party CMTSs in their entirety. As a result of the initiative, the customer is achieving its objective and rolling out 1 gigabit per second service across its entire footprint, and now provides 1 gigabit per second service in the largest metropolitan market it serves.

Sales and Marketing

We sell our products and services through our direct sales force and in partnership with our resellers and sales agents. Our sales force is supported by our sales engineering team, which has deep technical expertise and the capability for product presentations, product evaluations, field trials and customer care. Each sales team is responsible for specific direct end-customer accounts and/or a geographic territory across the following regions: North America, Latin America, Asia-Pacific and Europe, and Middle East & Africa. We intend to expand our sales force and our reseller and sales agent network.

Our products typically have a long sales cycle, requiring detailed discussions with prospective customers about their network requirements and technology roadmaps. To help us succeed in a market characterized by long sales cycles, we have developed strong customer relationships, which in turn provide us with insight into how our products will be deployed in our customers’ networks. We involve product engineers in the sales process, enabling them to build relationships with customers that are valuable both during implementation and in post-sales customer support. These relationships also provide us with opportunities to leverage our familiarity with our customers’ needs to make additional sales following the initial sale.

We also use resellers to market, sell and support our products and services, and we use sales agents to assist our direct global sales force with certain customers primarily located in the Latin America and Asia-Pacific regions.

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Our marketing activities consist primarily of technology conferences, web marketing, trade shows, seminars and events, public relations, analyst relations, demand generation and direct marketing to build our brand, increase customer awareness, communicate our product advantages and generate qualified leads for our field sales force and resellers and sales agents.

Competition

The broadband service provider market is highly competitive and subject to rapidly changing technology trends and shifting customer needs.

We primarily compete with larger and more established companies in the broadband service provider market, such as Arris and Cisco. As we seek to enter the wireless market, we expect to encounter additional competition from large, established providers of wireless communication networks, including Ericsson and Nokia.

The principal factors upon which we compete are:

- product capabilities;
- performance;
- scalability, flexibility and adaptability to new standards;
- ability to innovate;
- time to market;
- customer support; and
- total cost of ownership relative to performance and features.

We believe that we compete favorably with respect to these factors. Nevertheless, many of our competitors have substantial competitive advantages against us, including greater name recognition, longer operating histories, and substantially greater financial, technical, research and development or other resources.

Research and Development

Our research and development efforts are focused on developing new broadband products for the cable and wireless markets and enhancing our current products to meet the current and future needs of our customers. We aim to be first to market with deployable products and are willing to invest early in research and development and take technological risks to meet this goal. We also seek to enhance our technological innovation through our partnerships with industry standard-setting organizations and groups, such as CableLabs, 3GPP and Wi-Fi Alliance. These efforts position us to be able to advance industry standards while evolving our solutions to meet such new standards.

As of September 30, 2016, our research and development organization consisted of 321 employees worldwide, including both software and hardware engineers. Our research and development expense totaled \$25.5 million, \$37.2 million and \$37.2 million for the years ended December 31, 2014 and 2015 and the nine months ended September 30, 2016, respectively. We plan to continue to devote substantial resources to our research and development activities.

Manufacturing

We contract with multiple U.S.-based manufacturing firms, including Benchmark and Sanmina, to manufacture the hardware for our products using the designs, components and standards that we specify. After taking delivery from our contract manufacturers, we conduct final assembly and quality assurance testing at our facilities in Lawrence, Massachusetts and Limerick, Ireland. We believe our combination of local manufacturing

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and in-house assembly and quality assurance allows us to maintain consistency and quality in the products we ship to customers. We also believe that this manufacturing model enables us to respond quickly to technological changes and supports our engineering goal of being first to market with deployable products. We believe our inventory management enables us to offer shorter times between order and delivery to our customers as compared to our competitors.

We enter into purchase agreements with our contract manufacturers, generally with terms of one year or more. There are no minimum purchase requirements under these agreements and we purchase manufactured goods on a purchase order basis. As a result of our use of multiple contract manufacturers, we believe that we are not substantially dependent on the availability of any single contract manufacturer. Our contract manufacturers purchase the materials and components for our products through a variety of major electronics distributors. The materials and components of our solutions are generally available in adequate quantities from multiple potential suppliers.

Backlog

We do not have any long-term purchase commitments from customers. Customers generally order products on an as-needed basis with short lead and delivery times on a per-purchase-order basis. We maintain substantial finished goods inventory to ensure that products can generally be shipped shortly after receipt of an order.

A portion of our customer shipments in any fiscal period relate to orders received in prior fiscal periods. As of September 30, 2015 and 2016, we had backlog of \$17.0 million and \$26.8 million, respectively. The increase in backlog over that period was due principally to orders from an existing customer for network capacity expansion. Of the amount of backlog as of September 30, 2016, we expect that approximately \$23.7 million will be shipped within the following twelve months. However, because our customers utilize purchase orders containing non-binding purchase commitments and customers may cancel, change or reschedule orders without penalty at any time prior to shipment, we have no assurance that we will be able to convert our backlog into shipped orders.

Intellectual Property

Our success depends to a significant degree upon our ability to protect our core technology and intellectual property. To accomplish this, we rely on a combination of trade secrets, patents, copyrights and trademarks, as well as contractual protections. To date, we have focused our efforts to protect our intellectual property primarily on trade secrets because the cable industry generally relies on non-patentable CableLabs standards and specifications that are jointly developed by market participants.

We limit access to and use of our proprietary software, technology and other confidential information through the use of internal and external controls, including nondisclosure agreements with employees, consultants, customers and vendors and other measures for maintaining trade secret protection. We generally license our software to customers pursuant to agreements that impose restrictions on the customers' ability to use the software, including prohibitions on reverse engineering and limitations on the use of copies. We also seek to avoid disclosure of our intellectual property by requiring employees and consultants with access to our proprietary information to execute nondisclosure and assignment of intellectual property agreements and by restricting access to our source code.

We also incorporate a number of third-party software programs into our solutions pursuant to license agreements. Our software is not substantially dependent on any third-party software, although in some cases it utilizes open source code.

Employees

As of September 30, 2016, we employed 579 full-time employees, of which 332 were located in the United States and 247 were located outside the United States. Our workforce as of September 30, 2016 consisted of 321 employees in engineering and research and development, 114 employees in sales and marketing, 57 employees in

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general and administrative, 46 employees in manufacturing and 41 employees in services and support. None of our employees are represented by unions. We consider our relationship with our employees to be good and have not experienced significant interruptions of operations due to labor disagreements.

Facilities

Our corporate headquarters is located in Andover, Massachusetts and consists of approximately 122,000 square feet of space. We own the property constituting our corporate headquarters, subject to an \$8.0 million mortgage loan. The annual interest rate on the loan is 3.5%, and the loan is repayable in 60 monthly installments of principal and interest based on a 20-year amortization schedule. The remaining amount of unpaid principal under the loan is due on the maturity date of July 1, 2020. The loan terms include annual affirmative, negative and financial covenants, including a requirement that we maintain a minimum debt service ratio. We were in compliance with all annual covenants of the loan as of December 31, 2015 and September 30, 2016. As of December 31, 2015 and September 30, 2016, outstanding borrowings under the loan were \$7.8 million and \$7.6 million, respectively.

We lease additional facilities in Lawrence, Massachusetts and Limerick, Ireland that we use for manufacturing, testing, logistics, research and development and customer support. We also lease a facility in Guangzhou, China that we use for manufacturing, testing, logistics, research and development and technical support.

We believe that our current facilities are adequate to meet our current needs. We anticipate expanding our facilities as we add employees and enter new geographic markets. We believe that suitable additional or alternative space will be available on acceptable terms as needed to accommodate future growth.

Legal Proceedings

From time to time, we are a party to various litigation matters and subject to claims that arise in the ordinary course of business including, for example, patent infringement lawsuits by non-practicing entities. In addition, third parties may from time to time assert claims against us in the form of letters and other communications. There is no pending or threatened legal proceeding to which we are a party that, in our opinion, is likely to have a material adverse effect on our financial condition or results of operations. However, litigation is inherently unpredictable. Regardless of the outcome, litigation can adversely affect us because of defense and settlement costs, diversion of management resources and other factors.

MANAGEMENT

Executive Officers and Directors

The following table provides information regarding our executive officers and directors as of December 1, 2016:

| <u>Name</u> | <u>Age</u> | <u>Position</u> |
|------------------|------------|--|
| Jerry Guo | 53 | President, Chief Executive Officer and Chairman |
| Gary Hall | 55 | Chief Financial Officer |
| Weidong Chen | 49 | Chief Technology Officer and Director |
| Lucy Xie | 50 | Senior Vice President of Operations and Director |
| Abraham Pucheril | 50 | Senior Vice President of Worldwide Sales |
| Bruce Evans | 57 | Director |
| Bill Styslinger | 70 | Director |

(1) Member of audit committee

(2) Member of compensation committee

Jerry Guo, the founder of our company, has served as our president and chief executive officer and as the chairman of our board of directors since our founding in 2003. Prior to founding our company, Mr. Guo served as the Vice President of Broadband at River Delta Networks, which was acquired by Motorola in 2001. Prior to that, Mr. Guo was a research scientist at Bell Laboratories' research division. Mr. Guo holds a Ph.D. degree in electrical engineering from the University of Wisconsin-Madison and an M.S. degree in optical instruments from the Department of Precision Instruments at Tsinghua University. We believe that Mr. Guo is qualified to serve on our board of directors due to his leadership experience in the broadband and network industries, his extensive knowledge of our company and his service as our president and chief executive officer.

Gary Hall has served as our chief financial officer since June 2011. Prior to joining Casa, from April 2007 to March 2010, Mr. Hall was the chief financial officer of eCopy, a provider of document management solutions. From August 2004 to June 2006, he served as the chief financial officer of MatrixOne, a product life-cycle management company, where he had previously served as controller from April 1999 to August 2004. Previously, Mr. Hall served in various accounting and auditing roles at Deloitte & Touche, a multinational professional services firm. Mr. Hall holds a M.S. degree in finance from Bentley College and a B.A. degree in accounting from Southern New Hampshire University.

Weidong Chen has served as our chief technology officer since 2004 and as a member of our board of directors since 2010. Prior to joining Casa, Mr. Chen served as a software manager at Motorola, a multinational telecommunications company from October 2001 to November 2003. Mr. Chen holds a Ph.D. degree in physics from the University of Pennsylvania. We believe that Mr. Chen's deep experience in the telecommunications industry, his extensive knowledge of our company and his position as our chief technology officer enable Mr. Chen to make a valuable contribution to our board of directors.

Lucy Xie has served as our senior vice president of operations since 2011 and as a member of our board of directors since 2003. From 2003 to 2011, Ms. Xie served as our chief financial officer and vice president of operations. Prior to joining Casa, Ms. Xie held various accounting, finance and management positions at Raytheon, a U.S. defense contractor and industrial corporation, and Lucent Technologies, a telecommunications equipment company. Ms. Xie has also served as the vice chairman and a board member of the Asia-America Chamber of Commerce since 2015. Ms. Xie holds an M.B.A. degree in accounting from Fairleigh Dickinson University. We believe that Ms. Xie is qualified to serve on our board of directors due to her experience as an executive in the telecommunications industry, her extensive knowledge of our company and her service as our senior vice president of operations.

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Abraham Pucheril has served as our senior vice president of worldwide sales since August 2012. Prior to joining Casa, Mr. Pucheril was the vice president of sales (national carriers and vertical markets) for Fujitsu Network Communications, Inc., a communications network services provider, from April 2005 to July 2012. Before joining Fujitsu, Mr. Pucheril served as area vice president of sales of Alcatel North America, a telecommunications company, from April 2003 to April 2005, and regional vice president of sales of Atoga Systems, a provider of advanced video and data transmission systems that was acquired by Arris Systems, Inc., from January 2002 to April 2003. Mr. Pucheril holds a B.E. degree in electronics and communications engineering from Mangalore University, an M.E. degree in electrical and electronics engineering from Anna University and an M.A.Sc. degree in electrical engineering from the University of Waterloo.

Bruce Evans has been a director of our company since 2010. Since 1986, Mr. Evans has served in various positions with Summit Partners, a venture capital and investment firm, including most recently as a Managing Director and the Chairman of Summit Partners' Board of Managers. He is also currently a director of Analog Devices, a public company which designs and manufactures high-performance semiconductor products, as well as several private companies. Mr. Evans previously served as a director of more than a dozen public companies, including, from May 2012 to November 2014, FleetCor Technologies, a provider of fuel cards and workforce payment products and services. Mr. Evans holds a B.E. degree in mechanical engineering and economics from Vanderbilt University and an M.B.A. degree from Harvard Business School. We believe that Mr. Evans is qualified to serve as a director of our company due to his wide-ranging experience in growth equity and venture capital investing in the technology sector and his experience on other private and public company boards.

Bill Styslinger has been a director of our company since 2012. Mr. Styslinger served as chairman, president and chief executive officer of SeaChange International, a provider of multiscreen video software and services, from its inception in July 1993 until his retirement in November 2011. Mr. Styslinger was also previously a member of the board of directors of Omtool, a provider of enterprise client/server facsimile software solutions. Mr. Styslinger holds a B.S. degree in Engineering Science from the State University of New York at Buffalo. We believe that Mr. Styslinger is qualified to serve on our board of directors due to his leadership expertise, including service as chief executive officer of a public company with international operations, as well as his knowledge of the telecommunications industry.

Jerry Guo and Lucy Xie are married to one another. There are no other family relationships among any of our directors or executive officers.

Composition of the Board of Directors

Our board of directors currently consists of five members. The current members of our board of directors were elected pursuant to a voting agreement among certain of our preferred and common stockholders. The agreement will terminate upon the closing of this offering, at which time there will be no further contractual obligations regarding the election of our directors. Our directors hold office until their successors have been elected and qualified or until the earlier of their resignation or removal.

In accordance with the terms of our restated certificate of incorporation and amended and restated bylaws, each of which will become effective upon the closing of this offering, our board of directors will be divided into three classes, each of whose members will serve for staggered three year terms. Upon the closing of this offering, the members of the classes will be divided as follows:

- the class I directors will be _____, and their term will expire at the first annual meeting of stockholders held after the closing of this offering;
- the class II directors will be _____, and their term will expire at the second annual meeting of stockholders held after the closing of this offering; and
- the class III directors will be _____, and their term will expire at the third annual meeting of stockholders held after the closing of this offering.

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Our restated certificate of incorporation that will become effective upon the closing of this offering provides that the authorized number of directors may be changed only by _____. Any additional directorships resulting from an increase in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of one-third of the directors. This classification of our board of directors may have the effect of delaying or preventing changes in our control or management.

Our restated certificate of incorporation and amended and restated bylaws that will become effective upon the closing of this offering provide that our directors may be removed only for cause by the affirmative vote of the holders of at least _____ of the votes that all our stockholders would be entitled to cast in an annual election of directors. Upon the expiration of the term of a class of directors, directors in that class will be eligible to be elected for a new three-year term at the annual meeting of stockholders in the year in which their term expires. An election of our directors by our stockholders will be determined by a plurality of the votes cast by the stockholders entitled to vote on the election.

Director Independence

Rule 5605 of the Nasdaq Listing Rules requires a majority of a listed company's board of directors to be comprised of independent directors within one year of listing. In addition, the Nasdaq Listing Rules require that, subject to specified exceptions, each member of a listed company's audit, compensation and nominations committees be independent, or, if a listed company has no nominations committee, that director nominees be selected or recommended for the board's selection by independent directors constituting a majority of the board's independent directors, and that audit committee members also satisfy independence criteria set forth in Rule 10A-3 under the Exchange Act and compensation committee members must also satisfy the independence criteria set forth in Rule 10C-1 under the Exchange Act. Under Rule 5605(a)(2), a director will only qualify as an "independent director" if, in the opinion of our board of directors, that person does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. In order to be considered independent for purposes of Rule 10A-3, a member of an audit committee of a listed company may not, other than in his or her capacity as a member of the audit committee, the board of directors, or any other board committee, accept, directly or indirectly, any consulting, advisory or other compensatory fee from the listed company or any of its subsidiaries or otherwise be an affiliated person of the listed company or any of its subsidiaries.

The phase-in periods with respect to director independence under the Nasdaq Listing Rules allow us to have only one independent member on each of the audit committee, compensation committee and, if we choose to form one, nominating and corporate governance committee upon the listing date of our common stock, a majority of independent members on each committee within 90 days of the listing date (or the effective date of the registration statement, in the case of the audit committee) and fully independent committees and a majority of independent directors on our board of directors within one year of the listing date (or the effective date of the registration statement, in the case of the audit committee). The phase-in periods also allow us to have only one member comprise our audit committee by the listing date, two members comprise our audit committee within 90 days of the listing date and at least three members within one year of the listing date.

In _____, our board of directors undertook a review of the composition of our board of directors and its committees and the independence of each director. Based upon information requested from and provided by each director concerning his background, employment and affiliations, including family relationships, our board of directors has determined that each of Messrs. _____ and _____ is an "independent director" as defined under Rule 5605(a)(2) of the Nasdaq Listing Rules. Our board of directors also determined that Messrs. _____, who comprise our audit committee, and Messrs. _____, who comprise our compensation committee, satisfy the independence standards for such committees established by the Securities and Exchange Commission and the Nasdaq Listing Rules, as applicable. In making such determinations, our board of directors considered the relationships that each such non-employee director has with our company and all other facts and circumstances our board of directors deemed relevant in determining independence, including the beneficial ownership of our capital stock by each non-employee director and any institutional stockholder with which he is affiliated.

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We expect to satisfy the member independence requirements for each of the audit, compensation and, if we choose to form one, nominating and corporate governance committee prior to the end of the transition period provided under current Nasdaq Listing Rules and SEC rules and regulations for companies completing their initial public offering.

Board Leadership Structure

Our corporate governance guidelines provide that the roles of chairman of the board and chief executive officer may be separated or combined. Our board of directors has considered its leadership structure and determined that at this time Mr. Guo should serve both as our chief executive officer and as chairman of the board. Since 2003, Mr. Guo has served as our president and chief executive officer and has been an integral part of the leadership of our company and our board of directors, and his strategic vision has guided our growth and performance. Our board of directors believes that having Mr. Guo also serve as our chairman facilitates the board's decision-making process and enables Mr. Guo to act as the key link between the board of directors and other members of management.

Board Committees

Our board of directors has established an audit committee and compensation committee. Each of these committees will operate under a charter to be approved by our board of directors prior to this offering. Following this offering, a copy of each committee's charter will be posted on the corporate governance section of our website, www.casa-systems.com. Information contained on our website is not incorporated by reference into this prospectus, and you should not consider information contained on our website to be part of this prospectus or in deciding whether to purchase shares of our common stock.

Audit Committee

The audit committee's responsibilities will include:

- appointing, approving the compensation of, and assessing the independence of our registered public accounting firm;
- overseeing the work of our registered public accounting firm, including through the receipt and consideration of reports from such firm;
- reviewing and discussing with management and the registered public accounting firm our annual and quarterly financial statements and related disclosures;
- monitoring our internal control over financial reporting, disclosure controls and procedures and code of business conduct and ethics;
- discussing our risk management policies;
- establishing policies regarding hiring employees from the registered public accounting firm and procedures for the receipt and retention of accounting related complaints and concerns;
- meeting independently with our registered public accounting firm and management;
- reviewing and approving or ratifying any related person transactions; and
- preparing the audit committee report required by SEC rules.

All audit services and all non-audit services, other than de minimis non-audit services, to be provided to us by our independent registered public accounting firm will be required to be approved in advance by our audit committee.

Effective upon the effectiveness of the registration statement of which this prospectus is a part, the members of our audit committee will be Messrs. . Our board of directors has determined that is an "audit committee financial expert" as defined by applicable SEC rules.

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We expect to satisfy the member independence requirements for the audit committee prior to the end of the transition period provided under current Nasdaq Listing Rules and SEC rules and regulations for companies completing their initial public offering.

Compensation Committee

The compensation committee's responsibilities will include:

- annually reviewing and approving or advising with respect to corporate goals and objectives relevant to CEO compensation;
- determining or advising with respect to our CEO's compensation;
- reviewing and approving, or making recommendations to our board of directors with respect to, the compensation of our other executive officers;
- overseeing an evaluation of our senior executives;
- overseeing and administering our equity incentive plans;
- reviewing and making recommendations to our board of directors with respect to director compensation;
- reviewing and discussing annually with management our "Compensation Discussion and Analysis" disclosure to the extent such disclosure is required by SEC rules; and
- preparing annual compensation committee reports to the extent required by SEC rules.

Effective upon the effectiveness of the registration statement of which this prospectus is a part, the members of our compensation committee will be Messrs. .

We expect to satisfy the member independence requirements for the compensation committee prior to the end of the transition period provided under current Nasdaq Listing Rules and SEC rules and regulations for companies completing their initial public offering.

Compensation Committee Interlocks and Insider Participation

None of our executive officers serves as a member of the board of directors or compensation committee, or other committee serving an equivalent function, of any entity that has one or more executive officers who serve as members of our board of directors or our compensation committee. None of the members of our compensation committee is an officer or employee of our company, nor have they ever been an officer or employee of our company.

Code of Business Conduct and Ethics

We expect to adopt a written code of business conduct and ethics that applies to our directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. Following this offering, we will post a current copy of the code on our website, www.casa-systems.com. In addition, we intend to post on our website all disclosures that are required by law or the Nasdaq Listing Rules concerning any amendments to, or waivers from, any provision of the code.

EXECUTIVE COMPENSATION**Summary Compensation Table**

The following table sets forth the total compensation paid to our chief executive officer and each of our two other most highly compensated executive officers for the year ended December 31, 2016. We refer to these individuals as our “named executive officers.”

| Name and Principal Position | Year | Salary (\$) | Stock Awards (\$)(1) | Option Awards (\$)(1) | All Other Compensation (\$)(2) | Total (\$)(3) |
|---|-------------|--------------------------|-----------------------------|------------------------------|---------------------------------------|----------------------|
| Jerry Guo <i>President, Chief Executive Officer and Chairman</i> | 2016 | \$688,029 ⁽⁴⁾ | \$1,065,115 | \$1,989,328 | \$ 7,950 | \$3,750,422 |
| Lucy Xie <i>Senior Vice President of Operations and Director</i> | 2016 | \$377,516 ⁽⁵⁾ | \$ 628,081 | \$ 502,724 | \$ 7,950 | \$1,516,271 |
| Weidong Chen <i>Chief Technology Officer and Director</i> | 2016 | \$378,206 ⁽⁶⁾ | \$ 358,885 | \$ 287,266 | \$ 7,950 | \$1,032,307 |

(1) The amounts reported represent the aggregate grant-date fair value of the stock and option grants awarded to the named executive officer in the fiscal year ended December 31, 2016, calculated in accordance with FASB ASC Topic 718. Such grant-date fair values do not take into account any estimated forfeitures related to service-vesting conditions. The assumptions used in calculating the grant-date fair value of the sale of the stock or equity awards reported in this column are set forth in the notes to our consolidated financial statements included elsewhere in this prospectus. The amounts reported in this column reflect the accounting cost for these stock options and do not correspond to the actual economic value that may be received by the named executive officers upon exercise of the stock options.

(2) Constitutes matching contributions to 401(k) plans.

(3) Excludes bonus for 2016 performance to be determined and paid in early 2017.

(4) Includes \$42,499 of cash paid in lieu of vacation earned in 2016 and to be paid in 2017.

(5) Includes \$18,624 of cash paid in lieu of vacation earned in 2016 and to be paid in 2017.

(6) Includes \$19,315 of cash paid in lieu of vacation earned in 2016 and to be paid in 2017.

Outstanding Equity Awards at Fiscal Year-End

The following table sets forth information regarding outstanding stock awards held as of December 31, 2016 by our named executive officers.

| Name | Grant Date | Option Awards | | | | Number of Shares or Units of Stock That Have Not Vested (#) | Market Value of Shares or Units of Stock That Have Not Vested (\$)(1) |
|--------------|--------------|---|---|----------------------------|------------------------|---|---|
| | | Number of Securities Underlying Unexercised Options Exercisable (#) | Number of Securities Underlying Unexercised Options Unexercisable (#) | Option Exercise Price (\$) | Option Expiration Date | | |
| Jerry Guo | 1/23/2015(2) | 103,499 | 112,500 | 20.92 | 1/23/2025 | | |
| | 1/23/2015(3) | | | | | 115,714 | |
| | 1/23/2015(4) | | | | | 34,715 | |
| | 3/26/2016(5) | — | 118,432 | 41.97 | 3/25/2026 | | |
| | 3/26/2016(6) | | | | | 25,378 | |
| Lucy Xie | 1/23/2015(2) | 21,796 | 23,692 | 20.92 | 1/23/2025 | | |
| | 1/23/2015(3) | | | | | 34,116 | |
| | 1/23/2015(4) | | | | | 17,058 | |
| | 3/26/2016(5) | — | 29,929 | 41.97 | 3/25/2026 | | |
| | 3/26/2016(6) | | | | | 14,965 | |
| Weidong Chen | 5/25/2012 | 120,000 | — | 8.46 | 5/24/2022 | | |
| | 1/23/2015(2) | 12,454 | 13,539 | 20.92 | 1/23/2025 | | |
| | 1/23/2015(3) | | | | | 19,495 | |
| | 1/23/2015(4) | | | | | 9,748 | |
| | 3/26/2016(5) | | 17,102 | 41.97 | 3/25/2026 | | |
| | 3/26/2016(6) | | | | | 8,551 | |

- (1) Based on an assumed market price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus.
- (2) One-fourth (1/4) of the shares of our common stock subject to this stock option award vested on January 1, 2016, and the balance is scheduled to vest in 36 equal monthly installments thereafter, subject to continued service with us through each applicable vesting date.
- (3) One-half (1/2) of these RSUs vested on January 1, 2016, one-third (1/3) are scheduled to vest on January 1, 2017 and one-sixth (1/6) are scheduled to vest on January 1, 2018, subject to continued service with us through each applicable vesting date.
- (4) One-fourth (1/4) of these RSUs vested on January 1, 2016, and one-fourth (1/4) are scheduled to vest each year thereafter, subject to continued service with us through each applicable vesting date.
- (5) One-fourth (1/4) of the shares of our common stock subject to this stock option award vest on January 1, 2017, and the balance is scheduled to vest in 36 equal monthly installments thereafter, subject to continued service with us through each applicable vesting date.
- (6) One-fourth (1/4) of these RSUs are scheduled to vest on January 1, 2017, and one-fourth (1/4) are scheduled to vest each year thereafter, subject to continued service with us through each applicable vesting date.

Potential Payments upon Termination or Change in Control

Under our 2011 Stock Incentive Plan, our board of directors may provide that outstanding awards shall become exercisable, realizable, or deliverable, or restrictions applicable to an award shall lapse, in whole or in part, in connection with (a) any merger or consolidation of the company with or into another entity as a result of which all of the common stock of the company is converted into or exchanged for the right to receive cash, securities or other property or is cancelled, (b) any transfer or disposition of all of the common stock of the company for cash, securities or other property pursuant to a share exchange or other transaction or (c) any liquidation or dissolution of the company. Further, under both our 2003 Stock Incentive Plan and our 2011 Stock Incentive Plan, our board of directors has complete discretion to cause any award to become immediately exercisable in whole or in part, free of some or all restrictions or conditions, or otherwise realizable in whole or in part, as the case may be.

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Retirement Benefits

We maintain a retirement plan for the benefit of our employees, including our named executive officers. The plan is intended to qualify as a tax-qualified 401(k) plan so that contributions to the 401(k) plan, and income earned on such contributions, are not taxable to participants until withdrawn or distributed from the 401(k) plan (except in the case of contributions under the 401(k) plan designated as Roth contributions). Under the 401(k) plan, each employee is fully vested in his or her deferred salary contributions. Employee contributions are held and invested by the plan's trustee as directed by participants. We match 50% of employee contributions to our 401(k) plan up to a maximum amount of 6% of eligible wages.

Employee Benefits and Perquisites

Our named executive officers are eligible to participate in our health and welfare plans to the same extent as all full-time employees.

Director Compensation

During the year ended December 31, 2015, none of our directors received any cash compensation or stock-based awards for their service on our board of directors or committees of our board of directors.

We also have a policy of reimbursing our directors for their reasonable out-of-pocket expenses incurred in attending board of directors and committee meetings.

In _____, we approved a non-employee director compensation program to become effective upon the closing of this offering. Under this program, non-employee directors will receive the cash compensation set forth below, and an annual _____ grant of _____. Each such _____ will vest _____. In addition, new non-employee directors will also be eligible for an initial _____ grant of _____ following such director's initial election to our board of directors. Such _____ will vest _____.

Following the closing of this offering, each non-employee director will be eligible to receive compensation for his or her service on our board of directors or committees thereof consisting of annual cash retainers paid quarterly in arrears, as follows:

| <u>Position</u> | <u>Retainer</u> |
|-------------------------------|-----------------|
| Board member | \$ _____ |
| Audit committee chair | _____ |
| Compensation committee chair | _____ |
| Audit committee member | _____ |
| Compensation committee member | _____ |

Stock Option and Other Compensation Plans

Prior to this offering, we granted awards under our 2003 Stock Incentive Plan, as amended to date, and our 2011 Stock Incentive Plan, as amended to date. Following the effectiveness of the registration statement of which this prospectus is a part, we expect to grant awards under the 2017 Stock Incentive Plan.

2017 Stock Incentive Plan

In _____, our board of directors adopted, and we expect our stockholders will approve, the 2017 Stock Incentive Plan, which will become effective immediately prior to the effectiveness of the registration statement of which this prospectus is a part. The 2017 Stock Incentive Plan provides for the grant of incentive stock options, nonstatutory stock options, stock appreciation rights, restricted stock awards, RSUs and other stock-based awards. Upon effectiveness of the 2017 Stock Incentive Plan, the number of shares of our common stock

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that will be reserved for issuance under the 2017 Stock Incentive Plan will be the sum of: (1) plus; (2) the number of shares (up to shares) equal to the sum of the number of shares of our common stock then available for issuance under the 2003 Stock Incentive Plan and the 2011 Stock Incentive Plan and the number of shares of our common stock subject to outstanding awards under the 2003 Stock Incentive Plan and the 2011 Stock Incentive Plan that expire, terminate or are otherwise surrendered, cancelled, forfeited or repurchased by us at their original issuance price pursuant to a contractual repurchase right; plus (3) an annual increase, to be added on the first day of each fiscal year, beginning with the fiscal year ending December 31, 2018 and continuing until, and including, the fiscal year ending December 31, 2027, equal to the lowest of shares of our common stock, % of the number of shares of our common stock outstanding on the first day of such fiscal year and an amount determined by our board of directors.

Our employees, officers, directors, consultants and advisors will be eligible to receive awards under the 2017 Stock Incentive Plan. Incentive stock options, however, may only be granted to our employees.

Pursuant to the terms of the 2017 Stock Incentive Plan, our board of directors (or a committee delegated by our board of directors) will administer the plan and, subject to any limitations in the plan, will select the recipients of awards and determine:

- the number of shares of our common stock covered by options and the dates upon which the options become exercisable;
- the type of options to be granted;
- the duration of options, which may not be in excess of ten years;
- the exercise price of options, which must be at least equal to the fair market value of our common stock on the date of grant; and
- the number of shares of our common stock subject to and the terms of any stock appreciation rights, restricted stock awards, RSUs or other stock-based awards and the terms and conditions of such awards, including conditions for repurchase, issue price and repurchase price (though the measurement price of stock appreciation rights must be at least equal to the fair market value of our common stock on the date of grant and the duration of such awards may not be in excess of ten years).

If our board of directors delegates authority to an executive officer to grant awards under the 2017 Stock Incentive Plan, the executive officer will have the power to make awards to all of our employees, except executive officers. Our board of directors will fix the terms of the awards to be granted by such executive officer, including the exercise price of such awards (which may include a formula by which the exercise price will be determined), and the maximum number of shares subject to awards that such executive officer may make.

Effect of Certain Changes in Capitalization. Upon the occurrence of any stock split, reverse stock split, stock dividend, recapitalization, combination of shares, reclassification of shares, spin-off or other similar change in capitalization or event, or any dividend or distribution to holders of our common stock other than an ordinary cash dividend, our board of directors shall equitably adjust:

- the number and class of securities available under the 2017 Stock Incentive Plan;
- the share counting rules under the 2017 Stock Incentive Plan;
- the number and class of securities and exercise price per share of each outstanding option;
- the share and per-share provisions and the measurement price of each outstanding stock appreciation right;
- the number of shares subject to, and the repurchase price per share subject to, each outstanding restricted stock award; and
- the share and per-share related provisions and the purchase price, if any, of each other stock-based award.

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Effect of Certain Corporate Transactions. Upon a merger or other reorganization event (as defined in our 2017 Stock Incentive Plan), our board of directors may, on such terms as our board of directors determines (except to the extent specifically provided otherwise in an applicable award agreement or other agreement between the participant and us), take any one or more of the following actions pursuant to the 2017 Stock Incentive Plan as to some or all outstanding awards, other than restricted stock awards:

- provide that all outstanding awards shall be assumed, or substantially equivalent awards shall be substituted, by the acquiring or successor corporation (or an affiliate thereof);
- upon written notice to a participant, provide that all of the participant's unvested and/or vested but unexercised awards will terminate immediately prior to the consummation of such reorganization event unless exercised by the participant (to the extent then exercisable);
- provide that outstanding awards shall become exercisable, realizable or deliverable, or restrictions applicable to an award shall lapse, in whole or in part, prior to or upon such reorganization event;
- in the event of a reorganization event pursuant to which holders of shares of our common stock will receive a cash payment for each share surrendered in the reorganization event, make or provide for a cash payment to the participants with respect to each award held by a participant equal to (1) the number of shares of our common stock subject to the vested portion of the award (after giving effect to any acceleration of vesting that occurs upon or immediately prior to such reorganization event) multiplied by (2) the excess, if any, of the cash payment for each share surrendered in the reorganization event over the exercise, measurement or purchase price of such award and any applicable tax withholdings, in exchange for the termination of such award; and/or
- provide that, in connection with a liquidation or dissolution, awards shall convert into the right to receive liquidation proceeds (if applicable, net of the exercise, measurement or purchase price thereof and any applicable tax withholdings).

Our board of directors does not need to take the same action with respect to all awards, all awards held by a participant or all awards of the same type.

In the case of certain RSUs, no assumption or substitution is permitted, and the RSUs will instead be settled in accordance with the terms of the applicable RSU agreement.

Upon the occurrence of a reorganization event other than a liquidation or dissolution, the repurchase and other rights with respect to outstanding restricted stock awards will continue for the benefit of the successor company and will, unless the board of directors may otherwise determine, apply to the cash, securities or other property into which shares of our common stock are converted or exchanged pursuant to the reorganization event. Upon the occurrence of a reorganization event involving a liquidation or dissolution, all restrictions and conditions on each outstanding restricted stock award will automatically be deemed terminated or satisfied, unless otherwise provided in the agreement evidencing the restricted stock award or any other agreement between the participant and us.

At any time, our board of directors may, in its sole discretion, provide that any award under the 2017 Stock Incentive Plan will become immediately exercisable in full or in part, free of some or all restrictions or conditions, or otherwise realizable in whole or in part as the case may be.

No award may be granted under the 2017 Stock Incentive Plan on or after the date that is ten years following the effectiveness of the registration statement of which this prospectus is a part. Our board of directors may amend, suspend or terminate the 2017 Stock Incentive Plan at any time, except that stockholder approval may be required to comply with applicable law or stock market requirements.

2011 Stock Incentive Plan

Our 2011 Stock Incentive Plan was adopted by our board of directors on August 2, 2011, approved by our stockholders on September 22, 2011 and subsequently amended on May 25, 2012, June 11, 2014, and June 29,

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2015. The 2011 Stock Incentive Plan provides for the grant of incentive stock options, nonstatutory stock options, stock appreciation rights, restricted stock units and shares, restricted or otherwise, of our common stock. Our employees, officers, directors, consultants and advisors are eligible to receive awards under our 2011 Stock Incentive Plan; however incentive stock options may only be granted to our employees. A maximum of 4,604,732 shares of our common stock are authorized for issuance under the 2011 Stock Incentive Plan.

The type of award granted under our 2011 Stock Incentive Plan and the terms of such award are set forth in the applicable award agreement.

Pursuant to the terms of the 2011 Stock Incentive Plan, our board of directors (or a committee assigned by our board of directors) administers the 2011 Stock Incentive Plan. The board of directors has complete discretion to take any actions it deems necessary or advisable for the administration of the 2011 Stock Incentive Plan. All decisions, interpretations and other actions of our board of directors are final and binding on all participants and all persons deriving their rights from a participant. In addition, subject to any limitations in the 2011 Stock Incentive Plan, our board of directors selects the recipients of awards and determines:

- the number of shares of our common stock covered by options and the dates upon which the options become exercisable;
- the type of options to be granted;
- the duration of options, which may not be in excess of ten years;
- the exercise price of options, which must be at least equal to the fair market value of our common stock on the date of grant; and
- the number of shares of our common stock subject to, and the terms of any restricted stock awards or restricted stock units, and the terms and conditions of such awards, including conditions for repurchase, issue price and repurchase price.

Effect of Certain Changes in Capitalization. Pursuant to the 2011 Stock Incentive Plan, in the event of stock split, stock dividend, a combination of shares, reverse stock-split, a reclassification, or any other increase or decrease in the number of issued shares of our common stock effected without receipt of consideration by us, proportionate adjustments shall automatically be made in each of:

- the number of shares of our common stock available for issuance under the 2011 Stock Incentive Plan;
- the number of shares of our common stock covered by each outstanding option or RSU granted under the 2011 Stock Incentive Plan; and
- the exercise price under each outstanding option granted under the 2011 Stock Incentive Plan.

Our board of directors, in its sole discretion, may also make appropriate adjustments to one or more of the same items described above in the event of a declaration of an extraordinary dividend payable in a form other than shares of our common stock that has a material effect on the fair market value of shares of our common stock, a recapitalization, a spin-off or any similar occurrence.

Effect of Certain Corporate Transactions. In the event that we are a party to a merger or consolidation, all shares of our common stock acquired under the 2011 Stock Incentive Plan and all awards outstanding under the 2011 Stock Incentive Plan on the effective date of the transaction shall be treated in the manner described in the agreement of merger or consolidation, which agreement need not treat all awards in an identical manner but which must preserve an award's status as exempt from or compliant with Section 409A of the Internal Revenue Code of 1986, as amended, or the Code, and must provide for one or more of the following:

- continuation of the outstanding award by us if we are the surviving corporation;
- assumption, or substitution of substantially equivalent awards, of the outstanding award by the surviving corporation or its parent, provided that the assumption or substitution is accomplished in a

manner that complies with the rules regarding assumptions or substitutions that apply to incentive stock options under the Code (whether the outstanding award is an incentive stock option or a nonstatutory stock option);

- acceleration of the date of exercise or vesting of an option (which may be contingent on the closing of the merger or consolidation) followed by the termination of the option if it is not timely exercised prior to the closing of the merger or consolidation (which exercise may also be contingent on the closing of the merger or consolidation); or
- cancellation of the outstanding award in exchange for a payment (if any) equal to the fair market value of a share of common stock as of the closing date of the merger or consolidation minus the per-share exercise price of the award (if any).

Subject to the limitations of the 2011 Stock Incentive Plan, our board of directors may modify, extend or assume outstanding options and RSUs and may accept the cancellation of outstanding options in return for the grant of new options for the same or a different number of shares of our common stock or a different exercise price.

As of December 1, 2016, options to purchase 2,918,113 shares of common stock were outstanding under the 2011 Stock Incentive Plan, at a weighted-average exercise price of \$18.37 per share, and options to purchase 560,425 shares of our common stock had been exercised. In addition, as of such date, 279,740 RSUs were outstanding under the 2011 Stock Incentive Plan.

No further awards will be made under our 2011 Stock Incentive Plan on or after the effectiveness of the registration statement of which this prospectus is a part; however, awards outstanding under our 2011 Stock Incentive Plan will continue to be governed by their existing terms. Our board of directors may amend, suspend or terminate the 2011 Stock Incentive Plan at any time and for any reason, except that any amendment of the 2011 Stock Incentive Plan that increases the number of shares of our common stock available for issuance under the 2011 Stock Incentive Plan or that materially changes the class of persons who are eligible for the grant of incentive stock options is subject to the approval of our stockholders.

2003 Stock Incentive Plan

Our 2003 Stock Incentive Plan was adopted by our board of directors on December 24, 2003, approved by our stockholders on December 24, 2003 and subsequently amended on April 26, 2004 and July 1, 2005. The 2003 Stock Incentive Plan provides for the grant of incentive stock options, nonstatutory stock options, stock appreciation rights, restricted stock units and shares, restricted or otherwise, of our common stock. Our employees, officers, directors, consultants and advisors are eligible to receive awards under our 2003 Stock Incentive Plan; however incentive stock options may only be granted to our employees. A maximum of 6,322,000 shares of our common stock are authorized for issuance under the 2003 Stock Incentive Plan.

The type of award granted under our 2003 Stock Incentive Plan and the terms of such award are set forth in the applicable award agreement.

Pursuant to the terms of the 2003 Stock Incentive Plan, our board of directors (or a committee assigned by our board of directors) administers the 2003 Stock Incentive Plan. The board of directors has complete discretion to take any actions it deems necessary or advisable for the administration of the 2003 Stock Incentive Plan. All decisions, interpretations and other actions of our board of directors are final and binding on all participants and all persons deriving their rights from a participant. In addition, subject to any limitations in the 2003 Stock Incentive Plan, our board of directors selects the recipients of awards and determines:

- the number of shares of our common stock covered by options and the dates upon which the options become exercisable;
- the type of options to be granted;

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- the duration of options, which may not be in excess of ten years;
- the exercise price of options, which must be at least equal to the fair market value of our common stock on the date of grant; and
- the number of shares of our common stock subject to, and the terms of any restricted stock awards or restricted stock units, and the terms and conditions of such awards, including conditions for repurchase, issue price and repurchase price.

Effect of Certain Changes in Capitalization. Pursuant to the 2003 Stock Incentive Plan, in the event of stock split, stock dividend, a combination of shares, reverse stock-split, a reclassification, or any other increase or decrease in the number of issued shares of our common stock effected without receipt of consideration by us, proportionate adjustments shall automatically be made in each of:

- the number of shares of our common stock available for issuance under the 2003 Stock Incentive Plan;
- the number of shares of our common stock covered by each outstanding option or RSU granted under the 2003 Stock Incentive Plan; and
- the exercise price under each outstanding option granted under the 2003 Stock Incentive Plan.

Our board of directors, in its sole discretion, may also make appropriate adjustments to one or more of the same items described above in the event of a declaration of an extraordinary dividend payable in a form other than shares of our common stock that has a material effect on the fair market value of shares of our common stock, a recapitalization, a spin-off or any similar occurrence.

Effect of Certain Corporate Transactions. In the event that we are a party to a merger or consolidation, all shares of our common stock acquired under the 2003 Stock Incentive Plan and all awards outstanding under the 2003 Stock Incentive Plan on the effective date of the transaction shall be treated in the manner described in the agreement of merger or consolidation, which agreement need not treat all awards in an identical manner but which must preserve an award's status as exempt from or compliant with Section 409A of the Code and must provide for one or more of the following:

- continuation of the outstanding award by us if we are the surviving corporation;
- assumption, or substitution of substantially equivalent awards, of the outstanding award by the surviving corporation or its parent, provided that the assumption or substitution is accomplished in a manner that complies with the rules regarding assumptions or substitutions that apply to incentive stock options under the Code (whether the outstanding award is an incentive stock option or a nonstatutory stock option);
- acceleration of the date of exercise or vesting of an option (which may be contingent on the closing of the merger or consolidation) followed by the termination of the option if it is not timely exercised prior to the closing of the merger or consolidation (which exercise may also be contingent on the closing of the merger or consolidation); or
- cancellation of the outstanding award in exchange for a payment (if any) equal the fair market value of a share of common stock as of the closing date of the merger or consolidation minus the per-share exercise price of the award (if any).

Subject to the limitations of the 2003 Stock Incentive Plan, our board of directors may modify, extend or assume outstanding options and RSUs and may accept the cancellation of outstanding options in return for the grant of new options for the same or a different number of shares of our common stock or a different exercise price.

As of December 1, 2016, options to purchase 40,000 shares of common stock were outstanding under the 2003 Stock Incentive Plan, at a weighted-average exercise price of \$1.05 per share, and options to purchase 502,000 shares of our common stock had been exercised. In addition, as of such date no RSUs were outstanding under the 2003 Stock Incentive Plan.

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No further awards will be made under our 2003 Stock Incentive Plan on or after the effectiveness of the registration statement of which this prospectus is a part; however, awards outstanding under our 2003 Stock Incentive Plan will continue to be governed by their existing terms. Our board of directors may amend, suspend or terminate the 2003 Stock Incentive Plan at any time and for any reason, except that any amendment of the 2003 Stock Incentive Plan that increases the number of shares of our common stock available for issuance under the 2003 Stock Incentive Plan or that materially changes the class of persons who are eligible for the grant of incentive stock options is subject to the approval of our stockholders.

Limitation of Liability and Indemnification

Our restated certificate of incorporation, which will become effective upon the closing of this offering, limits the personal liability of directors for breach of fiduciary duty to the maximum extent permitted by the Delaware General Corporation Law and provides that no director will have personal liability to us or to our stockholders for monetary damages for breach of fiduciary duty or other duty as a director. However, these provisions do not eliminate or limit the liability of any of our directors:

- for any breach of the director's duty of loyalty to us or our stockholders;
- for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law;
- for voting or assenting to unlawful payments of dividends, stock repurchases or other distributions; or
- for any transaction from which the director derived an improper personal benefit.

Any amendment to, or repeal of, these provisions will not eliminate or reduce the effect of these provisions in respect of any act, omission or claim that occurred or arose prior to such amendment or repeal. If the Delaware General Corporation Law is amended to provide for further limitations on the personal liability of directors of corporations, then the personal liability of our directors will be further limited to the greatest extent permitted by the Delaware General Corporation Law.

In addition, our restated certificate of incorporation, which will become effective upon the closing of this offering, provides that we must indemnify our directors and officers and we must advance expenses, including attorneys' fees, to our directors and officers in connection with legal proceedings, subject to very limited exceptions.

We maintain a general liability insurance policy that covers certain liabilities of our directors and officers arising out of claims based on acts or omissions in their capacities as directors or officers. In addition, we have entered into indemnification agreements with certain of our executive officers and directors, and we intend to enter into indemnification agreements with all of our directors and executive officers prior to the closing of this offering. These indemnification agreements may require us, among other things, to indemnify each such director and executive officer for some expenses, including attorneys' fees, judgments, fines and settlement amounts incurred by him or her in any action or proceeding arising out of his or her service as one of our directors or executive officers.

Certain of our non-employee directors may, through their relationships with their employers, be insured and/or indemnified against certain liabilities incurred in their capacity as members of our board of directors. We have agreed that we will be the indemnitor of "first resort," however, with respect to any claims against these directors for indemnification claims that are indemnifiable by both us and their employers. Accordingly, to the extent that indemnification is permissible under applicable law, we will have full liability for such claims (including for the advancement of any expenses) and we have waived all related rights of contribution, subrogation or other recovery that we might otherwise have against these directors' employers.

Rule 10b5-1 Sales Plans

Our directors and executive officers may adopt written plans, known as Rule 10b5-1 plans, in which they will contract with a broker to buy or sell shares of our common stock on a periodic basis. Under a Rule 10b5-1 plan, a broker executes trades pursuant to parameters established by the director or officer when entering into the plan, without further direction from them. The director or officer may amend or terminate the plan in some circumstances. Our directors and executive officers may also buy or sell additional shares outside of a Rule 10b5-1 plan when they are not in possession of material, nonpublic information.

RELATED PERSON TRANSACTIONS

Other than compensation arrangements for our executive officers which are described elsewhere in this prospectus, below we describe transactions since January 1, 2013 to which we were a party or will be a party, in which:

- the amounts involved exceeded or will exceed \$120,000; and
- any of our directors, executive officers or holders of more than 5% of our capital stock, or any member of the immediate family of, or person sharing the household with, the foregoing persons, had or will have a direct or indirect material interest.

Transactions Involving Liberty Global Ventures Holding B.V. and its Affiliates

Liberty Global Ventures Holding B.V., one of our 5% stockholders, is affiliated with certain of our customers. In the years ended December 31, 2013, 2014 and 2015, sales to these customers accounted for \$13.8 million, \$14.8 million and \$46.1 million, respectively, and in the nine months ended September 30, 2016, sales to these customer accounted for \$16.3 million of our revenue.

We also issued 528,580 shares of our common stock to Liberty Global Ventures Holding B.V. on March 31, 2014, upon Liberty Global Ventures Holding B.V.'s exercise of outstanding warrants, for aggregate consideration of \$2.4 million.

Consulting Agreement with Bill Styslinger

On March 5, 2012, we entered into a consulting agreement with Bill Styslinger, one of our directors, for the provision of sales management, corporate strategy and advisory services. We extended the term of the consulting agreement, which was initially scheduled to expire on January 31, 2014, on two occasions, and it will expire on December 31, 2016. We paid Mr. Styslinger \$240,000, \$453,600, \$542,430 and \$379,000 for his services in the years ended December 31, 2013, 2014 and 2015 and the nine months ended September 30, 2016, respectively, under this consulting agreement. In addition, in May 2012, we granted to Mr. Styslinger an option to purchase 120,000 shares of common stock, at an exercise price of \$8.46 per share, which vested as to 1/3 of the option shares on February 1, 2013 and as to the remainder in equal monthly installments over the following two years. The option had a grant-date fair value of \$526,837.

Employment of Rongke Xie

Rongke Xie, who serves as Deputy General Manager of Guangzhou Casa Communication Technology LTD, one of our subsidiaries, is the sister of Lucy Xie, our Senior Vice President of Operations and a member of our board of directors. We paid Rongke Xie \$120,275, \$153,650, \$140,278 and \$130,058 in total compensation in the years ended December 31, 2013, 2014 and 2015 and the nine months ended September 30, 2016, respectively, for her services as an employee.

Indemnification Agreements

Our restated certificate of incorporation provides that we will indemnify our officers and directors to the fullest extent permitted by Delaware law. In addition, we have entered into indemnification agreements with certain of our executive officers and directors, and we intend to enter into indemnification agreements with all of our directors and executive officers prior to the closing of this offering. See "Limitation of Liability and Indemnification."

Arrangements with Executive Officers

For a description of the compensation arrangements that we have with our named executive officers and directors, see "Executive Compensation".

Policies and Procedures for Related Person Transactions

We will adopt written policies and procedures, which will become effective upon the closing of this offering, for the review of any transaction, arrangement or relationship in which our company is a participant, the amount involved exceeds \$120,000, and one of our executive officers, directors, director nominees or 5% stockholders (or their immediate family members), each of whom we refer to as a “related person,” has a direct or indirect material interest.

If a related person proposes to enter into such a transaction, arrangement or relationship, which we refer to as a “related person transaction,” the related person must report the proposed related person transaction. The policy will call for the proposed related person transaction to be reviewed and, if deemed appropriate, approved by the audit committee of our board of directors. Whenever practicable, the reporting, review and approval will occur prior to entry into the transaction. If advance review and approval is not practicable, the committee will review, and, in its discretion, may ratify the related person transaction. The policy will also permit the chairman of the audit committee to review and, if deemed appropriate, approve proposed related person transactions that arise between audit committee meetings, subject to ratification by the audit committee at its next meeting. Any related person transactions that are ongoing in nature will be reviewed annually.

A related person transaction reviewed under the policy will be considered approved or ratified if it is authorized by the audit committee after full disclosure of the related person’s interest in the transaction. As appropriate for the circumstances, the audit committee will review and consider:

- the related person’s interest in the related person transaction;
- the approximate dollar value of the amount involved in the related person transaction;
- the approximate dollar value of the amount of the related person’s interest in the transaction without regard to the amount of any profit or loss;
- whether the transaction was undertaken in the ordinary course of our business;
- whether the terms of the transaction are no less favorable to us than terms that could have been reached with an unrelated third party;
- the purpose of, and the potential benefits to us of, the transaction; and
- any other information regarding the related person transaction or the related person in the context of the proposed transaction that would be material to investors in light of the circumstances of the particular transaction.

The audit committee may approve or ratify the transaction only if it determines that, under all of the circumstances, the transaction is in or is not inconsistent with our company’s best interests. The audit committee may impose any conditions on the related person transaction that it deems appropriate.

In addition to the transactions that are excluded by the instructions to the SEC’s related person transaction disclosure rule, the policy will provide that the following transactions do not create a material direct or indirect interest on behalf of related persons and, therefore, are not related person transactions for purposes of this policy:

- interests arising only from the related person’s position as a director of another corporation or organization that is a party to the transaction;
- interests arising only from the direct or indirect ownership by the related person and all other related persons in the aggregate of less than a 10% equity interest (other than a general partnership interest) in another entity which is a party to the transaction;
- interests arising from both the position and ownership level described above;
- interests arising solely from the related person’s position as an executive officer of another entity (whether or not the person is also a director of such entity), that is a participant in the transaction,

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where (a) the related person and all other related persons own in the aggregate less than a 10% equity interest in such entity, (b) the related person and his or her immediate family members are not involved in the negotiation of the terms of the transaction and do not receive any special benefits as a result of the transaction and (c) the amount involved in the transaction equals less than the greater of \$200,000 or 5% of the annual gross revenues of the company receiving payment under the transaction;

- interests arising solely from the ownership of a class of our equity securities if all holders of that class of equity securities receive the same benefit on a pro rata basis;
- a transaction that involves compensation to an executive officer if the compensation has been approved, or recommended to our board of directors for approval, by the compensation committee of the board of directors or a group of independent directors of ours performing a similar function;
- a transaction that involves compensation to a director for services as one of our directors if such compensation will be reported pursuant to Item 402(k) of Regulation S-K;
- a transaction that is specifically contemplated by provisions of our certificate of incorporation or bylaws;
- interests arising solely from indebtedness of a significant shareholder or an immediate family member of a significant shareholder of ours, as such terms are defined under the policy;
- a transaction where the rates or charges involved in the transaction are determined by competitive bids;
- a transaction that involves the rendering of services as a common or contract carrier or public utility at rates or charges fixed in conformity with law or governmental authority; and
- a transaction that involves services as a bank depository of funds, transfer agent, registrar, trustee under a trust indenture, or similar services.

The policy will provide that transactions involving compensation of executive officers shall be reviewed and approved by the compensation committee in the manner specified in its charter.

PRINCIPAL STOCKHOLDERS

The following table sets forth information with respect to the beneficial ownership of our common stock, as of December 1, 2016, by:

- each person, or group of affiliated persons, known by us to beneficially own more than 5% of our common stock;
- each of our directors;
- each of our named executive officers; and
- all of our executive officers and directors as a group.

The column entitled “Shares Beneficially Owned Prior to Offering—Percentage” is based on a total of 14,666,720 shares of our common stock outstanding as of December 1, 2016, assuming the automatic conversion of all outstanding shares of our convertible preferred stock into an aggregate of 8,076,394 shares of our common stock upon the closing of this offering. The column entitled “Shares Beneficially Owned After Offering—Percentage” is based on shares of our common stock to be outstanding after this offering, including the shares of our common stock that we are selling in this offering, but not including any additional shares issuable pursuant to the underwriters’ option to purchase additional shares in this offering or any additional shares issuable upon exercise of outstanding options.

The number of shares beneficially owned by each stockholder is determined under rules of the SEC and includes voting or investment power with respect to securities. Under these rules, beneficial ownership includes any shares as to which the individual or entity has sole or shared voting power or investment power. In computing the number of shares beneficially owned by an individual or entity and the percentage ownership of that person, shares of common stock subject to options or other rights held by such person that are currently exercisable or will become exercisable within 60 days after December 1, 2016 are considered outstanding, although these shares are not considered outstanding for purposes of computing the percentage ownership of any other person. Unless otherwise indicated, the address of all listed stockholders is c/o Casa Systems, Inc., 100 Old River Road, Andover, Massachusetts 01810. Each of the stockholders listed has sole voting and investment power with respect to the shares beneficially owned by the stockholder unless noted otherwise, subject to community property laws where applicable. Beneficial ownership representing less than 1% is denoted with an asterisk (*).

| <u>Name of Beneficial Owner</u> | <u>Shares Beneficially Owned Prior to Offering</u> | | <u>Shares Beneficially Owned After Offering</u> | |
|---|--|-------------------|---|-------------------|
| | <u>Number</u> | <u>Percentage</u> | <u>Number</u> | <u>Percentage</u> |
| <i>5% Stockholders</i> | | | | |
| Entities affiliated with Summit Partners ⁽¹⁾ | 7,718,400 | 52.6% | | |
| Liberty Global Ventures Holding B.V. ⁽²⁾ | 886,574 | 6.1% | | |
| Dragonfly Trust ⁽³⁾ | 800,000 | 5.4% | | |
| <i>Executive Officers and Directors</i> | | | | |
| Jerry Guo ⁽⁴⁾ | 2,359,950 | 15.3% | | |
| Gary Hall ⁽⁵⁾ | 120,000 | * | | |
| Weidong Chen ⁽⁶⁾ | 1,470,887 | 9.5% | | |
| Lucy Xie ⁽⁷⁾ | 472,197 | 3.1% | | |
| Abraham Pucheril ⁽⁸⁾ | 120,000 | * | | |
| Bruce R. Evans ⁽⁹⁾ | 7,718,400 | 50.1% | | |
| Bill Styslinger ⁽¹⁰⁾ | 120,000 | * | | |
| All executive officers and directors as a group (7 persons) ⁽¹¹⁾ | 12,381,434 | 80.3% | | |

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- (1) Consists of 2,405,291 shares of Series C Convertible Preferred Stock held by Summit Partners Private Equity Fund VII-A, L.P., 1,444,657 shares of Series C Convertible Preferred Stock held by Summit Partners Private Equity Fund VII-B, L.P., 8,211 shares of Series C Convertible Preferred Stock held by Summit Investors I, LLC and 1,401 shares of Series C Convertible Preferred Stock held by Summit Investors I (UK), L.P. Summit Partners, L.P. is the managing member of Summit Partners PE VII, LLC, which is the general partner of Summit Partners PE VII, L.P., which is the general partner of each of Summit Partners Private Equity Fund VII-A, L.P. and Summit Partners Private Equity Fund VII-B, L.P. Summit Master Company, LLC is the managing member of Summit Investors Management, LLC, which is the manager of Summit Investors I, LLC, and the general partner of Summit Investors I (UK), L.P. Summit Master Company, LLC, as the managing member of Summit Investors Management, LLC, has delegated investment decisions, including voting and dispositive power, to Summit Partners, L.P. and its investment committee responsible for voting and investment decisions with respect to Casa. Summit Partners, L.P., through a two-person investment committee responsible for voting and investment decisions with respect to Casa, currently comprised of Bruce R. Evans and Martin J. Mannion, has voting and dispositive power over the shares held by each of these entities and therefore may be deemed to beneficially own such shares. Each of the Summit entities and persons mentioned in this footnote disclaims beneficial ownership of the shares, except for those shares held of record by such entity, and except to the extent of their pecuniary interest therein. The address of the entities and persons mentioned in this footnote is 222 Berkeley Street, 18th Floor, Boston, Massachusetts 02116.
- (2) Consists of (i) 528,580 shares of common stock and (ii) 357,994 shares of our Series B Convertible Preferred Stock held by Liberty Global Ventures Holding B.V. Liberty Global Ventures Holding B.V. has delegated investment decisions, including voting and dispositive power, to Liberty Global Europe Holding B.V. Liberty Global Europe Management B.V. may be deemed to have voting and dispositive control over Liberty Global Europe Holding B.V. Liberty Global Europe Management B.V., Liberty Global Europe Holding B.V. and Liberty Global Ventures Holding B.V. each disclaim beneficial ownership of such shares, except for those shares held of record by such entity, and except to the extent of its pecuniary interest therein. The address of Liberty Global Ventures Holding B.V. is Boeing Avenue 53, 1119PE Schiphol-Rijk, The Netherlands.
- (3) Consists of 800,000 shares of common stock held by Dragonfly Trust, a family trust established for the children of Mr. Guo and Ms. Xie. Mr. Chen serves as trustee for Dragonfly Trust and has voting and dispositive control over the shares held by Dragonfly Trust. Mr. Chen and Dragonfly Trust each disclaim beneficial ownership of such shares, except for those shares held of record by such person or entity, and except to the extent of such person or entity's pecuniary interest therein.
- (4) Consists of (i) 2,127,285 shares of common stock held by Mr. Guo, (ii) options to purchase 137,607 shares of common stock that may be exercised within 60 days of December 1, 2016 and (iii) 95,058 shares of common stock issuable upon vesting of restricted stock units within 60 days of December 1, 2016.
- (5) Consists of options to purchase 120,000 shares of common stock held by Mr. Hall that may be exercised within 60 days of December 1, 2016.
- (6) Consists of (i) 515,236 shares of common stock held by Mr. Chen, (ii) options to purchase 137,269 shares of common stock that may be exercised within 60 days of December 1, 2016 and (iii) 18,382 shares of common stock issuable upon vesting of restricted stock units within 60 days of December 1, 2016.
- (7) Consists of (i) 409,802 shares of common stock held by Ms. Xie, (ii) options to purchase 30,225 shares of common stock that may be exercised within 60 days of December 1, 2016 and (iii) 32,170 shares of common stock issuable upon vesting of restricted stock units within 60 days of December 1, 2016.
- (8) Consists of options to purchase 120,000 shares of common stock held by Mr. Pucheril that may be exercised within 60 days of December 1, 2016.
- (9) Consists of the shares noted in note (1) above. Mr. Evans is a Managing Director at Summit Partners, the general partner of the Summit-affiliated entities listed in note (1), and may be deemed the indirect beneficial owner of such shares.
- (10) Consists of (i) 60,000 shares of common stock held by Mr. Styslinger and (ii) an option to purchase 60,000 shares of common stock that may be exercised within 60 days of December 1, 2016.
- (11) Consists of (i) 3,112,323 shares of common stock held by our current directors and executive officers, (ii) options to purchase 605,101 shares of common stock that may be exercised within 60 days of December 1, 2016 by our current directors and executive officers and (iii) 145,610 shares of common stock issuable upon vesting of restricted stock units within 60 days of December 1, 2016 by our current directors and executive officers.

DESCRIPTION OF CAPITAL STOCK

General

Following the closing of this offering, our authorized capital stock will consist of _____ shares of common stock, par value \$0.001 per share, and _____ shares of preferred stock, par value \$0.001 per share. The following description of our capital stock and provisions of our restated certificate of incorporation and amended and restated bylaws are summaries and are qualified by reference to the restated certificate of incorporation and amended and restated bylaws that will become effective upon the closing of this offering. Copies of these documents have been filed with the SEC as exhibits to our registration statement, of which this prospectus forms a part. The description of our common stock reflects changes to our capital structure that will occur upon the closing of this offering.

As of December 1, 2016, we had issued and outstanding:

- 6,590,326 shares of our common stock held by 45 stockholders of record;
- 178,997 shares of our Series B convertible preferred stock held by one stockholder of record; and
- 3,859,200 shares of our Series C convertible preferred stock held by four stockholders of record.

Immediately prior to the closing of this offering, all of the outstanding shares of our convertible preferred stock will automatically convert into an aggregate of 8,076,394 shares of our common stock.

Common Stock

Holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders and do not have cumulative voting rights. An election of directors by our stockholders shall be determined by a plurality of the votes cast by the stockholders entitled to vote on the election. Holders of common stock are entitled to receive proportionately any dividends as may be declared by our board of directors, subject to any preferential dividend rights of any series of preferred stock that we may designate and issue in the future.

In the event of our liquidation or dissolution, the holders of common stock are entitled to receive proportionately our net assets available for distribution to stockholders after the payment of all debts and other liabilities and subject to the prior rights of any outstanding preferred stock. Holders of common stock have no preemptive, subscription, redemption or conversion rights. Our outstanding shares of common stock are, and the shares offered in this offering will be, when issued and paid for, validly issued, fully paid and nonassessable. The rights, preferences and privileges of holders of common stock are subject to and may be adversely affected by the rights of the holders of shares of any series of preferred stock that we may designate and issue in the future.

Preferred Stock

Under the terms of our restated certificate of incorporation that will become effective upon the closing of this offering, our board of directors is authorized to direct us to issue shares of preferred stock in one or more series without stockholder approval. Our board of directors has the discretion to determine the rights, preferences, privileges and restrictions, including voting rights, dividend rights, conversion rights, redemption privileges and liquidation preferences, of each series of preferred stock.

The purpose of authorizing our board of directors to issue preferred stock and determine its rights and preferences is to eliminate delays associated with a stockholder vote on specific issuances. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions, future financings and other corporate purposes, could have the effect of making it more difficult for a third party to acquire, or could discourage a third party from seeking to acquire, a majority of our outstanding voting stock. Upon the closing of this offering, there will be no shares of preferred stock outstanding, and we have no present plans to issue any shares of preferred stock.

Stock Options

As of December 1, 2016, options to purchase 40,000 shares of our common stock were outstanding under our 2003 Stock Incentive Plan at a weighted-average exercise price of \$1.05 per share, of which 40,000 shares were vested and exercisable as of that date. As of December 1, 2016, options to purchase 2,918,113 shares of our common stock were outstanding under our 2011 Stock Incentive Plan at a weighted-average exercise price of \$18.37 per share, of which 1,940,263 shares were vested and exercisable.

RSUs

As of December 1, 2016, 279,740 shares of our common stock were issuable upon the vesting of RSUs outstanding under our 2011 Stock Incentive Plan.

Registration Rights

Demand Registration Rights

Pursuant to our registration rights agreement, until the earlier of six months after the close of this offering and six months after the effective date of the registration statement of which this prospectus forms a part, the holders of at least 20% of the shares having rights under this agreement, which we refer to as registrable securities, can demand that we file up to two registration statements on Form S-1 registering all or a portion of their registrable securities, provided that the aggregate offering price is expected to be at least \$5 million. As of December 1, 2016, the holders of 8,076,394 shares of our common stock, including shares issuable upon the conversion of our convertible preferred stock, have demand registration rights. Under specified circumstances, we also have the right to defer filing of a requested registration statement for a period of not more than 60 days, which right may not be exercised more than once during any 12-month period. These registration rights are subject to additional conditions and limitations, including the right of the underwriters to limit the number of shares included in any such registration under certain circumstances.

Form S-3 Registration Rights

Pursuant to the registration rights agreement, if we are eligible to file a registration statement on Form S-3, the holders of at least 20% of our registrable securities have the right to demand that we file additional registration statements, including a shelf registration statement, for such holders on Form S-3, if the aggregate anticipated offering price is at least \$5 million. These holders can demand up to two such registrations in any 12-month period.

Piggyback Registration Rights

Pursuant to the registration rights agreement, if we propose to file a registration statement under the Securities Act, other than with respect to a registration related to employee benefit or similar plans, a registration on any form which does not include substantially the same information as would be required to be included in this registration statement, or a registration in which the only common stock being registered is common stock issuable upon conversion of debt securities which are also being registered, the holders of registrable securities are entitled to receive notice of the registration and to include their registrable securities in such registration. As of December 1, 2016, the holders of 8,076,394 shares of our common stock, including shares issuable upon the conversion of our convertible preferred stock, will be entitled to notice of this registration and will be entitled to include their registrable securities in this registration statement, but we anticipate that such right will be waived prior to consummation of this offering. The underwriters of any underwritten offering will have the right to limit the number of the number of registrable securities that may be included in the registration statement.

Expenses of Registration

We are required to pay all expenses relating to any demand, Form S-3 or piggyback registration, other than underwriting discounts and commissions, subject to certain limited exceptions. We will not pay for any expenses

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of any demand registration if the request is subsequently withdrawn by the holders of a majority of the shares requested to be included in such a registration statement, subject to limited exceptions.

Anti-Takeover Provisions

We are subject to Section 203 of the Delaware General Corporation Law. Subject to certain exceptions, Section 203 prevents a publicly held Delaware corporation from engaging in a “business combination” with any “interested stockholder” for three years following the date that the person became an interested stockholder, unless the interested stockholder attained such status with the approval of our board of directors or unless the business combination is approved in a prescribed manner. A “business combination” includes, among other things, a merger or consolidation involving us and the “interested stockholder” and the sale of more than 10% of our assets. In general, an “interested stockholder” is any entity or person beneficially owning 15% or more of our outstanding voting stock and any entity or person affiliated with or controlling or controlled by such entity or person.

Staggered Board; Removal of Directors

Our restated certificate of incorporation and our amended and restated bylaws, which will be effective upon the closing of this offering, divide our board of directors into three classes with staggered three-year terms. In addition, a director may be removed only for cause and only by the affirmative vote of the holders of at least _____ of the votes that all our stockholders would be entitled to cast in an annual election of directors. Any vacancy on our board of directors, including a vacancy resulting from an enlargement of our board of directors, may be filled only by vote of a majority of our directors then in office.

The classification of our board of directors and the limitations on the removal of directors and filling of vacancies could make it more difficult for a third party to acquire, or discourage a third party from seeking to acquire, control of our company.

Supermajority Voting

The Delaware General Corporation Law provides generally that the affirmative vote of a majority of the shares entitled to vote on any matter is required to amend a corporation’s certificate of incorporation or bylaws, unless a corporation’s certificate of incorporation or bylaws, as the case may be, requires a greater percentage. Our amended and restated bylaws, which will be effective upon the closing of this offering, may be amended or repealed by a majority vote of our board of directors or the affirmative vote of the holders of at least _____ of the votes that all our stockholders would be entitled to cast in an annual election of directors. In addition, the affirmative vote of the holders of at least _____ of the votes which all our stockholders would be entitled to cast in an election of directors is required to amend, repeal, or adopt any provisions inconsistent with, any of the provisions of our restated certificate of incorporation described in the prior two paragraphs.

Stockholder Action; Special Meeting of Stockholders; Advance Notice Requirements for Stockholder Proposals and Director Nominations

Our restated certificate of incorporation, which will be effective upon the closing of this offering, provides that any action required or permitted to be taken by our stockholders must be effected at a duly called annual or special meeting of such stockholders and may not be effected by any consent in writing by such stockholders. Our restated certificate of incorporation and our amended and restated bylaws also provide that, except as otherwise required by law, special meetings of our stockholders can only be called by our chairman of the board, our chief executive officer or our board of directors. In addition, our amended and restated bylaws, which will be effective upon the closing of this offering, establish an advance notice procedure for stockholder proposals to be brought before an annual meeting of stockholders, including proposed nominations of candidates for election to our board of directors. Stockholders at an annual meeting may only consider proposals or nominations specified

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in the notice of meeting or brought before the meeting by or at the direction of our board of directors, or by a stockholder of record on the record date for the meeting, who is entitled to vote at the meeting and who has delivered timely written notice in proper form to our secretary of the stockholder's intention to bring such business before the meeting. These provisions could have the effect of delaying until the next stockholder meeting stockholder actions that are favored by the holders of a majority of our outstanding voting securities. These provisions also could discourage a third party from making a tender offer for our common stock, because even if it acquired a majority of our outstanding voting stock, it would be able to take action as a stockholder, such as electing new directors or approving a merger, only at a duly called stockholders meeting and not by written consent.

Authorized But Unissued Shares

The authorized but unissued shares of common stock and preferred stock are available for future issuance without stockholder approval, subject to any limitations imposed by the Nasdaq Listing Rules. These additional shares may be used for a variety of corporate finance transactions, acquisitions and employee benefit plans. The existence of authorized but unissued and unreserved common stock and preferred stock could make more difficult or discourage an attempt to obtain control of us by means of a proxy contest, tender offer, merger or otherwise.

Choice of Forum

Upon the closing of this offering, our restated certificate of incorporation will provide that unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall, to the fullest extent permitted by law, be the sole and exclusive forum for (1) any derivative action or proceeding brought on behalf of our company, (2) any action asserting a claim of breach of fiduciary duty owed by any director, officer or other employee or stockholder of our company to us or our stockholders, (3) any action asserting a claim arising pursuant to any provision of the General Corporation Law or as to which the General Corporation Law of the State of Delaware confers jurisdiction on the Court of Chancery or (4) any action asserting a claim governed by the internal affairs doctrine.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock will be .

Nasdaq Global Market

We intend to apply to list our common stock on the Nasdaq Global Market under the symbol "CASA."

SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, there was no public market for our common stock. Future sales of substantial amounts of common stock in the public market, or the perception that such sales may occur, could adversely affect the market price of our common stock. Although we intend to apply to list our common stock on the Nasdaq Global Market, we cannot assure you that there will be an active public market for our common stock.

Based on the 6,590,326 shares of our common stock that were outstanding on December 1, 2016, upon the closing of this offering, we will have outstanding an aggregate of _____ shares of common stock, assuming the issuance of _____ shares of common stock offered in this offering and the conversion of all outstanding shares of our convertible preferred stock into 8,076,394 shares of our common stock upon the closing of this offering. Of these shares, all shares sold in this offering will be freely tradable without restriction or further registration under the Securities Act, except for any shares purchased by our “affiliates,” as that term is defined in Rule 144 under the Securities Act, whose sales would be subject to the Rule 144 resale restrictions described below, other than the holding period requirement.

The remaining 14,666,720 shares of common stock outstanding upon the closing of this offering will be “restricted securities,” as that term is defined in Rule 144 under the Securities Act. These restricted securities are eligible for public sale only if they are registered under the Securities Act or if they qualify for an exemption from registration under Rules 144 or 701 under the Securities Act, which are summarized below.

As a result of the lock-up agreements described below and the provisions of Rules 144 and 701 under the Securities Act, these restricted securities will be available for sale in the public market as follows:

| <u>Date</u> | <u>Number of Shares</u> |
|--|-------------------------|
| On the date of this prospectus | |
| 90 days after the date of this prospectus | |
| 180 days after the date of this prospectus | |

In addition, of the 2,958,113 shares of our common stock that were subject to stock options outstanding as of December 1, 2016, options to purchase 1,980,263 shares of common stock were vested as of December 1, 2016 and, upon exercise, these shares will be eligible for sale subject to the lock-up agreements and securities laws described below.

Lock-Up Agreements

We and each of our directors and executive officers and holders of substantially all of our capital stock and stock options have agreed that, without the prior written consent of Morgan Stanley & Co. LLC, we and they will not, subject to limited exceptions, during the period ending 180 days after the date of this prospectus:

- offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of our common stock or any other securities so owned convertible into or exercisable or exchangeable for shares of our common stock; or
- enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of our common stock.

These agreements are subject to certain exceptions, as described in the section of this prospectus entitled “Underwriters.”

Upon the expiration of the lock-up period, substantially all of the shares subject to such lock-up restrictions will become eligible for sale, subject to the limitations discussed above.

Rule 144

Affiliate Resales of Restricted Securities

In general, beginning 90 days after the effective date of the registration statement of which this prospectus is a part, a person who is an affiliate of ours, or who was an affiliate at any time during the 90 days before a sale, who has beneficially owned shares of our common stock for at least six months would be entitled to sell in “broker’s transactions” or certain “riskless principal transactions” or to market makers, a number of shares within any three-month period that does not exceed the greater of:

- 1% of the number of shares of our common stock then outstanding, which will equal approximately _____ shares immediately after this offering; or
- the average weekly trading volume in our common stock on the Nasdaq Global Market during the four calendar weeks preceding the filing of a notice on Form 144 with respect to such sale.

Affiliate resales under Rule 144 are also subject to the availability of current public information about us. In addition, if the number of shares being sold under Rule 144 by an affiliate during any three-month period exceeds 5,000 shares or has an aggregate sale price in excess of \$50,000, the seller must file a notice on Form 144 with the SEC and the Nasdaq Global Market concurrently with either the placing of a sale order with the broker or the execution directly with a market maker.

Non-Affiliate Resales of Restricted Securities

In general, beginning 90 days after the effective date of the registration statement of which this prospectus is a part, a person who is not an affiliate of ours at the time of sale, and has not been an affiliate at any time during the three months preceding a sale, and who has beneficially owned shares of our common stock for at least six months but less than a year, is entitled to sell such shares subject only to the availability of current public information about us. If such person has held our shares for at least one year, such person can resell under Rule 144(b)(1) without regard to any Rule 144 restrictions, including the 90-day public company requirement and the current public information requirement.

Non-affiliate resales are not subject to the manner of sale, volume limitation or notice filing provisions of Rule 144.

Rule 701

In general, under Rule 701, any of an issuer’s employees, directors, officers, consultants or advisors who purchases shares from the issuer in connection with a compensatory stock or option plan or other written agreement before the effective date of a registration statement under the Securities Act is entitled to sell such shares 90 days after such effective date in reliance on Rule 144. An affiliate of the issuer can resell shares in reliance on Rule 144 without having to comply with the holding period requirement, and non-affiliates of the issuer can resell shares in reliance on Rule 144 without having to comply with the current public information and holding period requirements.

The SEC has indicated that Rule 701 will apply to typical stock options granted by an issuer before it becomes subject to the reporting requirements of the Exchange Act, along with the shares acquired upon exercise of such options, including exercises after an issuer becomes subject to the reporting requirements of the Exchange Act.

Equity Plans

We intend to file one or more registration statements on Form S-8 under the Securities Act to register all shares of common stock issued or issuable under our 2003 Stock Incentive Plan, 2011 Stock Incentive Plan and 2017 Stock Incentive Plan. We expect to file the registration statement covering shares offered pursuant to our 2011 Stock Incentive Plan and 2017 Stock Incentive Plan shortly after the date of this prospectus, permitting the resale of such shares by non-affiliates in the public market without restriction under the Securities Act and the sale by affiliates in the public market, subject to compliance with the resale provisions of Rule 144.

Registration Rights

Upon the closing of this offering, the holders of 8,076,394 shares of common stock will be entitled to various rights with respect to the registration of these shares under the Securities Act. Registration of these shares under the Securities Act would result in these shares becoming fully tradable without restriction under the Securities Act immediately upon the effectiveness of the registration, except for shares purchased by affiliates. See “Description of Capital Stock—Registration Rights” for additional information. Shares covered by a registration statement will be eligible for sale in the public market upon the expiration or release from the terms of the lock-up agreement.

MATERIAL U.S. FEDERAL INCOME AND ESTATE TAX CONSIDERATIONS FOR NON-U.S. HOLDERS OF COMMON STOCK

The following is a discussion of material U.S. federal income and estate tax considerations relating to ownership and disposition of our common stock by a non-U.S. holder. For purposes of this discussion, the term “non-U.S. holder” means a beneficial owner (other than a partnership or other pass-through entity) of our common stock that is not, for U.S. federal income tax purposes:

- an individual who is a citizen or resident of the United States;
- a corporation, or other entity treated as a corporation for U.S. federal income tax purposes, created or organized in or under the laws of the United States or of any political subdivision of the United States;
- an estate the income of which is subject to U.S. federal income taxation regardless of its source; or
- a trust if (1) a U.S. court is able to exercise primary supervision over the administration of the trust and one or more U.S. persons have authority to control all substantial decisions of the trust or (2) the trust has a valid election in effect under applicable U.S. Treasury Regulations to be treated as a U.S. person.

This discussion does not address the tax treatment of partnerships or other entities that are pass-through entities for U.S. federal income tax purposes or persons who hold their common stock through partnerships or other pass-through entities. A partner in a partnership or other pass-through entity that will hold our common stock should consult his, her or its own tax advisor regarding the tax consequences of the ownership and disposition of our common stock through a partnership or other pass-through entity, as applicable.

This discussion is based on current provisions of the Internal Revenue Code of 1986, as amended, or the Code, existing and proposed U.S. Treasury Regulations promulgated thereunder, current administrative rulings and judicial decisions, all as in effect as of the date of this prospectus and all of which are subject to change or to differing interpretation, possibly with retroactive effect. Any change could alter the tax consequences to non-U.S. holders described in this prospectus. There can be no assurance that the Internal Revenue Service, or the IRS, will not challenge one or more of the tax consequences described in this prospectus.

We assume in this discussion that each non-U.S. holder holds shares of our common stock as a capital asset (generally, property held for investment) for U.S. federal income tax purposes. This discussion does not address all aspects of U.S. federal income and estate taxation that may be relevant to a particular non-U.S. holder in light of that non-U.S. holder’s individual circumstances nor does it address any aspects of U.S. state, local or non-U.S. taxes, the alternative minimum tax, or the Medicare tax on net investment income. This discussion also does not consider any specific facts or circumstances that may apply to a non-U.S. holder and does not address the special tax rules applicable to particular non-U.S. holders, such as:

- financial institutions;
- brokers or dealers in securities;
- tax-exempt organizations;
- pension plans;
- owners that hold our common stock as part of a straddle, hedge, conversion transaction, synthetic security or other integrated investment or who have elected to mark securities to market;
- insurance companies;
- controlled foreign corporations;
- passive foreign investment companies;
- non-U.S. governments; and
- certain U.S. expatriates.

THIS DISCUSSION IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT, AND IS NOT INTENDED TO BE, LEGAL OR TAX ADVICE. PROSPECTIVE INVESTORS SHOULD CONSULT THEIR OWN TAX ADVISORS REGARDING THE U.S. FEDERAL, STATE, LOCAL AND NON-U.S. INCOME, ESTATE AND OTHER TAX CONSIDERATIONS OF ACQUIRING, HOLDING AND DISPOSING OF OUR COMMON STOCK.

Distributions

If we make distributions in respect of our common stock, those distributions generally will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles, subject to the tax treatment described in this section. If a distribution exceeds our current and accumulated earnings and profits, the excess will be treated as a tax-free return of the non-U.S. holder's investment, up to the holder's tax basis in the common stock. Any remaining excess will be treated as capital gain, subject to the tax treatment described below under the heading "Gain on Sale, Exchange or Other Taxable Disposition of Our Common Stock." Any such distributions will also be subject to the discussions below under the headings "Information Reporting and Backup Withholding" and "FATCA."

Dividends paid to a non-U.S. holder generally will be subject to withholding of U.S. federal income tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder's country of residence.

Dividends that are treated as effectively connected with a trade or business conducted by a non-U.S. holder within the United States, and, if an applicable income tax treaty so provides, that are attributable to a permanent establishment or a fixed base maintained by the non-U.S. holder within the United States, are generally exempt from the 30% withholding tax if the non-U.S. holder satisfies applicable certification and disclosure requirements (generally including provision of a valid IRS Form W-8ECI (or applicable successor form) certifying that the dividends are effectively connected with the non-U.S. holder's conduct of a trade or business within the United States). However, such U.S. effectively connected income, net of specified deductions and credits, is taxed in the hands of the non-U.S. holder at the same graduated U.S. federal income tax rates as would apply if such holder were a U.S. person (as defined in the Code). Any U.S. effectively connected income received by a non-U.S. holder that is classified as a corporation for U.S. federal income tax purposes may also, under certain circumstances, be subject to an additional "branch profits tax" at a 30% rate or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder's country of residence.

A non-U.S. holder of our common stock who claims the benefit of an applicable income tax treaty between the United States and such holder's country of residence generally will be required to provide a properly executed IRS Form W-8BEN or W-8BEN-E (or successor form) and satisfy applicable certification and other requirements. Non-U.S. holders are urged to consult their own tax advisors regarding their entitlement to benefits under a relevant income tax treaty and the specific methods available to them to satisfy these requirements.

A non-U.S. holder that is eligible for a reduced rate of U.S. withholding tax under an income tax treaty may obtain a refund or credit of any excess amounts withheld by timely filing an appropriate claim for a refund with the IRS.

Gain on Sale, Exchange or Other Taxable Disposition of Our Common Stock

Subject to the discussions below under the headings "Information Reporting and Backup Withholding" and "FATCA," a non-U.S. holder generally will not be subject to U.S. federal income tax on any gain realized upon such non-U.S. holder's sale, exchange or other disposition of our common stock unless:

- the gain is effectively connected with the non-U.S. holder's conduct of a trade or business in the United States, and, if an applicable income tax treaty so provides, the gain is attributable to a permanent establishment or fixed base maintained by the non-U.S. holder in the United States; in these cases, the

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non-U.S. holder generally will be taxed on a net income basis at the graduated U.S. federal income tax rates applicable to U.S. persons, and, if the non-U.S. holder is a foreign corporation, the branch profits tax described above under the heading “Distributions” may also apply;

- the non-U.S. holder is a non-resident alien present in the United States for 183 days or more in the taxable year of the disposition and certain other requirements are met, in which case the non-U.S. holder will be subject to a 30% tax (or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder’s country of residence) on the net gain derived from the disposition, which may be offset by certain U.S.-source capital losses of the non-U.S. holder, if any; or
- we are or have been, at any time during the five-year period preceding such disposition (or the non-U.S. holder’s holding period, if shorter) a “U.S. real property holding corporation” unless our common stock is regularly traded on an established securities market and the non-U.S. holder held no more than 5% of our outstanding common stock, directly or indirectly, during the shorter of the five-year period ending on the date of the disposition or the period that the non-U.S. holder held our common stock. Generally, a corporation is a “U.S. real property holding corporation” if the fair market value of its “U.S. real property interests” (as defined in the Code and applicable regulations) equals or exceeds 50% of the sum of the fair market value of its worldwide real property interests plus its other assets used or held for use in a trade or business. Although there can be no assurance, we believe that we are not currently, and we do not anticipate becoming, a “U.S. real property holding corporation” for U.S. federal income tax purposes. If we are a U.S. real property holding corporation and either our common stock is not regularly traded on an established securities market or a non-U.S. holder holds more than 5% of our outstanding common stock, directly or indirectly, during the applicable testing period, such non-U.S. holder’s gain on the disposition of shares of our common stock generally will be taxed in the same manner as gain that is effectively connected with the conduct of a U.S. trade or business, except that the branch profits tax generally will not apply.

U.S. Federal Estate Tax

Shares of our common stock that are owned or treated as owned by an individual who is not a citizen or resident of the United States (as specially defined for U.S. federal estate tax purposes) at the time of death are considered U.S. situs assets and will be included in the individual’s gross estate for U.S. federal estate tax purposes. Such shares, therefore, may be subject to U.S. federal estate tax, unless an applicable estate tax or other treaty provides otherwise.

Information Reporting and Backup Withholding

We must report annually to the IRS and to each non-U.S. holder the gross amount of the distributions on our common stock paid to such holder and the tax withheld, if any, with respect to such distributions. Non-U.S. holders generally will have to comply with specific certification procedures to establish that the holder is not a U.S. person (as defined in the Code) in order to avoid backup withholding at the applicable rate with respect to dividends on our common stock. Generally, a holder will comply with such procedures if it provides a properly executed IRS Form W-8BEN or W-8BEN-E (or other applicable Form W-8), or otherwise meets documentary evidence requirements for establishing that it is a non-U.S. holder, or otherwise establishes an exemption. Dividends paid to non-U.S. holders subject to withholding of U.S. federal income tax, as described above under “Distributions,” will generally be exempt from U.S. backup withholding.

Information reporting and backup withholding generally will apply to the proceeds of a disposition of our common stock by a non-U.S. holder effected by or through the U.S. office of any broker, U.S. or non-U.S., unless the holder certifies its status as a non-U.S. holder and satisfies certain other requirements, or otherwise establishes an exemption. Generally, information reporting and backup withholding will not apply to a payment of disposition proceeds to a non-U.S. holder where the transaction is effected outside the United States through a

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non-U.S. office of a broker. However, for information reporting purposes, dispositions effected through a non-U.S. office of a broker with substantial U.S. ownership or operations generally will be treated in a manner similar to dispositions effected through a U.S. office of a broker. Non-U.S. holders should consult their own tax advisors regarding the application of the information reporting and backup withholding rules to them.

Copies of information returns may be made available to the tax authorities of the country in which the non-U.S. holder resides or is incorporated under the provisions of a specific treaty or agreement.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules from a payment to a non-U.S. holder can be refunded or credited against the non-U.S. holder's U.S. federal income tax liability, if any, provided that an appropriate claim is timely filed with the IRS.

FATCA

Provisions of the Code commonly known as the Foreign Account Tax Compliance Act, or FATCA, generally impose a 30% withholding tax on dividends on, and gross proceeds from the sale or disposition of, our common stock if paid to a foreign entity unless (1) if the foreign entity is a "foreign financial institution," the foreign entity undertakes certain due diligence, reporting, withholding, and certification obligations, (2) if the foreign entity is not a "foreign financial institution," the foreign entity identifies certain of its U.S. investors, or (iii) the foreign entity is otherwise exempt under FATCA.

Withholding under FATCA generally (1) applies to payments of dividends on our common stock, and (2) will apply to payments of gross proceeds from a sale or other disposition of our common stock made after December 31, 2018. An intergovernmental agreement between the United States and an applicable foreign country may modify the requirements described in this section. Under certain circumstances, a non-U.S. holder may be eligible for refunds or credits of the tax. Non-U.S. holders should consult their own tax advisors regarding the possible implications of FATCA on their investment in our common stock.

The preceding discussion of material U.S. federal income and estate tax considerations is for informational purposes only. It is not legal or tax advice. Prospective investors should consult their own tax advisors regarding the particular U.S. federal, state, local and non-U.S. tax consequences of purchasing, holding and disposing of our common stock, including the consequences of any proposed changes in applicable laws.

UNDERWRITERS

Under the terms and subject to the conditions in an underwriting agreement dated the date of this prospectus, the underwriters named below, for whom Morgan Stanley & Co. LLC, J.P. Morgan Securities LLC and Barclays Capital Inc. are acting as representatives, have severally agreed to purchase, and we have agreed to sell to them, severally, the number of shares indicated below:

| <u>Name</u> | <u>Number of Shares</u> |
|--|-----------------------------|
| Morgan Stanley & Co. LLC | |
| J.P. Morgan Securities LLC | |
| Barclays Capital Inc. | |
| Raymond James & Associates, Inc. | |
| Stifel, Nicolaus & Company, Incorporated | |
| Total | <u> </u> |

The underwriters and the representatives are collectively referred to as the “underwriters” and the “representatives,” respectively. The underwriters are offering the shares of common stock subject to their acceptance of the shares from us and subject to prior sale. The underwriting agreement provides that the obligations of the several underwriters to pay for and accept delivery of the shares of common stock offered by this prospectus are subject to the approval of certain legal matters by their counsel and to certain other conditions. The underwriters are obligated to take and pay for all of the shares of common stock offered by this prospectus if any such shares are taken. However, the underwriters are not required to take or pay for the shares covered by the underwriters’ option to purchase additional shares described below. The underwriting agreement also provides that if an underwriter defaults, the purchase commitment of non-defaulting underwriters may be increased or the offering terminated.

The underwriters initially propose to offer part of the shares of common stock directly to the public at the offering price listed on the cover page of this prospectus and part to certain dealers. After the initial offering of the shares of common stock, the offering price and other selling terms may from time to time be varied by the representatives.

We have granted to the underwriters an option, exercisable for 30 days from the date of this prospectus, to purchase up to additional shares of common stock at the public offering price listed on the cover page of this prospectus, less underwriting discounts and commissions. To the extent the option is exercised, each underwriter will become obligated, subject to certain conditions, to purchase about the same percentage of the additional shares of common stock as the number listed next to the underwriter’s name in the preceding table bears to the total number of shares of common stock listed next to the names of all underwriters in the preceding table.

The following table shows the per share and total public offering price, underwriting discounts and commissions, and proceeds before expenses. These amounts are shown assuming both no exercise and full exercise of the underwriters’ option to purchase up to an additional shares of common stock.

| | <u>Per Share</u> | <u>Total</u> | |
|---|------------------|--------------------|----------------------|
| | | <u>No Exercise</u> | <u>Full Exercise</u> |
| Public offering price | \$ | \$ | \$ |
| Underwriting discounts and commissions to be paid by us | \$ | \$ | \$ |
| Proceeds, before expenses | \$ | \$ | \$ |

The estimated offering expenses payable by us, exclusive of underwriting discounts and commissions, are approximately \$. We have agreed to reimburse the underwriters for expense relating to clearance of this offering with the Financial Industry Regulatory Authority up to \$.

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The underwriters have informed us that they do not intend sales to discretionary accounts to exceed 5% of the total number of shares of common stock offered by them.

We intend to apply to list our common stock on the Nasdaq Global Market under the symbol “CASA”.

We and all directors and officers and the holders of substantially all of our outstanding stock and stock options have agreed that, without the prior written consent of Morgan Stanley & Co. LLC on behalf of the underwriters, we and they will not, during the period ending 180 days after the date of this prospectus, which we refer to as the restricted period:

- offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of our common stock or any other securities so owned convertible into or exercisable or exchangeable for our common stock;
- enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of our common stock; or
- file any registration statement with the Securities and Exchange Commission relating to the offering of any shares of our common stock or any securities convertible into or exercisable or exchangeable for shares of our common stock

whether any such transaction described above is to be settled by delivery of common stock or such other securities, in cash or otherwise. In addition, we and each such person agrees that, without the prior written consent of Morgan Stanley & Co. LLC on behalf of the underwriters, we or such other person will not, during the restricted period, make any demand for, or exercise any right with respect to, the registration of any shares of common stock or any security convertible into or exercisable or exchangeable for common stock.

The restrictions described in the immediately preceding paragraph do not apply to certain specified types of transactions, including the following, subject in certain cases to specified limitations:

- the sale of shares in this offering;
- transactions relating to shares of our common stock acquired in open market transactions after the completion of this offering;
- transfers as bona fide gifts;
- transfers to a trust, or other entity formed for estate planning purposes;
- transfers to a corporation, partnership, limited liability company, trust or other business entity that controls, is controlled by or is under common control with the transferor, or distributions to partners, limited liability company members or stockholders of the transferor;
- transfers by will or intestate succession upon death;
- transfers in connection with the “net” or “cashless” exercise or settlement of equity awards;
- transfers in connection with our repurchase of shares of our common stock issued pursuant to an employee benefit plan disclosed in this prospectus or pursuant to the agreements pursuant to which such shares were issued as disclosed in this prospectus;
- the establishment of a trading plan pursuant to Rule 10b5-1 under the Securities Exchange Act of 1934, as amended, for the transfer of shares of our common stock;
- the conversion of outstanding shares of our preferred stock into shares of our common stock;
- transfers pursuant to qualified domestic orders or in connection with divorce settlements; or

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- transfers pursuant to a bona fide third-party tender offer, merger, consolidation or other similar transaction involving a change of control approved by our board of directors.

Morgan Stanley & Co. LLC, in its sole discretion, may release the common stock and other securities subject to the lock-up agreements described above in whole or in part at any time.

In order to facilitate the offering of the common stock, the underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of the common stock. Specifically, the underwriters may sell more shares than they are obligated to purchase under the underwriting agreement, creating a short position. A short sale is covered if the short position is no greater than the number of shares available for purchase by the underwriters under the option. The underwriters can close out a covered short sale by exercising the option or purchasing shares in the open market. In determining the source of shares to close out a covered short sale, the underwriters will consider, among other things, the open market price of shares compared to the price available under the option. The underwriters may also sell shares in excess of the option, creating a naked short position. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the common stock in the open market after pricing that could adversely affect investors who purchase in this offering. As an additional means of facilitating this offering, the underwriters may bid for, and purchase, shares of common stock in the open market to stabilize the price of the common stock. These activities may raise or maintain the market price of the common stock above independent market levels or prevent or retard a decline in the market price of the common stock. The underwriters are not required to engage in these activities and may end any of these activities at any time.

We and the underwriters have agreed to indemnify each other against certain liabilities, including liabilities under the Securities Act.

A prospectus in electronic format may be made available on websites maintained by one or more underwriters, or selling group members, if any, participating in this offering. The representatives may agree to allocate a number of shares of common stock to underwriters for sale to their online brokerage account holders. Internet distributions will be allocated by the representatives to underwriters that may make Internet distributions on the same basis as other allocations.

The underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities. Certain of the underwriters and their respective affiliates have, from time to time, performed, and may in the future perform, various financial advisory and investment banking services for us, for which they received or will receive customary fees and expenses.

In addition, in the ordinary course of their various business activities, the underwriters and their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers and may at any time hold long and short positions in such securities and instruments. Such investment and securities activities may involve our securities and instruments. The underwriters and their respective affiliates may also make investment recommendations or publish or express independent research views in respect of such securities or instruments and may at any time hold, or recommend to clients that they acquire, long or short positions in such securities and instruments.

Pricing of the Offering

Prior to this offering, there has been no public market for our common stock. The initial public offering price was determined by negotiations between us and the representatives. Among the factors considered in determining the initial public offering price were the information set forth in this prospectus and otherwise

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available to the representatives, our future prospects and those of our industry in general, assessment of our management, conditions of the securities markets at the time of this offering, our sales, earnings and certain other financial and operating information in recent periods, and the price-earnings ratios, price-sales ratios, market prices of securities, and certain financial and operating information of companies engaged in activities similar to ours.

Neither we nor the underwriters can assure investors that an active trading market will develop for our common shares, or that the shares will trade in the public market at or above the initial public offering price.

Selling Restrictions

Canada

The shares may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 Prospectus Exemptions or subsection 73.3(1) of the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the shares must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 (or, in the case of securities issued or guaranteed by the government of a non-Canadian jurisdiction, section 3A.4) of National Instrument 33-105 Underwriting Conflicts (NI 33-105), the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

European Economic Area

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (each, a "Relevant Member State"), with effect from and including the date on which the Prospectus Directive is implemented in that Relevant Member State, no offer of shares may be made to the public in that Relevant Member State other than:

A. to any legal entity which is a qualified investor as defined in the Prospectus Directive;

B. to fewer than 150 natural or legal persons (other than qualified investors as defined in the Prospectus Directive), subject to obtaining the prior consent of the underwriters; or

C. in any other circumstances falling within Article 3(2) of the Prospectus Directive,

provided that no such offer of shares shall require our company or any underwriter to publish a prospectus pursuant to Article 3 of the Prospectus Directive or supplement a prospectus pursuant to Article 16 of the Prospectus Directive and each person who initially acquires any shares or to whom any offer is made will be deemed to have represented, acknowledged and agreed to and with each of the underwriters and our company that it is a "qualified investor" within the meaning of the law in that Relevant Member State implementing Article 2(1)(e) of the Prospectus Directive.

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In the case of any shares being offered to a financial intermediary as that term is used in Article 3(2) of the Prospectus Directive, each such financial intermediary will be deemed to have represented, acknowledged and agreed that the shares acquired by it in the offer have not been acquired on a non-discretionary basis on behalf of, nor have they been acquired with a view to their offer or resale to, persons in circumstances which may give rise to an offer of any shares to the public other than their offer or resale in a Relevant Member State to qualified investors as so defined or in circumstances in which the prior consent of the representatives has been obtained to each such proposed offer or resale.

For the purposes of this provision, the expression an “offer of shares to the public” in relation to any shares in any Relevant Member State means the communication in any form and by means of sufficient information on the terms of the offer and the shares to be offered so as to enable an investor to decide to purchase shares, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State, the expression “Prospectus Directive” means Directive 2003/71/EC (as amended, including by Directive 2010/73/EU), and includes any relevant implementing measure in the Relevant Member State.

United Kingdom

In the United Kingdom, this document is being distributed only to, and is directed only at, and any offer subsequently made may only be directed at persons who are “qualified investors” (as defined in the Prospectus Directive) (i) who have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended (the “Order”) and/or (ii) who are high net worth companies (or persons to whom it may otherwise be lawfully communicated) falling within Article 49(2)(a) to (d) of the Order (all such persons together being referred to as “relevant persons”) or otherwise in circumstances which have not resulted and will not result in an offer to the public of the shares in the United Kingdom within the meaning of the Financial Services and Markets Act 2000.

Any person in the United Kingdom that is not a relevant person should not act or rely on the information included in this document or use it as basis for taking any action. In the United Kingdom, any investment or investment activity that this document relates to may be made or taken exclusively by relevant persons.

Hong Kong

Shares of our common stock may not be offered or sold by means of any document other than (i) in circumstances which do not constitute an offer to the public within the meaning of the Companies Ordinance (Cap.32, Laws of Hong Kong), or (ii) to “professional investors” within the meaning of the Securities and Futures Ordinance (Cap.571, Laws of Hong Kong) and any rules made thereunder, or (iii) in other circumstances which do not result in the document being a “prospectus” within the meaning of the Companies Ordinance (Cap.32, Laws of Hong Kong), and no advertisement, invitation or document relating to shares of our common stock may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the laws of Hong Kong) other than with respect to shares of our common stock which are or are intended to be disposed of only to persons outside Hong Kong or only to “professional investors” within the meaning of the Securities and Futures Ordinance (Cap.571, Laws of Hong Kong) and any rules made thereunder.

Japan

Shares of our common stock have not been and will not be registered under the Financial Instruments and Exchange Law of Japan (the Financial and Exchange Law) and each underwriter has agreed that it will not offer or sell any shares of our common stock, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to a

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resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the Financial Instruments and Exchange Law and any other applicable laws, regulations and ministerial guidelines of Japan.

Singapore

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of shares of our common stock may not be circulated or distributed, nor may the shares of our common stock be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore (the “SFA”), (ii) to a relevant person, or any person pursuant to Section 275(1A), and in accordance with the conditions, specified in Section 275 of the SFA or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where shares of our common stock are subscribed or purchased under Section 275 by a relevant person which is: (a) a corporation (which is not an accredited investor) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or (b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary is an accredited investor, shares, debentures and units of shares and debentures of that corporation or the beneficiaries’ rights and interest in that trust shall not be transferable for 6 months after that corporation or that trust has acquired shares of our common stock under Section 275 except: (1) to an institutional investor under Section 274 of the SFA or to a relevant person, or any person pursuant to Section 275(1A), and in accordance with the conditions, specified in Section 275 of the SFA; (2) where no consideration is given for the transfer; or (3) by operation of law.

LEGAL MATTERS

The validity of the shares of common stock offered hereby will be passed upon for us by Wilmer Cutler Pickering Hale and Dorr LLP, Boston, Massachusetts. Wilson Sonsini Goodrich & Rosati, Professional Corporation, Boston, Massachusetts, has acted as counsel for the underwriters in connection with certain legal matters related to this offering.

EXPERTS

The financial statements as of December 31, 2014 and 2015 and for each of the two years in the period ended December 31, 2015 included in this prospectus have been so included in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the Securities and Exchange Commission a registration statement on Form S-1 under the Securities Act with respect to the shares of common stock offered hereby. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement or the exhibits and schedules filed therewith. For further information about us and the common stock offered hereby, we refer you to the registration statement and the exhibits and schedules filed thereto. Statements contained in this prospectus regarding the contents of any contract or any other document that is filed as an exhibit to the registration statement are not necessarily complete, and each such statement is qualified in all respects by reference to the full text of such contract or other document filed as an exhibit to the registration statement.

You may read and copy the registration statement of which this prospectus is a part at the SEC's public reference room, which is located at 100 F Street, N.E., Room 1580, Washington, DC 20549. You can request copies of the registration statement by writing to the SEC and paying a fee for the copying cost. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the SEC's public reference room. In addition, the SEC maintains an Internet website, which is located at www.sec.gov, that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC. You may access the registration statement of which this prospectus is a part at the SEC's Internet website.

Upon the closing of this offering, we will be subject to the informational and periodic reporting requirements of the Exchange Act. We will fulfill our obligations with respect to such requirements by filing periodic reports and other information with the SEC. We intend to furnish our stockholders with annual reports containing consolidated financial statements certified by an independent registered public accounting firm. We also maintain a website at www.casa-systems.com. The information contained on, or which can be accessed through, our website does not constitute a part of this prospectus.

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Management
of Casa Systems, Inc.

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of operations and comprehensive income, of convertible preferred stock and stockholders' equity and of cash flows present fairly, in all material respects, the financial position of Casa Systems, Inc. and its subsidiaries as of December 31, 2014 and 2015, and the results of their operations and their cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with the standards of the Public Company Accounting Oversight Board (United States) and in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

As discussed in Note 7 to the consolidated financial statements, the Company changed the manner in which it classifies deferred tax assets and liabilities in the year ended December 31, 2015.

/s/ PricewaterhouseCoopers LLP

Boston, Massachusetts
December 13, 2016

CASA SYSTEMS, INC.
CONSOLIDATED BALANCE SHEETS
(Amounts in thousands, except per share amounts)

| | <u>December 31,</u> | |
|---|---------------------|-------------------|
| | <u>2014</u> | <u>2015</u> |
| Assets | | |
| Current assets: | | |
| Cash and cash equivalents | \$ 77,155 | \$ 92,496 |
| Accounts receivable, net of provision for doubtful accounts of \$485 and \$768 as of December 31, 2014 and 2015, respectively | 85,669 | 90,945 |
| Inventory | 34,454 | 47,501 |
| Prepaid expenses and other current assets | 3,654 | 4,173 |
| Prepaid income taxes | 1,687 | 945 |
| Deferred tax assets | 11,050 | — |
| Total current assets | <u>213,669</u> | <u>236,060</u> |
| Property and equipment, net | 8,991 | 22,328 |
| Accounts receivable, net of current portion | 6,114 | 9,839 |
| Deferred tax assets | 1,593 | 14,280 |
| Other assets | 448 | 590 |
| Total assets | <u>\$ 230,815</u> | <u>\$ 283,097</u> |
| Liabilities, Convertible Preferred Stock and Stockholders' Equity | | |
| Current liabilities: | | |
| Accounts payable | \$ 3,353 | \$ 7,218 |
| Accrued expenses and other current liabilities | 18,767 | 25,354 |
| Accrued income taxes | 15,691 | 4,882 |
| Deferred revenue | 76,621 | 35,353 |
| Current portion of long-term debt | — | 272 |
| Total current liabilities | <u>114,432</u> | <u>73,079</u> |
| Accrued income taxes, net of current portion | 429 | 449 |
| Deferred revenue, net of current portion | 9,775 | 22,109 |
| Long-term debt, net of current portion | — | 7,523 |
| Total liabilities | <u>124,636</u> | <u>103,160</u> |
| Commitments and contingencies (Note 16) | | |
| Convertible preferred stock (Series A, B and C), \$0.001 par value; 5,502 shares authorized as of December 31, 2014 and 2015; 4,038 shares issued and outstanding as of December 31, 2014 and 2015; aggregate liquidation preference of \$131,577 as of December 31, 2015 | 97,479 | 97,479 |
| Stockholders' equity: | | |
| Common stock, \$0.001 par value; 20,000 shares authorized as of December 31, 2014 and 2015; 6,335 and 6,362 shares issued and outstanding as of December 31, 2014 and 2015, respectively | 6 | 6 |
| Additional paid-in capital | 7,664 | 14,745 |
| Accumulated other comprehensive income (loss) | 1,030 | (214) |
| Retained earnings | — | 67,921 |
| Total stockholders' equity | <u>8,700</u> | <u>82,458</u> |
| Total liabilities, convertible preferred stock and stockholders' equity | <u>\$ 230,815</u> | <u>\$ 283,097</u> |

The accompanying notes are an integral part of these consolidated financial statements.

CASA SYSTEMS, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME
(Amounts in thousands, except share and per share amounts)

| | Year Ended December 31, | |
|---|--------------------------------|------------------|
| | 2014 | 2015 |
| Revenue: | | |
| Product | \$ 194,358 | \$ 247,588 |
| Service | 16,920 | 24,862 |
| Total revenue | <u>211,278</u> | <u>272,450</u> |
| Cost of revenue: | | |
| Product | 59,088 | 74,349 |
| Service | 5,917 | 5,265 |
| Total cost of revenue | <u>65,005</u> | <u>79,614</u> |
| Gross profit | <u>146,273</u> | <u>192,836</u> |
| Operating expenses: | | |
| Research and development | 25,481 | 37,155 |
| Sales and marketing | 21,409 | 36,157 |
| General and administrative | 10,346 | 16,453 |
| Total operating expenses | <u>57,236</u> | <u>89,765</u> |
| Income from operations | <u>89,037</u> | <u>103,071</u> |
| Other income (expense): | | |
| Interest income | 913 | 955 |
| Interest expense | (23) | (214) |
| Loss on foreign currency | (3,173) | (3,020) |
| Other income (expense), net | (659) | 871 |
| Total other expense, net | <u>(2,942)</u> | <u>(1,408)</u> |
| Income before provision for income taxes | 86,095 | 101,663 |
| Provision for income taxes | 26,387 | 33,742 |
| Net income | 59,708 | 67,921 |
| Other comprehensive expense—foreign currency translation adjustment | (149) | (1,244) |
| Comprehensive income | <u>\$ 59,559</u> | <u>\$ 66,677</u> |

CASA SYSTEMS, INC.

CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME (Continued)
(Amounts in thousands, except share and per share amounts)

| | Year Ended December 31, | |
|---|-------------------------|------------------|
| | 2014 | 2015 |
| Cash dividends declared per common share or common share equivalent | <u>\$ 1,9173</u> | <u>\$ —</u> |
| Net income attributable to common stockholders: | | |
| Basic | <u>\$ 23,287</u> | <u>\$ 27,302</u> |
| Diluted | <u>\$ 23,843</u> | <u>\$ 30,402</u> |
| Net income per share attributable to common stockholders: | | |
| Basic | <u>\$ 3.88</u> | <u>\$ 4.30</u> |
| Diluted | <u>\$ 3.65</u> | <u>\$ 3.92</u> |
| Weighted-average shares used to compute net income per share attributable to common stockholders: | | |
| Basic | <u>5,997</u> | <u>6,348</u> |
| Diluted | <u>6,537</u> | <u>7,761</u> |
| Pro forma net income per share attributable to common stockholders (unaudited): | | |
| Basic | | <u>\$</u> |
| Diluted | | <u>\$</u> |
| Weighted-average shares used to compute pro forma net income per share attributable to common stockholders (unaudited): | | |
| Basic | | <u></u> |
| Diluted | | <u></u> |

The accompanying notes are an integral part of these consolidated financial statements.

CASA SYSTEMS, INC.

CONSOLIDATED STATEMENTS OF CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' EQUITY
(Amounts in thousands, except per share amounts)

| | Series A, B and C Convertible Preferred Stock | | Common Stock | | Additional Paid-in Capital | Accumulated Other Comprehensive Income (Loss) | Retained Earnings (Accumulated Deficit) | Total Stockholders' Equity (Deficit) |
|---|---|----------|--------------|--------|----------------------------------|--|--|---|
| | Shares | Amount | Shares | Amount | | | | |
| Balances at January 1, 2014 | 4,038 | \$97,479 | 5,294 | \$ 5 | \$ 8,215 | \$ 1,179 | \$ (42,944) | \$ (33,545) |
| Exercise of stock options | — | — | 512 | — | 4,297 | — | — | 4,297 |
| Exercise of warrants | — | — | 529 | 1 | 2,368 | — | — | 2,369 |
| Reclassification of warrant liability | — | — | — | — | 3,695 | — | — | 3,695 |
| Foreign currency translation adjustment, net of tax of \$0 | — | — | — | — | — | (149) | — | (149) |
| Cash dividends declared (\$1.9173 per share of common stock, \$3.8346 per share of convertible preferred stock and \$1.9173 per share to holders of stock-based awards) | — | — | — | — | (13,201) | — | (16,764) | (29,965) |
| Stock-based compensation | — | — | — | — | 1,782 | — | — | 1,782 |
| Income tax benefits related to stock-based compensation plans | — | — | — | — | 508 | — | — | 508 |
| Net income | — | — | — | — | — | — | 59,708 | 59,708 |
| Balances at December 31, 2014 | 4,038 | 97,479 | 6,335 | 6 | 7,664 | 1,030 | — | 8,700 |
| Exercise of stock options | — | — | 27 | — | 226 | — | — | 226 |
| Foreign currency translation adjustment, net of tax of \$0 | — | — | — | — | — | (1,244) | — | (1,244) |
| Stock-based compensation | — | — | — | — | 6,855 | — | — | 6,855 |
| Net income | — | — | — | — | — | — | 67,921 | 67,921 |
| Balances at December 31, 2015 | 4,038 | \$97,479 | 6,362 | \$ 6 | \$ 14,745 | \$ (214) | \$ 67,921 | \$ 82,458 |

The accompanying notes are an integral part of these consolidated financial statements.

CASA SYSTEMS, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Amounts in thousands)

| | Year Ended December 31, | |
|---|--------------------------------|------------------|
| | 2014 | 2015 |
| Cash flows from operating activities: | | |
| Net income | \$ 59,708 | \$ 67,921 |
| Adjustments to reconcile net income to net cash provided by operating activities: | | |
| Depreciation and amortization | 3,604 | 5,149 |
| Stock-based compensation | 1,991 | 7,321 |
| Deferred income taxes | (8,398) | (1,637) |
| Increase in fair value of warrant liability | 1,523 | — |
| Excess and obsolete inventory valuation adjustment | 264 | 1,379 |
| Increase in provision for doubtful accounts | 311 | 454 |
| Excess income tax benefits from stock-based compensation plans | (508) | — |
| Changes in operating assets and liabilities: | | |
| Accounts receivable | (46,634) | (9,717) |
| Inventory | (22,075) | (17,373) |
| Prepaid expenses and other assets | (2,404) | (875) |
| Prepaid income taxes | (1,687) | 742 |
| Accounts payable | (6,621) | 2,744 |
| Accrued expenses and other current liabilities | 7,993 | 7,967 |
| Accrued income taxes | 13,880 | (10,842) |
| Deferred revenue | 59,401 | (28,631) |
| Net cash provided by operating activities | <u>60,348</u> | <u>24,602</u> |
| Cash flows used in investing activities: | | |
| Purchases of property and equipment | (4,030) | (15,503) |
| Net cash used in investing activities | <u>(4,030)</u> | <u>(15,503)</u> |
| Cash flows from financing activities: | | |
| Proceeds from issuance of debt, net of issuance costs | — | 7,905 |
| Principal repayments of debt | — | (115) |
| Proceeds from exercise of warrants | 2,369 | — |
| Proceeds from exercise of stock options | 4,297 | 226 |
| Payments of dividends and equitable adjustments | (28,869) | (712) |
| Excess income tax benefits from stock-based awards | 508 | — |
| Net cash provided by (used in) financing activities | <u>(21,695)</u> | <u>7,304</u> |
| Effect of exchange rate changes on cash and cash equivalents | 28 | (1,062) |
| Net increase in cash and cash equivalents | 34,651 | 15,341 |
| Cash and cash equivalents at beginning of year | 42,504 | 77,155 |
| Cash and cash equivalents at end of year | <u>\$ 77,155</u> | <u>\$ 92,496</u> |
| Supplemental disclosures of cash flow information: | | |
| Cash paid for interest | \$ — | \$ 117 |
| Cash paid for income taxes | \$ 22,279 | \$ 45,182 |
| Supplemental disclosures of non-cash investing and financing activities: | | |
| Purchases of property and equipment included in accounts payable | \$ — | \$ 1,140 |
| Unpaid dividends and equitable adjustments included in accrued expenses and other current liabilities | \$ 1,096 | \$ 383 |

The accompanying notes are an integral part of these consolidated financial statements.

CASA SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Amounts in thousands, except per share amounts)

1. Nature of Business and Basis of Presentation

Casa Systems, Inc. (the “Company”) was incorporated under the laws of the State of Delaware on February 28, 2003. The Company is a global communications technology company headquartered in Andover, Massachusetts and has wholly owned subsidiaries in China, France, Canada and the Netherlands.

The Company provides a suite of software-centric infrastructure solutions that allow cable service providers to deliver voice, video and data services over a single platform at multi-gigabit speeds. In addition, the Company offers solutions for next-generation distributed and virtualized architectures in cable operator, fixed telecom and wireless networks. The Company’s innovative solutions enable customers to cost-effectively and dynamically increase network speed, add bandwidth capacity, reconfigure and add new services for consumers and enterprises, reduce network complexity and reduce operating and capital expenditures.

The Company is subject to a number of risks similar to other companies of comparable size and other companies selling and providing services to the communications industry. These risks include, but are not limited to, the level of capital spending by the communications industry, a lengthy sales cycle, dependence on the development of new products and services, unfavorable economic and market conditions, competition from larger and more established companies, limited management resources, dependence on a limited number of contract manufacturers and suppliers, the rapidly changing nature of the technology used by the communications industry and reliance on resellers. Failure by the Company to anticipate or to respond adequately to technological developments in its industry, changes in customer or supplier requirements, changes in regulatory requirements or industry standards, or any significant delays in the development or introduction of products could have a material adverse effect on the Company’s operating results, financial condition and cash flows.

The accompanying consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (“GAAP”) and include the accounts of the Company and its wholly owned subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation.

2. Summary of Significant Accounting Policies

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting periods.

Significant estimates and judgments relied upon by management in preparing these consolidated financial statements include revenue recognition, provision for doubtful accounts, reserves for excess and obsolete inventory, valuation of inventory and deferred inventory costs, the expensing and capitalization of software-related research and development costs, amortization and depreciation periods, recoverability of net deferred tax assets, valuation of uncertain tax positions, warranty allowances and of the Company’s common stock and other equity instruments, and stock-based compensation expense.

Although the Company regularly reassesses the assumptions underlying these estimates, actual results could differ materially from these estimates. Changes in estimates are recorded in the period in which they become known. The Company bases its estimates on historical experience and various other assumptions that it believes to be reasonable under the circumstances existing at the time such estimates are made.

CASA SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Amounts in thousands, except per share amounts)

Unaudited Pro Forma Information

In the accompanying consolidated statements of operations and comprehensive income, the calculation of the unaudited pro forma basic and diluted net income per share attributable to common stockholders for the year ended December 31, 2015 has been prepared to give effect, upon the closing of a qualified initial public offering, to (i) the automatic conversion of all outstanding shares of convertible preferred stock into shares of common stock as if the proposed initial public offering had occurred on January 1, 2015 and (ii) the number of shares offered in the initial public offering whose proceeds are deemed necessary, based on an assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, to pay (a) the special cash dividend of \$43,148 declared by the Company's board of directors on June 17, 2016 and (b) the special cash dividend of \$ declared by the Company's board of directors on because the Company's earnings for the twelve months ended September 30, 2016 were not sufficient to fully fund those dividends.

The unaudited pro forma net income per share data have been presented in accordance with Securities and Exchange Commission Staff Accounting Bulletin Topic 1B.3 ("SAB Topic 1B.3"). In accordance with SAB Topic 1B.3, dividends declared at or in the year preceding an initial public offering are deemed to be in contemplation of the offering with the intention of repayment out of the offering proceeds to the extent that the amount of dividends exceeded the amount of earnings during the twelve-month period ended on the balance sheet date. For the twelve months ended September 30, 2016, the Company's net income was \$75,140 (unaudited).

Cash Equivalents

Cash equivalents include all highly liquid investments maturing within three months from the date of purchase. As of December 31, 2014 and 2015, the Company's cash equivalents consisted of investments in certificates of deposit and money market mutual funds.

Accounts Receivable

Accounts receivable are presented net of a provision for doubtful accounts, which is an estimate of amounts that may not be collectible. Accounts receivable for arrangements with customary payment terms, which are one year or less, are recorded at invoiced amounts and do not bear interest. The Company generally does not require collateral, but the Company may, in certain instances based on its credit assessment, require full or partial prepayment prior to shipment.

For certain customers and/or for certain transactions, the Company provides extended payment arrangements to allow the customer to pay for the purchased equipment in monthly, other periodic or lump-sum payments over a period of one to five years. Certain of these arrangements are collateralized by the underlying assets during the term of the arrangement. Payments due beyond 12 months from the balance sheet date are recorded as non-current assets. In addition, amounts recorded as current and non-current accounts receivable for extended payment term arrangements at any balance sheet date have a corresponding amount recorded as deferred revenue because the Company defers the recognition of revenue for all extended payment term arrangements and only recognizes revenue to the extent of the payment amounts that become due from the customer (see—Revenue Recognition—Deferred Revenue below).

Although there is no contractual interest rate for customer arrangements with extended payment terms, the Company imputes interest on the accounts receivable related to these arrangements and reduces the arrangement

CASA SYSTEMS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Amounts in thousands, except per share amounts)

fee that will be recognized as revenue for the amount of the imputed interest, which is recorded as interest income over the payment term using the effective interest method. For the periods presented in the accompanying consolidated financial statements, the impact of imputing interest on revenue and interest income was insignificant.

Accounts receivable as of December 31, 2014 and 2015 consisted of the following:

| | December 31, | |
|--|-----------------|------------------|
| | 2014 | 2015 |
| Current portion of accounts receivable, net: | | |
| Accounts receivable, net | \$51,535 | \$ 71,155 |
| Amounts due from related party (see Note 15) | 28,046 | 12,367 |
| Accounts receivable, extended payment arrangements | 6,088 | 7,423 |
| | <u>85,669</u> | <u>90,945</u> |
| Accounts receivable, net of current portion: | | |
| Accounts receivable, extended payment arrangements | 6,114 | 9,839 |
| | <u>\$91,783</u> | <u>\$100,784</u> |

The Company performs ongoing credit evaluations of its customers and, if necessary, provides a provision for doubtful accounts and expected losses. When assessing and recording its provision for doubtful accounts, the Company evaluates the age of its accounts receivable, current economic trends, creditworthiness of the customers, customer payment history, and other specific customer and transaction information. The Company writes off accounts receivable against the provision when it determines a balance is uncollectible and no longer actively pursues collection of the receivable. Adjustments to the provision for doubtful accounts are recorded as general and administrative expenses in the consolidated statements of operations and comprehensive income. A summary of changes in the provision for doubtful accounts for the years ended December 31, 2014 and 2015 is as follows:

| | Year Ended December 31, | |
|--|-------------------------|---------------|
| | 2014 | 2015 |
| Provision for doubtful accounts at beginning of year | \$ 174 | \$ 485 |
| Provisions | 311 | 454 |
| Write-offs | — | (171) |
| Provision for doubtful accounts at end of year | <u>\$ 485</u> | <u>\$ 768</u> |

As December 31, 2014 and 2015, the Company concluded that all amounts due under extended payment term arrangements were collectible and no reserve for credit losses was recorded. During the years ended December 31, 2014 and 2015, the Company did not provide a reserve for credit losses and did not write off any uncollectible receivables due under extended payment term arrangements.

Inventories

Inventories are valued at the lower of cost or market value. Cost is computed using the first-in first-out convention. Inventories are composed of hardware and related component parts of finished goods. The Company establishes provisions for excess and obsolete inventories after evaluating historical sales, future demand, market

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conditions, expected product life cycles, and current inventory levels to reduce such inventories to their estimated net realizable value. Such provisions are made in the normal course of business and charged to cost of revenue in the consolidated statements of operations and comprehensive income.

Deferred inventory costs are included within inventory in the consolidated balance sheets. Deferred inventory costs represent the cost of products that have been delivered to the customer for which revenue associated with the arrangement has been deferred as a result of not meeting all of the required revenue recognition criteria, such as receipt of customer acceptance. Until the revenue recognition criteria are met, the Company retains the right to a return of the underlying inventory. Deferred inventory costs are recognized as cost of revenue in the consolidated statements of operations and comprehensive income when the related revenue is recognized.

Property and Equipment

Property and equipment is stated at historical cost less accumulated depreciation. Depreciation is computed using the straight-line method over the estimated useful lives of the assets. Leasehold improvements are recorded at cost with any reimbursement from the landlord being accounted for as deferred rent, which is amortized using the straight-line method over the lease term. Costs for trial systems held and used by the Company's customers pursuant to evaluation agreements are also included within property and equipment. Trial systems held and used by the Company's customers are depreciated over the estimated useful life of such assets, which is two years. Whenever a trial system is sold to a customer and the selling price is recorded as revenue, the related net book value of the trial system sold is removed from property and equipment and recorded as a cost of revenue. Maintenance and repairs expenditures are charged to expense as incurred.

Estimated useful lives of the respective property and equipment assets are as follows:

| | <u>Estimated Useful Life</u> |
|-----------------------------------|----------------------------------|
| Computers and purchased software | 3 years |
| Leasehold improvements | Shorter of lease term or 7 years |
| Furniture and fixtures | 7 years |
| Machinery and equipment | 3 – 5 years |
| Building | 40 years |
| Building improvements | 5 – 40 years |
| Trial systems at customers' sites | 2 years |

Upon retirement or sale, the cost of assets disposed of and the related accumulated depreciation are removed from the accounts and any resulting gain or loss is included in income from operations.

Impairment of Long-Lived Assets

The Company evaluates its long-lived assets, which consist primarily of property and equipment, for impairment whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. Factors that the Company considers in deciding when to perform an impairment review include significant underperformance of the business in relation to expectations, significant negative industry or economic trends and significant changes or planned changes in the use of the assets. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to the future undiscounted net cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment to

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be recognized is measured by the amount by which the carrying amount of the asset exceeds the fair value of the asset, less the cost to sell. No events or changes in circumstances existed to require an impairment assessment during the years ended December 31, 2014 and 2015.

Deferred Offering Costs

The Company capitalizes certain legal, professional accounting and other third-party fees that are directly associated with in-process equity financings as deferred offering costs until such financings are consummated. After consummation of the equity financing, these costs are recorded in stockholders' equity as a reduction of additional paid-in capital generated as a result of the offering. Should the planned equity financing be abandoned, the deferred offering costs will be expensed immediately as a charge to operating expenses in the statement of operations and comprehensive income. The Company did not record any deferred offering costs as of December 31, 2014 and 2015.

Concentration of Risks

Financial instruments that potentially subject the Company to concentrations of credit risk consist principally of cash and cash equivalents and accounts receivable. Cash and cash equivalents consist of demand deposits, savings accounts, money market mutual funds, and certificates of deposits with financial institutions, which may exceed Federal Deposit Insurance Corporation limits. The Company has not experienced any losses related to its cash and cash equivalents and does not believe that it is subject to unusual credit risk beyond the normal credit risk associated with commercial banking relationships.

Significant customers are those that represent 10% or more of revenue or accounts receivable balances as set forth in the following table:

| | Revenue | | Accounts Receivable, Net | |
|------------|-------------------------|------|--------------------------|------|
| | Year Ended December 31, | | December 31, | |
| | 2014 | 2015 | 2014 | 2015 |
| Customer A | 41% | 14% | * | * |
| Customer B | 13% | * | 25% | * |
| Customer C | * | 17% | 31% | 12% |
| Customer D | * | * | * | 17% |
| Customer E | * | * | * | 12% |
| Customer F | * | * | 11% | 15% |
| Customer G | * | * | 14% | * |

* Less than 10% of total

Customer C is a related party, Liberty Global Services B.V. and its affiliates (see Note 15).

Certain of the components and subassemblies included in the Company's products are obtained from a single source or a limited group of suppliers. In addition, the Company primarily relies on two third parties to manufacture its products. Although the Company seeks to reduce dependence on those limited sources of suppliers and manufacturers, the partial or complete loss of certain of these sources could have a material adverse effect on the Company's operating results, financial condition and cash flows and damage its customer relationships.

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Substantially all of the Company's products are covered by a warranty for software and hardware for periods ranging from 90 days to one year. In addition, in conjunction with renewals of maintenance and support contracts, the Company offers an extended warranty for periods typically of one to three years for agreed-upon fees. In the event of a failure of a hardware product or software covered by these warranties, the Company must repair or replace the software or hardware or, if those remedies are insufficient, and at the discretion of the Company, provide a refund. The Company's warranty reserve, which is included in accrued expenses and other current liabilities in the consolidated balance sheets, reflects estimated material, labor and other costs related to potential or actual software and hardware warranty claims for which the Company expects to incur an obligation. The Company's estimates of anticipated rates of warranty claims and the costs associated therewith are primarily based on historical information and future forecasts. The Company periodically assesses the adequacy of the warranty reserve and adjusts the amount as necessary. If the historical data used to calculate the adequacy of the warranty reserve are not indicative of future requirements, additional or reduced warranty reserves may be required.

A summary of changes in the amount reserved for warranty costs for the years ended December 31, 2014 and 2015 is as follows:

| | Year Ended December 31, | |
|---------------------------------------|-------------------------|---------------|
| | 2014 | 2015 |
| Warranty reserve at beginning of year | \$ 646 | \$ 949 |
| Provisions | 988 | 1,272 |
| Charges | (685) | (1,228) |
| Warranty reserve at end of year | <u>\$ 949</u> | <u>\$ 993</u> |

Revenue Recognition

The Company generates revenue from sales of its broadband products, along with associated maintenance and support services, and, to a lesser extent, from sales of professional services and extended warranty services. The Company also generates revenue from sales of additional line cards and software-based capacity expansions. Maintenance and support services include telephone support and unspecified software upgrades and updates provided on a when-and-if-available basis.

In the Company's consolidated statements of operations and comprehensive income, revenue from sales of broadband products and capacity expansions is classified as product revenue, and revenue from maintenance and support, professional services and extended warranty services is classified as service revenue.

The Company recognizes revenue from sales when the following revenue recognition criteria are met:

- *Persuasive evidence of an arrangement exists.* Binding contracts and/or customer purchase orders are generally evidence of an arrangement. For professional services, evidence of an arrangement may also include information documenting the scope of work to be performed, and customer acceptance terms, if any.
- *Delivery has occurred.* For broadband products, shipping documents and customer acceptance, if applicable, verify that delivery has occurred. For software-enabled capacity expansions, delivery occurs when the additional bandwidth capacity is made available to the customer. For professional services, delivery occurs as the services are completed.

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- *The sales price is fixed or determinable.* The sales price is considered fixed or determinable when the fees have been contractually agreed with the customer and are not deemed to be subject to refund, adjustment or future discounts, and when the payment terms of the transaction do not extend beyond the Company's customary payment terms, which are one year or less.
- *Collectibility is reasonably assured.* The Company assesses the ability to collect from its customers based on a number of factors that generally include information supplied by credit agencies, references and/or analysis of customer accounts and payment history. If collection from a customer is not considered reasonably assured, all revenue related to the customer arrangement is deferred until payment is received and all other revenue recognition criteria have been met.

When customer acceptance of the product is required and is other than perfunctory, revenue for the entire customer arrangement is deferred until the acceptance has been received.

The Company's products have both software and non-software (i.e., hardware) components that function together to deliver the products' essential functionality. In addition, the hardware sold generally cannot be used apart from the embedded software. As a result, all of the Company's product and service offerings are excluded from the scope of software revenue recognition requirements and instead fall within the scope of Accounting Standards Codification ("ASC") Topic 605, *Revenue Recognition*.

Many of the Company's sales involve multiple-deliverable arrangements that include products and maintenance and support services and, on a limited basis, may also include professional services and extended warranty services. The Company has determined that its products, maintenance and support services, professional services and extended warranty services have standalone value to the customer because each of these elements is sold separately by the Company to its customers or, in the case of professional services, is sold separately by other vendors. As a result, the Company treats each of these elements as a separate unit of accounting for purposes of allocating the arrangement fee and recognizing the revenue of each unit.

For its multiple-deliverable arrangements, the Company allocates the arrangement fee to each deliverable based on the relative selling prices of each of the deliverables in the arrangement using the selling price hierarchy. In such circumstances, the Company determines the selling price of each deliverable based on vendor-specific objective evidence ("VSOE") of selling price, if it exists; otherwise, third-party evidence ("TPE") of selling price. If neither VSOE nor TPE exists, the Company uses its best estimate of the selling price ("BESP") for the deliverable. The Company limits the amount of the arrangement fee allocated to deliverables to the amount that is not contingent on the future delivery of products or services or future performance obligations and the amount that is not subject to customer-specific return or refund privileges.

To date, the Company has not been able to establish VSOE of selling price of any of its products, maintenance and support services, professional services or extended warranty services because the Company has not established a history of consistently pricing each product or service within a narrow range. In addition, the Company is not able to determine TPE of selling price for its products or services because the Company's various product and service offerings contain a significant level of differentiation and, therefore, comparable pricing of competitors' products and services with similar functionality cannot be obtained. As the Company is unable to establish selling price using VSOE or TPE, the Company uses BESP to allocate the arrangement fee to products, maintenance and support services, professional services and extended warranty services in multiple-deliverable arrangements. The objective of BESP is to determine the price at which the Company would transact a sale if a product or service was sold on a standalone basis. The Company determines BESP of selling price for its products and services by considering multiple factors, including, but not limited to, its historical pricing practices by customer type and geographic-specific market factors.

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Revenue from product sales is recognized upon delivery to the customer, or upon the later receipt of customer acceptance of the product when such acceptance is required.

Revenue from maintenance and support services is recognized ratably over the contract period, which is typically one year, but can be as long as three or five years. When customer acceptance of a product is required, the recognition of any associated maintenance and support services revenue commences only upon customer acceptance of the associated product. Revenue from extended warranty services is recognized ratably over the contract period, which is typically one to three years.

Revenue from professional services is recognized as the services are performed. Professional services generally include installation or configuration services that are not deemed to be essential to the functionality of the products. When customer acceptance is required, the recognition of any associated professional services revenue is deferred until the associated product and/or professional service is accepted by the customer.

Resellers

The Company markets and sell its products through its direct global sales force, supported by sales agents, and through resellers. The Company's resellers receive an order from an end customer prior to placing an order with the Company, and the Company confirms the identification of or is aware of the end customer prior to accepting such order. The Company invoices the reseller and records revenue based on the amount set forth in the reseller's purchase order submitted to the Company. The Company's resellers do not stock inventory received from the Company.

When the Company transacts with a reseller, its contractual arrangement is with the reseller and not with the end customer. Whether the Company transacts business with and receives the order from a reseller or directly from an end customer, its revenue recognition policy and resulting pattern of revenue recognition for the order are the same.

The Company also uses sales agents that assist in the sales process with certain customers primarily located in the Latin America and Asia-Pacific regions. Sales agents are not resellers. If a sales agent is engaged in the sales process, the Company receives the order directly from and sells the products and services directly to the end customer, and the Company pays a commission to the sales agent, calculated as a percentage of the related customer payment. Sales agent commissions are recorded as expenses when incurred and are classified as sales and marketing expenses in the Company's consolidated statements of operations and comprehensive income.

Deferred Revenue

Amounts billed in excess of revenue recognized are recorded as deferred revenue. Deferred revenue includes customer deposits, amounts billed for maintenance and support services contracts in advance of services being performed, amounts for trade-in right liabilities and amounts related to arrangements that have been deferred as a result of not meeting the required revenue recognition criteria as of the end of the reporting period. Deferred revenue expected to be recognized as revenue more than one year subsequent to the balance sheet date is reported within long-term liabilities in the consolidated balance sheets.

When the payment terms of a customer order extend beyond the Company's customary payment terms, which are one year or less, the Company considers the arrangement to be an extended payment term arrangement and concludes that the sales price is not fixed or determinable for revenue recognition purposes. In these circumstances, the Company defers all revenue of the arrangement and only recognizes revenue to the extent of the payment amounts that become due, provided that all other revenue recognition criteria have been met.

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The Company defers recognition of incremental direct costs, such as cost of goods and services, until recognition of the related revenue. Such costs are classified as current assets if the related deferred revenue is classified as current, and such costs are classified as non-current assets if the related deferred revenue is classified as non-current.

Other Revenue Recognition Policies

In limited instances, the Company has offered future rebates to customers based on a fixed or variable percentage of actual sales volumes over specified periods. The future rebates earned based on the customer's purchasing from the Company in one period may be used as credits to be applied by them against accounts receivable due to the Company in later periods. The Company accounts for these future rebates as a reduction of the revenue recorded for the customer's current purchasing activity giving rise to the future rebates. The liability for these future rebates is recorded as accrued customer incentives (within accrued expenses and other current liabilities) until the credits have been applied by the customer against accounts receivable due to the Company.

When future trade-in rights are granted to customers at the time of sale, the Company defers a portion of the revenue recognized for the sale and accounts for it as a guarantee at fair value until the trade-in right is exercised or the right expires, in accordance with ASC Topic 460, *Guarantees*. Determining the fair value of the trade-in right requires the Company to estimate the probability of the trade-in right being exercised and the future value of the product upon trade-in. The Company assesses and updates these estimates each reporting period, and updates to these estimates may result in either an increase or decrease in the amount of revenue deferred.

Billings to customers for shipping costs and reimbursement of out-of-pocket expenses are recorded as revenue, and the associated costs incurred by the Company for those items are recorded as cost of revenue.

The Company excludes any taxes assessed by a governmental authority that are directly imposed on a revenue-producing transaction (e.g., sales, use and value added taxes) from its revenue and costs.

Stock-Based Compensation

The Company measures stock options and other stock-based awards granted to employees and directors based on the fair value on the date of the grant and recognizes compensation expense of those awards, net of estimated forfeitures, over the requisite service period, which is generally the vesting period of the respective award. Generally, the Company issues stock options with only service-based vesting conditions and records the expense for these awards using the straight-line method.

For stock-based awards granted to non-employee consultants, compensation expense is recognized over the period during which services are rendered by such non-employee consultants until completed. At the end of each financial reporting period prior to completion of the service, the fair value of these awards is remeasured using the then-current fair value of the Company's common stock and updated assumption inputs in the Black-Scholes option-pricing model.

The Company classifies stock-based compensation expense in its consolidated statements of operations and comprehensive income in the same manner in which the award recipient's payroll costs are classified or in which the award recipient's service payments are classified.

The Company recognizes compensation expense for only the portion of awards that are expected to vest. In developing a forfeiture rate estimate, the Company has considered its historical experience to estimate pre-

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vesting forfeitures for service-based awards. The impact of a forfeiture rate adjustment will be recognized in full in the period of adjustment, and if the actual forfeiture rate is materially different from the Company's estimate, the Company may be required to record adjustments to stock-based compensation expense in future periods.

The fair value of each stock option grant is estimated on the date of grant using the Black-Scholes option pricing model. The Company historically has been a private company and lacks company-specific historical and implied volatility information for its stock. Therefore, it estimates its expected stock volatility based on the historical volatility of publicly traded peer companies and expects to continue to do so until such time as it has adequate historical data regarding the volatility of its own traded stock price. The expected term of the Company's stock options has been determined utilizing the "simplified" method for awards that qualify as "plain-vanilla" options. The expected term of stock options granted to non-employees is equal to the contractual term of the option award. The risk-free interest rate is determined by reference to the U.S. Treasury yield curve in effect at the time of grant of the award for time periods approximately equal to the expected term of the award. Expected dividend yield is based on the fact that the Company does not have a history of declaring or paying cash dividends, except for the special cash dividend declared in November 2014, and in that circumstance the board of directors approved cash dividends to be paid to holders of the Company's stock options and SARs upon vesting as an equitable adjustment to the holders of such instruments.

The Company has also granted stock appreciation rights ("SARs") to certain employees, which require the Company to pay in cash upon exercise an amount equal to the product of the excess of the per share fair market value of the Company's common stock on the date of exercise over the exercise price, multiplied by the number of shares of common stock with respect to which the stock appreciation right is exercised. Because these awards may require the Company to settle the awards in cash, they are accounted for as a liability in the Company's consolidated balance sheets. The liability related to these awards, as well as related compensation expense, is recognized over the period during which services are rendered until completed. Changes in the fair value of the SAR liability are estimated using the Black-Scholes option pricing model and are recorded in the consolidated statements of operations and comprehensive income. After vesting is completed, the Company will continue to remeasure the fair market value of the liability until the award is either exercised or canceled, with changes in the fair value of the liability recorded in the consolidated statements of operations and comprehensive income.

Research and Development Costs

The Company expenses research and development costs as incurred. Costs incurred to develop software to be licensed to customers are expensed prior to the establishment of technological feasibility of the software and are capitalized thereafter until commercial release of the software. The Company has not historically capitalized software development costs as the establishment of technological feasibility typically occurs shortly before the commercial release of its software, which is embedded in its products. As such, all software development costs related to software for license to customers are expensed as incurred and included within research and development expense in the accompanying consolidated statements of operations and comprehensive income.

Advertising Costs

Advertising costs are expensed as incurred and are included in selling and marketing expense in the accompanying consolidated statements of operations and comprehensive income. Advertising expenses were \$12 and \$28 for the years ended December 31, 2014 and 2015, respectively.

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Foreign Currency Translation

For each of the Company's foreign subsidiaries, the functional currency is its local currency. Assets and liabilities of these foreign operations are translated into U.S. dollars using period-end exchange rates, and revenues and expenses are translated into U.S. dollars using average exchange rates in effect during each period. The effects of foreign currency translation adjustments are included in accumulated other comprehensive income, a separate component of stockholders' equity.

Foreign currency transaction losses are included in the consolidated statements of operations and comprehensive income and are classified as other income (expense) and totaled \$3,173 and \$3,020 for the years ended December 31, 2014 and 2015, respectively.

Fair Value Measurements

Certain assets and liabilities are carried at fair value under GAAP. Fair value is defined as the price that would be received for an asset or the exit price that would be paid to transfer a liability in the principal or most advantageous market in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. Financial assets and liabilities carried at fair value are to be classified and disclosed in one of the following three levels of the fair value hierarchy, of which the first two are considered observable and the last is considered unobservable:

- Level 1*— Quoted prices in active markets for identical assets and liabilities.
- Level 2*— Observable inputs (other than Level 1 quoted prices), such as quoted prices in active markets for similar assets or liabilities at the measurement date; quoted prices in markets that are not active for identical or similar assets and liabilities; or other inputs that are observable or can be corroborated by observable market data.
- Level 3*— Unobservable inputs that involve management judgment and are supported by little or no market activity, including pricing models, discounted cash flow methodologies and similar techniques.

The categorization of a financial instrument within the valuation hierarchy is based on the lowest level of input that is significant to the fair value measurement.

The Company's cash equivalents, SARs and warrant liability are carried at fair value, determined according to the fair value hierarchy described above (see Note 6). The fair values of accounts receivable, accounts payable and accrued expenses and other current liabilities approximate their fair values due to the short-term nature of these assets and liabilities, with the exception of amounts recorded by the Company as "accounts receivable, non-current," which represent amounts billed to customers for which payment has not yet become due and for which an offsetting amount of deferred revenue has been recorded. The carrying value of the Company's debt obligations (see Note 8) as of December 31, 2015 approximates its fair value due to the proximity of that date to the date of borrowing.

Income Taxes

The Company accounts for income taxes using the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of temporary differences between the financial statement and tax basis of assets and liabilities, as measured by enacted tax rates anticipated to be in

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effect when these differences reverse. This method also requires the recognition of future tax benefits to the extent that realization of such benefits is more likely than not. Deferred tax expense or benefit is the result of changes in the deferred tax assets and liabilities. The Company assesses the likelihood that its deferred tax assets will be recovered from future taxable income and, to the extent it believes, based upon the weight of available evidence, that it is more likely than not that all or a portion of the deferred tax assets will not be realized, a valuation allowance is established through a charge to income tax expense. Potential for recovery of deferred tax assets is evaluated by estimating the future taxable profits expected and considering prudent and feasible tax planning strategies.

The Company records a liability for potential payments of taxes to various tax authorities related to uncertain tax positions and other tax matters. The recorded liability is based on a determination of whether and how much of a tax benefit taken by the Company in its tax filings or positions is “more likely than not” to be realized. The amount of the benefit that may be recognized in the financial statements is the largest amount that has a greater than 50% likelihood of being realized upon ultimate settlement. To the extent that the assessment of such tax positions changes, the change in estimate is recorded in the period in which the determination is made. The Company establishes a liability, which is included in accrued income taxes in the consolidated balance sheets, for tax-related uncertainties based on estimates of whether, and the extent to which, additional taxes will be due. These liabilities are established when the Company believes that certain positions might be challenged despite the Company’s belief that the tax return positions are fully supportable. The recorded liability is adjusted in light of changing facts and circumstances. The provision for income taxes includes the impact of the recorded liability and changes thereto.

The Company recognizes interest and penalties related to uncertain tax positions within other income (expense) in the accompanying consolidated statements of operations and comprehensive income. Accrued interest and penalties are included in accrued income taxes in the consolidated balance sheets.

Comprehensive Income

Comprehensive income includes net income as well as other changes in stockholders’ equity that result from transactions and economic events other than those with stockholders. Comprehensive income for the periods presented consists of net income and the change in the cumulative foreign currency translation adjustment.

Net Income per Share

The Company follows the two-class method when computing net income (loss) per share as the Company has issued shares that meet the definition of participating securities. The two-class method determines net income (loss) per share for each class of common and participating securities according to dividends declared or accumulated and participation rights in undistributed earnings. The two-class method requires income available to common stockholders for the period to be allocated between common and participating securities based upon their respective rights to receive dividends as if all income for the period had been distributed.

Basic net income (loss) per share attributable to common stockholders is computed by dividing the net income (loss) attributable to common stockholders by the weighted-average number of shares of common stock outstanding for the period. Diluted net income (loss) attributable to common stockholders is computed by adjusting net income (loss) attributable to common stockholders to reallocate undistributed earnings based on the potential impact of dilutive securities. Diluted net income (loss) per share attributable to common stockholders is computed by dividing the diluted net income (loss) attributable to common stockholders by the weighted-average

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number of shares of common stock outstanding for the period, including potential dilutive common shares. For purpose of this calculation, outstanding stock-based awards, warrants to purchase common stock and convertible preferred stock are considered potential dilutive common shares.

Impact of Recently Issued Accounting Standards

In May 2014, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) 2014-09, *Revenue from Contracts with Customers (Topic 606)* (“ASU 2014-09”), which supersedes existing revenue recognition guidance under GAAP. The core principle of this standard is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. In August 2015, the FASB issued ASU 2015-14, *Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date*, which delays the effective date of ASU 2014-09 such that the standard is effective for annual periods beginning after December 15, 2017 and for interim periods within those fiscal years. Early adoption of the standard is permitted for annual periods beginning after December 15, 2016. This standard can be adopted either retrospectively to each prior reporting period presented or as a cumulative effect adjustment as of the date of adoption. In March 2016, the FASB issued ASU No. 2016-08, *Revenue from Contracts with Customers (Topic 606): Principal versus Agent Considerations* (“ASU 2016-08”), which further clarifies the implementation guidance on principal versus agent considerations in ASU 2014-09. In April 2016, the FASB issued ASU No. 2016-10, *Revenue from Contracts with Customers (Topic 606): Identifying Performance Obligations and Licensing*, clarifying the implementation guidance on identifying performance obligations and licensing. In May 2016, the FASB issued ASU No. 2016-12, *Revenue from Contracts with Customers (Topic 606): Narrow-Scope Improvements and Practical Expedients* (“ASU 2016-12”), which clarifies the objective of the collectibility criterion, presentation of taxes collected from customers, non-cash consideration, contract modifications at transition, completed contracts at transition and how guidance in ASU 2014-09 is retrospectively applied. ASU 2016-08, ASU 2016-10 and ASU 2016-12 have the same effective dates and transition requirements as ASU 2014-09. The Company is currently assessing the potential impact that the adoption of ASU 2014-09, ASU 2016-08, ASU 2016-10 and ASU 2016-12 will have on its consolidated financial statements.

In July 2015, the FASB issued ASU 2015-11, *Simplifying the Measurement of Inventory*. Under ASU 2015-11, subsequent measurement of inventory is based on the lower of cost or net realizable value. Net realizable value is estimated selling price in the ordinary course of business, less the estimated cost of completion and disposal. This update does not apply to inventory that is measured using last-in, first-out or the retail inventory method. The new guidance is effective for fiscal years beginning after December 15, 2016. Early application is permitted. The Company is currently assessing the potential impact that the adoption of ASU 2015-11 will have on its consolidated financial statements.

In November 2015, the FASB issued ASU 2015-17, *Balance Sheet Classification of Deferred Taxes* (“ASU 2015-17”). ASU 2015-17 requires deferred tax assets and liabilities be classified as non-current on the balance sheet. The classification change for deferred taxes as non-current eliminates the need to separately identify the current and non-current deferred tax asset or liability in each jurisdiction. The Company elected to prospectively adopt ASU 2015-17 in the year ended December 31, 2015. Prior periods in the consolidated financial statements were not retrospectively adjusted. See Note 7 for the amount of deferred tax assets as of December 31, 2014 that was not classified as non-current assets.

In February 2016, the FASB issued ASU 2016-02, *Leases*, which will require lessees to recognize most leases on their balance sheets as a right-of-use asset with a corresponding lease liability, and lessors to recognize

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a net lease investment. Additional qualitative and quantitative disclosures will also be required. The new guidance is effective for annual reporting periods beginning after December 15, 2018 and for interim periods within those fiscal years. Early application is permitted. The Company is currently assessing the potential impact that the adoption of ASU 2016-02 will have on its consolidated financial statements.

In March 2016, the FASB issued ASU 2016-09, *Improvements to Employee Share-Based Payment Accounting* (“ASU 2016-09”), which simplifies share-based payment accounting through a variety of amendments. The standard is effective for annual periods beginning after December 15, 2016 and for interim periods within those fiscal years. Early adoption is permitted. The Company elected to prospectively adopt the standard as of January 1, 2016. The primary impacts of the adoption were (i) the recognition of excess tax benefits from equity transactions as a reduction of the provision for income taxes rather than as an increase to additional paid-in capital and (ii) excluding from the calculation of diluted net income per share attributable to common stockholders the effect of the excess tax benefit when applying the treasury stock method to determine the dilutive effect of outstanding stock-based awards.

In June 2016, the FASB issued ASU 2016-13, *Measurement of Credit Losses on Financial Instruments*. This guidance requires that financial assets measured at amortized cost be presented at the net amount expected to be collected. The measurement of expected credit losses is based on historical experience, current conditions and reasonable and supportable forecasts that affect the collectibility. This guidance is effective for annual reporting periods beginning after December 15, 2019 and for interim periods within those fiscal years. The Company is currently assessing the potential impact that the adoption of ASU 2016-13 will have on its consolidated financial statements.

In August 2016, the FASB issued ASU 2016-15, *Statement of Cash Flows: Classification of Certain Cash Receipts and Cash Payments* (“ASU 2016-15”), to address diversity in practice in how certain cash receipts and cash payments are presented and classified in the statement of cash flows. The standard is effective for annual periods beginning after December 15, 2017, including interim periods within those fiscal years. The Company is currently assessing the potential impact that the adoption of ASU 2016-15 will have on its consolidated financial statements.

In October 2016, the FASB issued ASU 2016-16, *Income Taxes (Topic 740): Intra-Entity Transfer of Assets Other than Inventory* (“ASU 2016-16”), which requires the recognition of the income tax consequences of an intra-entity transfer of an asset, other than inventory, when the transfer occurs. The standard is effective for annual periods beginning after December 15, 2017, including interim periods within those fiscal years. The Company is currently assessing the potential impact that the adoption of ASU 2016-16 will have on its consolidated financial statements.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
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3. Inventory

Inventory as of December 31, 2014 and 2015 consisted of the following:

| | December 31, | |
|--|---------------------|-----------------|
| | 2014 | 2015 |
| Raw materials | \$ 2,348 | \$ 4,267 |
| Work in process | 479 | 361 |
| Finished goods: | | |
| Manufactured finished goods | 16,549 | 40,052 |
| Deferred inventory costs | 16,568 | 5,680 |
| | <u>35,944</u> | <u>50,360</u> |
| Valuation adjustment for excess and obsolete inventory | (1,490) | (2,859) |
| | <u>\$34,454</u> | <u>\$47,501</u> |

4. Property and Equipment

Property and equipment as of December 31, 2014 and 2015 consisted of the following:

| | December 31, | |
|---|---------------------|------------------|
| | 2014 | 2015 |
| Computers and purchased software | \$ 3,755 | \$ 6,570 |
| Leasehold improvements | 2,357 | 905 |
| Furniture and fixtures | 932 | 1,416 |
| Machinery and equipment | 4,688 | 8,068 |
| Land | — | 3,091 |
| Building | — | 4,765 |
| Building improvements | — | 3,152 |
| Trial systems at customers' sites | 4,643 | 6,028 |
| | <u>16,375</u> | <u>33,995</u> |
| Less: Accumulated depreciation and amortization | (7,384) | (11,667) |
| | <u>\$ 8,991</u> | <u>\$ 22,328</u> |

During years ended December 31, 2014 and 2015, the Company transferred trial systems from inventory into property and equipment with a value of \$1,229 and \$1,545, respectively, net of transfers of trial systems to cost of revenue. In addition, the Company transferred \$1,357 and \$806 of equipment from inventory into property and equipment during the years ended December 31, 2014 and 2015, respectively.

Total depreciation and amortization expense was \$3,604 and \$5,149 for the years ended December 31, 2014 and 2015, respectively.

In March 2015, the Company purchased the land and building of its U.S. corporate offices for \$8,325. As a result of the purchase, the Company recorded closing costs of \$57 and reclassified \$1,887 of leasehold improvements net of accumulated depreciation, \$238 of leasehold improvement receivable and \$1,098 of deferred rent liability to land, building and building improvements.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
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5. Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities as of December 31, 2014 and 2015 consisted of the following:

| | December 31, | |
|--|-----------------|-----------------|
| | 2014 | 2015 |
| Accrued compensation and related taxes | \$13,913 | \$17,346 |
| Accrued warranty | 949 | 993 |
| Accrued rent | 1,013 | 64 |
| Accrued sales and use tax | 1,259 | 51 |
| Dividends and equitable adjustments payable (see Note 9) | 1,096 | 383 |
| Other accrued expenses | 537 | 6,517 |
| | <u>\$18,767</u> | <u>\$25,354</u> |

6. Fair Value Measurements

The Company's cash equivalents include certificates of deposit and money market mutual funds, which are valued using Level 1 or Level 2 inputs in the fair value hierarchy. The Company's warrant liabilities and SARs valued using as Level 3 inputs in the fair value hierarchy based on management's judgment and the assumptions set forth in Notes 11 and 12 as there is no market activity to derive an estimate of their fair value. Changes in the fair value of warrant liabilities and SARs are recorded in other income (expense) and operating expenses, respectively, in the consolidated statements of operations and comprehensive income.

The following tables present information about the fair value of the Company's financial assets and liabilities as of December 31, 2014 and 2015 and indicate the level of the fair value hierarchy utilized to determine such fair values:

| | Fair Value Measurements as of December 31, 2014 Using: | | | |
|---------------------------|--|------------------|---------------|------------------|
| | Level 1 | Level 2 | Level 3 | Total |
| Assets: | | | | |
| Certificates of deposit | \$ — | \$ 13,808 | \$ — | \$ 13,808 |
| Money market mutual funds | 31,019 | — | — | 31,019 |
| | <u>\$ 31,019</u> | <u>\$ 13,808</u> | <u>\$ —</u> | <u>\$ 44,827</u> |
| Liabilities: | | | | |
| SARs | \$ — | \$ — | \$ 271 | \$ 271 |
| | <u>\$ —</u> | <u>\$ —</u> | <u>\$ 271</u> | <u>\$ 271</u> |

| | Fair Value Measurements as of December 31, 2015 Using: | | | |
|---------------------------|--|---------------|---------------|------------------|
| | Level 1 | Level 2 | Level 3 | Total |
| Assets: | | | | |
| Certificates of deposit | \$ — | \$ 342 | \$ — | \$ 342 |
| Money market mutual funds | 45,065 | — | — | 45,065 |
| | <u>\$ 45,065</u> | <u>\$ 342</u> | <u>\$ —</u> | <u>\$ 45,407</u> |
| Liabilities: | | | | |
| SARs | \$ — | \$ — | \$ 737 | \$ 737 |
| | <u>\$ —</u> | <u>\$ —</u> | <u>\$ 737</u> | <u>\$ 737</u> |

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During the years ended December 31, 2014 and 2015, there were no transfers between Level 1, Level 2 and Level 3.

The liability for SARs in the table above consists of the fair value of the SARs granted to the Company's employees. The fair values of the SARs is based on significant inputs not observable in the market, which represents a Level 3 measurement within the fair value hierarchy. The Company's valuation of these SARs utilized the Black-Scholes option-pricing model, which incorporates assumptions and estimates to determine their fair values (see Note 12). The Company assesses these assumptions and estimates on a quarterly basis as additional information impacting the assumptions is obtained. Changes in the fair value of the SARs liability are recognized as stock-based compensation expense in the consolidated statements of operations and comprehensive income.

Until March 31, 2014, the Company had classified warrants for the purchase of shares of its common stock as a liability in its consolidated balance sheets due to the anti-dilution provisions in those warrants. The warrants were initially recorded at fair value on date of issuance and were subsequently remeasured to fair value at each balance sheet date. The Company continued to adjust the liability for changes in fair value until the warrants were exercised on March 31, 2014. The Company's valuation of the warrants utilized the Black-Scholes option-pricing model, which incorporates assumptions and estimates, to value these warrants (see Note 11). The Company assessed these assumptions and estimates on a quarterly basis as additional information impacting the assumptions was obtained. The Company continued to adjust the liability for changes in fair value until the warrants were exercised. Changes in the fair value of the warrant liability were recognized as other income (expense) in the consolidated statements of operations and comprehensive income.

The following table provides a summary of changes in the fair values of the Company's SARs liability and warrant liability, for which fair value is determined by Level 3 inputs:

| | <u>SARs Liability</u> | | <u>Warrant Liability</u> | |
|-------------------------------------|--------------------------------|---------------|--------------------------------|-------------|
| | <u>Year Ended December 31,</u> | | <u>Year Ended December 31,</u> | |
| | <u>2014</u> | <u>2015</u> | <u>2014</u> | <u>2015</u> |
| Fair value at beginning of the year | \$ 62 | \$ 271 | \$ 2,172 | \$ — |
| Change in fair value | 209 | 466 | 1,523 | — |
| Exercises | — | — | (3,695) | — |
| Fair value at end of year | <u>\$ 271</u> | <u>\$ 737</u> | <u>\$ —</u> | <u>\$ —</u> |

The Company's cash and cash equivalents as of December 31, 2014 and 2015 consisted of the following:

| | <u>December 31,</u> | |
|---------------------------------|---------------------|-----------------|
| | <u>2014</u> | <u>2015</u> |
| Cash | <u>\$32,328</u> | <u>\$47,089</u> |
| Cash equivalents: | | |
| Certificates of deposit | 13,808 | 342 |
| Money market mutual funds | 31,019 | 45,065 |
| Total cash equivalents | <u>44,827</u> | <u>45,407</u> |
| Total cash and cash equivalents | <u>\$77,155</u> | <u>\$92,496</u> |

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
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7. Income Taxes

Income before the provision for income taxes for the years ended December 31, 2014 and 2015 consisted of the following:

| | Year Ended December 31, | |
|---------------|--------------------------------|-------------------|
| | 2014 | 2015 |
| United States | \$ 82,237 | \$ 99,972 |
| Foreign | 3,858 | 1,691 |
| | <u>\$ 86,095</u> | <u>\$ 101,663</u> |

The provision for income taxes for the years ended December 31, 2014 and 2015 consisted of the following:

| | Year Ended December 31, | |
|---|--------------------------------|------------------|
| | 2014 | 2015 |
| Current income tax provision: | | |
| Federal | \$ 30,556 | \$ 34,124 |
| State | 3,644 | 924 |
| Foreign | 585 | 331 |
| Total current income tax provision | <u>34,785</u> | <u>35,379</u> |
| Deferred income tax provision (benefit): | | |
| Federal | (6,556) | (2,260) |
| State | (1,081) | 346 |
| Foreign | (761) | 277 |
| Total deferred income tax provision (benefit) | <u>(8,398)</u> | <u>(1,637)</u> |
| Total income tax provision | <u>\$ 26,387</u> | <u>\$ 33,742</u> |

A reconciliation of the U.S. federal statutory rate to the Company's effective income tax rate for the years ended December 31, 2014 and 2015 is as follows:

| | Year Ended December 31, | |
|---|--------------------------------|--------------|
| | 2014 | 2015 |
| Federal statutory income tax rate | 35.0% | 35.0% |
| State taxes, net of federal tax benefit | 1.9 | 0.7 |
| Research and development tax credits | (1.1) | (1.6) |
| Permanent differences | (0.2) | 1.6 |
| Domestic manufacturing deduction | (3.3) | (3.2) |
| Foreign rate differential | (1.2) | 0.6 |
| Uncertain tax positions | (0.4) | — |
| Other, net | (0.1) | 0.1 |
| Effective income tax rate | <u>30.6%</u> | <u>33.2%</u> |

CASA SYSTEMS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
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The income tax effect of each type of temporary difference and carryforward as of December 31, 2014 and 2015 was as follows:

| | December 31, | |
|----------------------------------|---------------------|-----------------|
| | 2014 | 2015 |
| Deferred tax assets: | | |
| Nonqualified stock options | \$ 1,163 | \$ 2,846 |
| Tax credit carryforwards | 756 | 1,057 |
| Inventory valuation | 566 | 1,090 |
| Unrealized foreign exchange gain | 924 | — |
| Accrued liabilities and reserves | 4,504 | 3,859 |
| Deferred revenue | 8,147 | 7,367 |
| Other | 311 | 525 |
| Total deferred tax assets | <u>16,371</u> | <u>16,744</u> |
| Deferred tax liabilities: | | |
| Depreciation and amortization | (1,398) | (1,626) |
| Deferred costs | (1,638) | (589) |
| Nonqualified stock options | (378) | (86) |
| Deferred revenue | (307) | (156) |
| Other | (7) | (7) |
| Total deferred tax liabilities | <u>(3,728)</u> | <u>(2,464)</u> |
| Net deferred tax assets | <u>\$12,643</u> | <u>\$14,280</u> |

In the year ended December 31, 2015, the Company prospectively adopted the guidance of ASU 2015-17, which requires that all deferred tax assets and liabilities be classified as non-current on the balance sheet (see Note 2). Prior periods in the consolidated financial statements were not retrospectively adjusted.

As of December 31, 2014 and 2015, deferred tax assets were reported in the following balance sheet captions:

| | December 31, | |
|----------------------------------|---------------------|-----------------|
| | 2014 | 2015 |
| Deferred tax assets, current | \$11,050 | \$ — |
| Deferred tax assets, non-current | 1,593 | 14,280 |
| Net deferred tax assets | <u>\$12,643</u> | <u>\$14,280</u> |

The Company has concluded that these net tax assets will be recovered based upon its expectation that current and future earnings will provide sufficient taxable income to realize the recorded net tax assets. However, the realization of the Company's net deferred tax assets cannot be assured, and to the extent that future taxable income against which these tax assets may be applied is not sufficient, some or all of the Company's recorded net deferred tax assets would not be realizable. The Company is required to compute income tax expense in each jurisdiction in which it operates. This process requires the Company to project its current tax liability and estimate its deferred tax assets and liabilities, including tax credit carryforwards. In assessing the need for a valuation allowance against its net deferred tax assets, the Company considers its recent operating results, future taxable income projections and feasible tax planning strategies.

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As of December 31, 2015, the Company had state research and development tax credits of \$1,626 that will begin to expire in 2028 through 2030. Management believes that it is more likely than not that the research and development tax benefit will be realized and thus has not provided a valuation allowance relating to these tax credit carryforwards.

The Company's intent is to reinvest the total amount of its unremitted earnings in the local international jurisdiction to support business growth. As such, the Company has not provided for U.S. taxes on the unremitted earnings of its international subsidiaries. It is not practicable to estimate the amount of deferred tax liability related to the unremitted earnings of these foreign subsidiaries.

Interest and penalties related to uncertain tax positions are recorded in the consolidated statements of operations and comprehensive income within other income (expense) and totaled \$24 and \$20 for the years ended December 31, 2014 and 2015, respectively. The liability recorded for potential penalties and interest was \$111 and \$131 as of December 31, 2014 and 2015, respectively. The Company had a total recorded liability of \$429 and \$449 related to uncertain tax positions, inclusive of penalties and interest, as of December 31, 2014 and 2015, respectively, which is included in accrued income taxes in the consolidated balance sheets.

The aggregate changes in the balance of gross unrecognized tax benefits, which excludes interest and penalties, for the years ended December 31, 2014 and 2015 were as follows:

| | |
|--|---------------|
| Balance at January 1, 2014 | \$ 532 |
| Settlement/decreases related to tax positions taken during prior years | (336) |
| Increases related to tax positions taken during prior years | 122 |
| Increases related to tax positions taken during the current year | — |
| Balance at December 31, 2014 | 318 |
| Settlement/decreases related to tax positions taken during prior years | — |
| Increases related to tax positions taken during prior years | — |
| Increases related to tax positions taken during the current year | — |
| Balance at December 31, 2015 | <u>\$ 318</u> |

The Company and its subsidiaries file income tax returns in the U.S. federal jurisdiction as well as various states and foreign jurisdictions. As of December 31, 2015, the tax years 2013 through 2015 remained open to examination in the U.S. federal jurisdiction and the tax years 2012 through 2015 remained open to examination in the Massachusetts state and China federal jurisdictions. If any issues addressed in the Company's tax audits are resolved in a manner not consistent with management's expectations, the Company would be required to adjust its provision for income tax in the period such resolution occurs. Although timing of the resolution and/or closure of audits is highly uncertain, the Company does not believe it is reasonably possible that its unrecognized tax benefits will materially change in the next 12 months.

The Company recorded stock-based compensation expense of \$1,782 and \$6,855 in the years ended December 31, 2014 and 2015, respectively. Accounting for the tax effects of certain stock-based awards requires that the Company establish a deferred tax asset as the compensation expense is recognized for financial reporting purposes prior to recognizing the related income tax deduction upon exercise of the awards.

Upon the settlement of certain stock-based awards, such as exercise, vesting, forfeiture or cancellation, the actual tax deduction is compared with the cumulative stock-based compensation expense and any excess tax

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deduction related to such awards is considered a windfall tax benefit. Windfall tax benefits are tracked within a windfall tax benefit pool to offset any future tax deduction shortfalls. Prior to the Company's adoption of ASU 2016-09 as of January 1, 2016 (see Note 2), windfall tax benefits were recorded as increases to additional paid-in capital in the period in which the tax deduction reduced income taxes. During the year ended December 31, 2014, the Company recorded a net windfall tax benefit of \$508 as an increase to additional paid-in capital.

8. Debt

Revolving Credit Agreement

On April 11, 2014, the Company entered into a revolving credit agreement (the "Revolver") with a bank that, as of December 31, 2015, provided for borrowings of up to \$10,000, subject to certain limitations, that accrued interest, at the Company's election, at either (i) the bank's prime rate or (ii) LIBOR plus two percentage points and that was due to expire on April 11, 2017. Interest on amounts borrowed under the Revolver is due quarterly in arrears, and, as of December 31, 2015, the Company was required to pay a fee of 0.25% per year, payable quarterly in arrears, on the unused amount of the Revolver.

On July 1, 2016, the Company amended the Revolver to increase the amount of the line of credit, extend the maturity date and decrease the fee for the unused amount of the Revolver. The amended Revolver expires on June 30, 2019 and provides for borrowings of up to \$25,000, subject to certain limitations, that accrue interest, at the Company's election, at either (i) the bank's prime rate or (ii) LIBOR plus two percentage points. Interest on amounts borrowed under the Revolver is due quarterly in arrears, and the Company is required to pay a fee of 0.20% per year, payable quarterly in arrears, on the unused amount of the Revolver.

As of December 31, 2014 and 2015, the Company did not have any borrowings under the Revolver but used \$27 and \$1,000, respectively, under the Revolver as collateral for a stand-by letter of credit to guarantee the Company's contractual performance with a customer. For the year ended December 31, 2015, interest expense related to the fee for the unused amount of the Revolver totaled \$25. For the year ended December 31, 2014, no interest expense was recorded related to the fee for the unused amount of the Revolver.

Borrowings under the Revolver are secured by substantially all of the Company's assets, excluding its intellectual property, as defined, and its investments in foreign subsidiaries. Under the Revolver, the Company is subject to various affirmative, negative and financial covenants, including a funded debt to consolidated EBITDA ratio and a basic fixed charge coverage ratio. The Company was in compliance with all covenants of the Revolver as of December 31, 2014 and 2015.

Commercial Mortgage Loan Agreement

On July 1, 2015, the Company entered into a commercial mortgage loan agreement in the amount of \$7,950 (the "Loan"). Borrowings under the Loan bear interest at a rate of 3.5% per annum and are repayable in 60 monthly installments of \$46, consisting of principal and interest based on a 20-year amortization schedule. The remaining amount of unpaid principal under the Loan is due on the maturity date of July 1, 2020. Upon entering into the Loan, the Company incurred debt issuance costs of \$45, which was initially recorded as a direct deduction from the debt liability and are amortized to interest expense using the effective interest rate method from issuance date of the loan until the maturity date.

The Company made principal payments under the Loan of \$115 during the year ended December 31, 2015. Interest expense, including the amortization of debt issuance costs, totaled \$145 for the year ended December 31, 2015.

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The Loan is secured by the land and building purchased in March 2015 and subjects the Company to various affirmative, negative and financial covenants, including maintenance of a minimum debt service ratio. The Company was in compliance with all covenants of the Loan as of December 31, 2015.

As of December 31, 2015, minimum future principal payments of debt are summarized as follows:

| <u>Year Ending December 31,</u> | |
|---------------------------------|----------------|
| 2016 | \$ 282 |
| 2017 | 292 |
| 2018 | 303 |
| 2019 | 314 |
| 2020 | <u>6,644</u> |
| | 7,835 |
| Unamortized debt issuance costs | <u>(40)</u> |
| | <u>\$7,795</u> |

9. Convertible Preferred Stock

The Company has issued Series A, Series B and Series C convertible preferred stock (collectively, the “Convertible Preferred Stock”). All of the issued and outstanding shares of Series A convertible preferred stock (the “Series A Preferred Stock”) were repurchased by the Company in April 2010. The holders of Convertible Preferred Stock have liquidation rights in the event of a deemed liquidation that, in certain situations, is not solely within the control of the Company. Therefore, the Convertible Preferred Stock is classified outside of stockholders’ equity in the consolidated balance sheets. As of December 31, 2015, the Company’s certificate of incorporation, as amended and restated, authorized the Company to issue 6,000 shares of \$0.001 par value preferred stock.

As of each balance sheet date, Convertible Preferred Stock consisted of the following:

| | <u>December 31, 2014</u> | | | | |
|--------------------------------------|------------------------------------|--|-----------------------|-------------------------------|--|
| | <u>Preferred Shares Authorized</u> | <u>Preferred Shares Issued and Outstanding</u> | <u>Carrying Value</u> | <u>Liquidation Preference</u> | <u>Common Stock Issuable Upon Conversion</u> |
| Series A convertible preferred stock | 1,291 | \$ — | \$ — | \$ — | — |
| Series B convertible preferred stock | 352 | 179 | 1,542 | 2,134 | 358 |
| Series C convertible preferred stock | 3,859 | 3,859 | 95,937 | 123,559 | 7,718 |
| | <u>5,502</u> | <u>\$ 4,038</u> | <u>\$97,479</u> | <u>\$ 125,693</u> | <u>8,076</u> |
| | <u>December 31, 2015</u> | | | | |
| | <u>Preferred Shares Authorized</u> | <u>Preferred Shares Issued and Outstanding</u> | <u>Carrying Value</u> | <u>Liquidation Preference</u> | <u>Common Stock Issuable Upon Conversion</u> |
| Series A convertible preferred stock | 1,291 | \$ — | \$ — | \$ — | — |
| Series B convertible preferred stock | 352 | 179 | 1,542 | 2,230 | 358 |
| Series C convertible preferred stock | 3,859 | 3,859 | 95,937 | 129,347 | 7,718 |
| | <u>5,502</u> | <u>\$ 4,038</u> | <u>\$97,479</u> | <u>\$ 131,577</u> | <u>8,076</u> |

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The rights and preferences of the Series A Preferred Stock, Series B convertible preferred stock (the “Series B Preferred Stock”) and Series C convertible preferred stock (the “Series C Preferred Stock”) are described below:

Voting Rights

The holders of Convertible Preferred Stock are entitled to vote, together with the holders of common stock, on all matters submitted to the stockholders for vote. The holders of the Convertible Preferred Stock are entitled to the number of votes equal to the number of shares of common stock into which such shares of Convertible Preferred Stock could convert.

Dividends

Holders of the Convertible Preferred Stock are entitled to receive cumulative dividends, when and if declared by the board of directors. Dividends on Convertible Preferred Stock accrue at a rate of \$0.5376 per share for Series B Preferred Stock and \$1.499694 per share for Series C Preferred Stock from the date of issuance of share of each series of Convertible Preferred Stock. In the case of a dividend on common stock, the holders of Convertible Preferred Stock are entitled to receive payment equal to the pro rata per share amount of the declared dividend on an as-converted to common stock basis. Except with the consent of the holders of the Convertible Preferred Stock voting as a single class on an as-converted to common stock basis, no dividends may be paid on common stock or a lesser class of preferred stock until the dividends accruing to the Convertible Preferred Stock are paid in full. As of December 31, 2015, no dividends had been declared by the board of directors, except for the special cash dividend declared on November 30, 2014 payable to the holders of the Company’s common and preferred stock.

Conversion

Each share of Convertible Preferred Stock may be converted at any time at the option of the holder or will automatically be converted into shares of common stock at the applicable conversion rate then in effect (i) upon the closing of a firm commitment public offering of the Company’s common stock with gross proceeds to the Company of at least \$100,000 and a price per share of at least \$24.9949 or (ii) upon the vote or written consent of the holders of at least a majority of the votes represented by the then-outstanding shares of Convertible Preferred Stock, voting together as a single class and on an as-converted to common stock basis.

The conversion ratio of each series of preferred stock is determined by dividing the Original Issue Price of each series by the Conversion Price of each series. The Original Issue Price per share is \$8.96 for Series B Preferred Stock and \$24.9949 for Series C Preferred Stock. The Conversion Price per share is \$4.48 for Series B Preferred Stock and \$12.49745 for Series C Preferred Stock, subject to appropriate adjustment in the event of any deemed issuance of additional shares, stock dividend, stock split combination or other similar recapitalization and other adjustments as set forth in the Company’s certificate of incorporation, as amended and restated. As of December 31, 2014 and 2015, all outstanding shares of Convertible Preferred Stock were convertible into common stock on a 2-for-1 basis. Shares of preferred stock that are converted into shares of common stock may not be reissued.

Liquidation Preference

In the event of any voluntary or involuntary liquidation, dissolution or winding-up of the Company or Liquidating Event (as described below), the holders of the Convertible Preferred Stock will receive, in preference

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to the common stockholders, an amount equal to the greater of (i) the Original Issue Price per share of the respective share of preferred stock, plus all accrued but unpaid dividends (whether or not declared) or (ii) the amount the holders would receive if the Convertible Preferred Stock were converted into common stock immediately prior to such liquidation event. If, upon any such liquidation event, the assets of the Company available for distribution are insufficient to permit payment in full to the holders of Convertible Preferred Stock, the proceeds will be ratably distributed among the holders of Convertible Preferred Stock in proportion to the respective amounts that they would have received if they were paid in full. After payments of all preferential amounts have been made in full to the holders of Convertible Preferred Stock, then, to the extent available, the remaining assets available for distribution will be distributed among the common stockholders ratably in proportion to the number of shares of common stock held by each common stockholder. As of December 31, 2015, accrued but undeclared dividends totaled \$626 for the Series B Preferred Stock and \$32,886 for Series C Preferred Stock.

A Liquidating Event shall include a merger or consolidation (other than one in which stockholders of the Company own a majority by voting power of the outstanding shares of the surviving or acquiring corporation) or a sale, exchange, transfer or other disposition of all or substantially all of the assets of the Company.

Redemption

The Company's certificate of incorporation, as amended and restated, does not provide redemption rights to the holders of Convertible Preferred Stock.

Special Dividend to Holders of Common and Preferred Stock

On November 30, 2014, the board of directors declared and the stockholders approved a special dividend to the holders of common stock and preferred stock of record on that date. In accordance with the laws of the State of Delaware, a dividend may be declared, provided there is an excess of total assets over total liabilities to support the amounts declared. The cash dividend declared to stockholders was \$1.9173 per share of common stock, \$3.8346 per share of the Series B Preferred Stock and \$3.8346 per share of the Series C Preferred Stock. The Company paid \$27,251 and \$345 in dividends to the stockholders during the years ended December 31, 2014 and 2015, respectively, and, as of December 31, 2014, \$345 of dividends were payable and included in accrued expenses and other current liabilities in the accompanying consolidated balance sheet. No dividends were payable as of December 31, 2015.

In connection with the special dividend, the board of directors also approved cash payments to be made to holders of the Company's stock options and SARs as an equitable adjustment to the holders of such instruments in accordance with the provisions of the Company's 2011 Stock Incentive Plan (the "2011 Plan"). The cash payment due to the holders of the stock options and SARs is equal to \$1.9173 per share multiplied by the weighted number of vested shares as calculated using the treasury stock method. The cash payments to the holders of stock options and SARs will be made as the equity awards vest through fiscal year 2018. The Company paid \$1,618 and \$367 to the holders of stock options and SARs during the years ended December 31, 2014 and 2015, respectively. As of December 31, 2014 and 2015, payments to be made through fiscal 2018, net of estimated forfeitures, totaled \$751 and \$383, respectively, and were included in accrued expenses and other current liabilities in the accompanying consolidated balance sheets.

The cash dividends declared to the holders of common stock, Series B Preferred Stock and Series C Preferred Stock totaled \$12,111, \$686 and \$14,799, respectively, and the equitable adjustment to the holders of

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stock options and SARs, net of estimated forfeitures, totaled \$2,369. During the year ended December 31, 2014, the \$29,965 aggregate amount of such dividends was recorded as a charge to retained earnings (until reduced to zero) and a charge to additional paid-in capital.

10. Common Stock

As of December 31, 2014 and 2015, the Company's certificate of incorporation, as amended and restated, authorized the Company to issue 20,000 shares of \$0.001 par value common stock. The voting, dividend and liquidation rights of the holders of the Company's common stock are subject to and qualified by the rights, powers and preferences of the holders of the Convertible Preferred Stock set forth above.

Each share of common stock entitles the holder to one vote on all matters submitted to a vote of the Company's stockholders. Common stockholders are entitled to receive dividends, as may be declared by the board of directors, if any, subject to the preferential dividend rights of the preferred stock. Through December 31, 2015, except for the special cash dividend declared on November 30, 2014 (see Note 9), no dividends have been declared by the board of directors.

As of December 31, 2015, the Company had reserved 12,207 shares of common stock for the conversion of outstanding shares of Convertible Preferred Stock (see Note 9), the exercise of outstanding stock options, the vesting of outstanding restricted stock units, and the number of shares remaining available for grant under the Company's 2011 Stock Incentive Plan (see Note 12).

11. Common Stock Warrants

In June 2009, in connection with the issuance of Series B Preferred Stock, the Company entered into an agreement with an investor, Liberty Global Ventures Holding B.V. (the "Series B Investor"), to issue warrants for the purchase up to 793 shares of the Company's common stock, at an exercise price of \$4.48 per share, subject to the achievement of specified targets for the amount of purchases made by a subsidiary of the Series B Investor, Liberty Global Services B.V. (the "Series B Subsidiary"), from the Company. Pursuant to the agreement, the Series B Investor was entitled to receive warrants for the purchase 53 shares of the Company's common stock for every \$5,000 of net revenues, as defined in the warrant agreement, received by the Company from the Series B Subsidiary for the period from January 1, 2009 through December 31, 2011. Under the agreement, the Series B Investor received warrants for the purchase of 529 shares of the Company's common stock. The warrants were due to expire in June 2014. Due to specified anti-dilution provisions included in the terms of those warrants, the warrant was classified as a liability for accounting purposes. The warrant liability was remeasured to its fair value at the end of each reporting period until it was exercised, and the related change in fair value was recorded as an increase or decrease in other income (expense) in the consolidated statements of operations and comprehensive income. The Company recorded other expense of \$1,523 during the year ended December 31, 2014 related to the change in fair value of these warrants.

All of the warrants for the purchase of 529 shares of common stock were exercised on March 31, 2014, and the Company received proceeds of \$2,369. Upon exercise of the warrants, the Company recorded an increase to common stock and additional paid-in capital equal to the \$3,695 remeasured fair value of the warrant liability immediately prior to exercise of the warrants and recorded an increase to additional paid-in capital of \$2,369 for the cash proceeds received.

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The Company calculated the fair value of the warrants outstanding as of the exercise date of March 31, 2014 using the Black-Scholes option-pricing model and the following assumptions:

| | |
|-----------------------------|-------|
| Contractual term (in years) | 0.2 |
| Risk-free interest rate | 0.1% |
| Expected volatility | 55.7% |
| Expected dividend yield | 0.0% |

12. Stock-based Compensation***2003 Stock Incentive Plan***

The Company's 2003 Stock Incentive Plan, as amended (the "2003 Plan"), provided for the grant of qualified incentive stock options, nonqualified stock options, restricted stock or other stock-based awards to the Company's employees, officers, directors, advisers and outside consultants. The number of shares authorized for grant under the 2003 Plan, as amended, was 6,500 shares. The 2003 Plan was administered by the board of directors, or at the discretion of the board of directors, by a committee of the board or by one or more executive officers of the Company. The exercise prices, vesting and other restrictions were determined at the discretion of the board of directors, or their committee or by one or more executive officers of the Company, if so delegated.

The 2003 Plan was terminated in August 2011, and the remaining 428 shares available for issuance under the plan at that time were transferred to the 2011 Plan. The shares of common stock underlying any awards that are forfeited, canceled, repurchased or are otherwise terminated by the Company under the 2003 Plan will be added back to the shares of common stock available for issuance under the 2011 Plan.

2011 Stock Incentive Plan

The 2011 Plan provides for the Company to sell or issue common stock or restricted common stock, or to grant qualified incentive stock options, nonqualified stock options, SARs, restricted stock units or other stock-based awards to the Company's employees, officers, directors, advisers and outside consultants. The 2011 Plan is administered by the board of directors, or at the discretion of the board of directors, by a committee of the board. The exercise prices, vesting and other restrictions are determined at the discretion of the board of directors, or their committee if so delegated, except that the exercise price per share of stock options may not be less than 100% of the fair market value of common stock on the date of grant and the term of the stock option may not be greater than ten years. The stock options generally vest over a four-year period and expire ten years from the date of grant. Certain options provide for accelerated vesting if there is a change in control (as defined in the stock option agreements). Any award that expires or is terminated, surrendered or canceled without having been fully exercised or is forfeited in whole or in part shall again be available for grant.

The total number of shares authorized for issuance under the 2011 Plan was 3,485 shares as of December 31, 2014, of which 928 shares remained available for future grant. In June 2015, the Company effected an increase in the number of shares of common stock authorized for future issuance under the 2011 Plan by 1,000 shares. The total number of shares authorized for issuance under the 2011 Plan was 4,605 shares as of December 31, 2015, of which 1,030 shares remained available for future grant.

Stock Option Valuation

The fair value of each option award is estimated on the date of grant using the Black-Scholes option-pricing model that uses the assumptions noted in the table below. Expected volatility for the Company's common stock

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was determined based on an average of the historical volatility of a peer group of similar public companies. The expected term of options granted was calculated using the simplified method, which represents the average of the contractual term of the option and the weighted-average vesting period of the option. The Company uses the simplified method because it does not have sufficient historical option exercise data to provide a reasonable basis upon which to estimate the expected term. The expected dividend yield is based on the fact that the Company does not have a history paying cash dividends, except for the special dividend declared in November 2014 (see Note 9), and in that circumstance, the board of directors approved cash dividends to be paid to holders of the Company's stock options and SARs upon vesting as an equitable adjustment to the holders of such instruments. The risk-free rate for periods within the expected life of the option is based upon the U.S. Treasury yield curve in effect at the time of grant.

In determining the exercise prices for options granted, the Company's board of directors has considered the fair value of the common stock as of the measurement date. The fair value of the common stock has been determined by the board of directors at each award grant date based upon a variety of factors, including the results obtained from an independent third-party valuation of the Company's common stock, the Company's financial position and historical financial performance, the status of technological developments within the Company's products, the composition and ability of the current management team, an evaluation or benchmark of the Company's competition, the current business climate in the marketplace, the illiquid nature of the common stock, the effect of the rights and preferences of the holders of the Company's convertible preferred stock, and the prospects of a liquidity event, among others.

The assumptions used in the Black-Scholes option-pricing model were as follows, presented on a weighted-average basis:

| | Year Ended December 31, | |
|--------------------------|-------------------------|-------------|
| | 2014 | 2015 |
| Risk-free interest rate | 1.9%–2.1% | 1.4%–2.0% |
| Expected term (in years) | 5.8–6.2 | 5.6–6.2 |
| Expected volatility | 52.1%–56.5% | 41.3%–52.5% |
| Expected dividend yield | 0.0% | 0.0% |

Stock Options

A summary of option activity under the 2003 Plan and the 2011 Plan for the year ended December 31, 2015 is as follows:

| | Number of Shares | Weighted- Average Exercise Price | Weighted- Average Remaining Contractual Term (in years) | Aggregate Intrinsic Value |
|---|---------------------|--|--|---------------------------------|
| Outstanding at January 1, 2015 | 2,230 | \$ 8.88 | 7.58 | \$ 26,855 |
| Granted | 720 | 29.39 | | |
| Exercised | (27) | 8.46 | | |
| Forfeited | (213) | 8.55 | | |
| Cancellations | (29) | 8.38 | | |
| Outstanding at December 31, 2015 | 2,681 | \$ 14.42 | 7.41 | \$ 73,852 |
| Options exercisable at December 31, 2015 | 1,663 | \$ 8.80 | 6.47 | \$ 55,153 |
| Vested or expected to vest at December 31, 2015 | 2,608 | \$ 14.09 | 7.36 | \$ 72,713 |

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The weighted-average grant-date fair value of options granted during the years ended December 31, 2014 and 2015 was \$7.56 and \$13.77 per share, respectively. Cash proceeds received upon the exercise of options were \$4,297 and \$226 during the years ended December 31, 2014 and 2015, respectively. The intrinsic value of stock options exercised during the years ended December 31, 2014 and 2015 was \$2,021 and \$720, respectively. The aggregate intrinsic value of is calculated as the difference between the exercise price of the stock options and the fair value of the Company's common stock for those stock options that had exercise prices lower than the fair value of the Company's common stock.

Restricted Stock Units

On January 23, 2015, the Company granted 421 restricted stock units under the 2011 Plan. The restricted stock units vest ratably over a three- to four-year period from the date of grant and expire ten years from the date of grant. The grant-date fair value of each restricted stock unit award is being recorded as stock-based compensation expense on a straight-line basis, net of estimated forfeitures, over the requisite service period for the restricted stock units, which is generally three to four years. The fair value of each restricted stock unit on date of grant is the estimated fair value of the underlying common stock on the date of the grant. A summary of restricted stock units activity under the 2011 Plan as of and for the year ended December 31, 2015 is as follows:

| | Number of Shares | Weighted-Average Grant Date Fair Value |
|---------------------------------------|---------------------|--|
| Unvested balance at January 1, 2015 | — | \$ — |
| Granted | 421 | 20.92 |
| Unvested balance at December 31, 2015 | 421 | \$ 20.92 |

Stock Appreciation Rights

In 2012, the Company granted 28 SARs that allow the holder the right, upon exercise, to receive in cash the amount of the difference between the fair value of the Company's common stock at the date of exercise and the price of the underlying common stock at the date of grant of each SAR. The price of the underlying common stock on the date of grant was \$8.46 per share and the grant-date fair value was \$4.39 per SAR. The SARs vest over a four-year period from the date of grant and expire ten years from the date of grant. As of December 31, 2015, there were 22 SARs exercisable and the fair value of each SAR was \$33.51. As of December 31, 2015, 22 SARs were outstanding and fully vested. The fair value of the SAR liability as of December 31, 2014 and 2015 was \$271 and \$737, respectively, and was included in accrued expenses and other current liabilities in the accompanying consolidated balance sheets.

Stock-Based Compensation Expense

The Company recorded stock-based compensation expense of \$1,991 and \$7,321 during the years ended December 31, 2014 and 2015, respectively, which is based on the number of stock options, restricted stock units and SARs ultimately expected to vest. As of December 31, 2015, there was \$14,282 of unrecognized compensation cost related to outstanding stock options, restricted stock units and SARs, which is expected to be recognized over a weighted-average period of 1.44 years.

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(Amounts in thousands, except per share amounts)

Stock-based compensation expense related to stock options, restricted stock units and SARs for the years ended December 31, 2014 and 2015 was classified in the consolidated statements of operations and comprehensive income as follows as follows:

| | Year Ended December 31, | |
|-------------------------------------|-------------------------|-----------------|
| | 2014 | 2015 |
| Cost of revenue | \$ 161 | \$ 143 |
| Research and development expenses | 852 | 1,843 |
| Sales and marketing expenses | 598 | 775 |
| General and administrative expenses | 380 | 4,560 |
| | <u>\$ 1,991</u> | <u>\$ 7,321</u> |

13. Net Income per Share and Unaudited Pro Forma Net Income per Share*Net Income per Share*

Basic and diluted net income per share attributable to common stockholders was calculated as follows:

| | Year Ended December 31, | |
|---|----------------------------|------------------|
| | 2014 | 2015 |
| Numerator: | | |
| Net income | \$ 59,708 | \$ 67,921 |
| Cumulative dividends on convertible preferred stock | (5,884) | (5,884) |
| Dividends declared on convertible preferred stock | (15,485) | — |
| Undistributed earnings allocated to participating securities | (15,052) | (34,735) |
| Net income attributable to common stockholders, basic | 23,287 | 27,302 |
| Undistributed earnings reallocated to dilutive potential common shares | 556 | 3,100 |
| Net income attributable to common stockholders, diluted | <u>\$ 23,843</u> | <u>\$ 30,402</u> |
| Denominator: | | |
| Weighted-average shares used to compute net income per share attributable to common stockholders, basic | 5,997 | 6,348 |
| Dilutive effect of stock options | 540 | 1,266 |
| Dilutive effect of restricted stock units | — | 147 |
| Weighted-average shares used to compute net income per share attributable to common stockholders, diluted | <u>6,537</u> | <u>7,761</u> |
| Net income per share attributable to common stockholders: | | |
| Basic | <u>\$ 3.88</u> | <u>\$ 4.30</u> |
| Diluted | <u>\$ 3.65</u> | <u>\$ 3.92</u> |

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The following outstanding shares of common stock equivalents were excluded from the computation of diluted net income per share attributable to common stockholders for the periods presented because including them would have been anti-dilutive (presented on a weighted-average basis):

| | Year Ended December 31, | |
|--|----------------------------|-------|
| | 2014 | 2015 |
| Convertible preferred stock (on an as-converted basis) | 8,076 | 8,076 |
| Options to purchase common stock | 474 | 330 |
| Warrants to purchase common stock | 62 | — |

Unaudited Pro Forma Net Income per Share

The unaudited pro forma basic and diluted net income per share attributable to common stockholders for the year ended December 31, 2015 have been prepared to give effect, upon the closing of a qualified initial public offering, to (i) the automatic conversion of all outstanding shares of convertible preferred stock into shares of common stock as if the proposed initial public offering had occurred on January 1, 2015 and (ii) the number of shares offered in the initial public offering whose proceeds are deemed necessary, based on an assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, to pay (a) the special cash dividend of \$43,148 declared by the Company's board of directors on June 17, 2016 and (b) the special cash dividend of \$ declared by the Company's board of directors on because the Company's earnings for the twelve months ended September 30, 2016 were not sufficient to fully fund those dividends.

The unaudited pro forma earnings per share data have been presented in accordance with Securities and Exchange Commission SAB Topic 1B.3. In accordance with SAB Topic 1B.3, dividends declared at or in the year preceding an initial public offering are deemed to be in contemplation of the offering with the intention of repayment out of the offering proceeds to the extent that the amount of dividends exceeded the amount of earnings during the twelve-month period ended on the balance sheet date. For the twelve months ended September 30, 2016, the Company's net income was \$75,140 (unaudited).

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Unaudited pro forma basic and diluted net income per share attributable to common stockholders was calculated as follows:

| | <u>Year Ended</u> <u>December 31, 2015</u> <u>(unaudited)</u> |
|--|---|
| Numerator: | |
| Net income | \$ 67,921 |
| Denominator: | |
| Weighted-average shares used to compute net income per share attributable to common stockholders, basic | 6,348 |
| Pro forma adjustment to reflect assumed conversion of convertible preferred stock upon closing of initial public offering | 8,076 |
| Pro forma adjustments to reflect the number of shares whose proceeds are deemed necessary to pay dividends in excess of earnings | _____ |
| Pro forma weighted-average shares used in computing pro forma net income per share attributable to common stockholders, basic | _____ |
| Dilutive effect of stock options | 1,266 |
| Dilutive effect of restricted stock units | 147 |
| Pro forma weighted-average shares used in computing pro forma net income per share attributable to common stockholders, diluted | _____ |
| Pro forma net income per share attributable to common stockholders: | |
| Basic | \$ _____ |
| Diluted | \$ _____ |

14. Segment Information

The Company operates as one operating segment. Operating segments are defined as components of an enterprise for which separate financial information is regularly evaluated by the Company's chief operating decision maker, or decision-making group, in deciding how to allocate resources and assess performance. The Company has determined that its chief operating decision maker is its President and Chief Executive Officer. The Company's chief operating decision maker reviews the Company's financial information on a consolidated basis for purposes of allocating resources and assessing financial performance. Since the Company operates as one operating segment, all required financial segment information can be found in these consolidated financial statements.

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The following table summarizes the Company's revenue based on the customer's location, as determined by the customer's shipping address:

| | Year Ended December 31, | |
|--------------------------------------|----------------------------|-------------------|
| | 2014 | 2015 |
| North America: | | |
| United States | \$ 106,639 | \$ 54,365 |
| Other | 737 | 153 |
| Total North America | <u>107,376</u> | <u>54,518</u> |
| Latin America: | | |
| Mexico | 4,092 | 66,991 |
| Other | 25,823 | 20,391 |
| Total Latin America | <u>29,915</u> | <u>87,382</u> |
| Europe, Middle East and Africa: | | |
| Belgium | — | 30,794 |
| Other | 32,407 | 44,973 |
| Total Europe, Middle East and Africa | <u>32,407</u> | <u>75,767</u> |
| Asia-Pacific: | | |
| Japan | 27,003 | 25,433 |
| Other | 14,577 | 29,350 |
| Total Asia-Pacific | <u>41,580</u> | <u>54,783</u> |
| Total revenue ⁽¹⁾ | <u>\$ 211,278</u> | <u>\$ 272,450</u> |

(1) Other than the United States, Mexico, Belgium and Japan, no individual countries represented 10% or more of the Company's total revenue for each of the periods presented.

The Company's property and equipment, net by location was as follows:

| | December 31, | |
|-----------------------------------|----------------|-----------------|
| | 2014 | 2015 |
| United States | \$6,646 | \$18,465 |
| China | 1,240 | 2,460 |
| Other | 1,105 | 1,403 |
| Total property and equipment, net | <u>\$8,991</u> | <u>\$22,328</u> |

15. Related Parties

Transactions Involving Liberty Global Ventures Holding B.V. and its Affiliates

Liberty Global Ventures Holding B.V. is a principal stockholder of the Company through its ownership of Series B Preferred Stock. Liberty Global Ventures Holding B.V. is an affiliate of Liberty Global Services B.V. and its affiliates, which are customers of the Company. During the years ended December 31, 2014 and 2015, the Company recognized revenue of \$14,807 and \$46,069, respectively, from transactions with these customers and

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(Amounts in thousands, except per share amounts)

amounts received in cash from these customers totaled \$13,774 and \$37,012, respectively. As of December 31, 2014 and 2015, amounts due from Liberty Global Services B.V. and its affiliates totaled \$28,046 and \$12,367, respectively.

In addition, on March 31, 2014, Liberty Global Ventures Holding B.V. exercised outstanding warrants to purchase 529 shares of the Company's common stock (see Note 11), and the Company received proceeds of \$2,369.

Consulting Agreement with Bill Styslinger

In March 2012, the Company entered into a consulting agreement with Bill Styslinger, a member of its board of directors, for the provision of sales management, corporate strategy and advisory services. The Company extended the term of the consulting agreement, which was initially scheduled to expire on January 31, 2014, on two occasions, and it will expire on December 31, 2016. During the years ended December 31, 2014 and 2015, the Company recognized sales and marketing expenses of \$503 and \$441, respectively, and paid Mr. Styslinger \$454 and \$542, respectively, for his services under this consulting agreement. As of December 31, 2014 and 2015, amounts due to Mr. Styslinger for his consulting services totaled \$238 and \$137, respectively.

In connection with Mr. Styslinger's services as a consultant, in May 2012, the Company granted Mr. Styslinger stock options for the purchase of 120,000 shares of common stock, at an exercise price of \$8.46 per share, which vested as to one-third of the shares under the award on February 1, 2013 and in equal monthly installments thereafter for the following two years. The grant-date fair value of the award totaled \$527, which was recorded by the Company as stock-based compensation expense over the vesting period of the award. During the years ended December 31, 2014 and 2015, the Company recognized sales and marketing expenses of \$175 and \$15, respectively, related to these stock options.

Employment of Rongke Xie

Rongke Xie, who serves as Deputy General Manager of Guangzhou Casa Communication Technology LTD, one of the Company's subsidiaries, is the sister of Lucy Xie, the Company's Senior Vice President of Operations and a member of its board of directors. During the years ended December 31, 2014 and 2015, the Company paid Rongke Xie \$154 and \$140, respectively, for her services as an employee of the Company.

16. Commitments and Contingencies

Operating Leases

The Company leases manufacturing and office space in the United States and China under non-cancelable operating leases, which expire in 2021 and 2018, respectively. Rent expense for the years ended December 31, 2014 and 2015 was \$1,337 and \$773, respectively. Rent expense is recorded on a straight-line basis, and, as a result, as of December 31, 2014 and 2015, the Company had a deferred rent liability of \$1,013 and \$64, respectively, which is included in accrued expenses and other current liabilities in the accompanying consolidated balance sheets.

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Future minimum lease payments under non-cancelable operating leases as of December 31, 2015 were as follows:

| <u>Year Ending December 31,</u> | |
|---------------------------------|----------------|
| 2016 | \$ 291 |
| 2017 | 301 |
| 2018 | 311 |
| 2019 | 102 |
| 2020 | 102 |
| Thereafter | 17 |
| | <u>\$1,124</u> |

In March 2015, the Company purchased the land and building of its U.S. corporate offices, which it had previously leased (see Note 4). As a result of the purchase, the deferred rent liability of \$1,098 at that time was reclassified to land, building and building improvements.

In January 2016, the Company entered into a lease for 9,000 square feet of manufacturing space in China through 2019. In September 2016, the Company entered into a lease for 29,880 square feet of manufacturing, warehouse and office space in Ireland through 2026, with a right to terminate in 2021. The associated minimum lease payments of these two new leases are not included in the table above presented as of December 31, 2015. In aggregate, the two new leases entered into in 2016 require future minimum lease payments of \$40, \$289, \$458, \$413 and \$407 during the years ending December 31, 2016, 2017, 2018, 2019 and 2020, respectively, and \$305 thereafter.

Indemnification

The Company has, in the ordinary course of business, agreed to defend and indemnify certain customers against third-party claims asserting infringement of certain intellectual property rights, which may include patents, copyrights, trademarks or trade secrets.

As permitted under Delaware law, the Company indemnifies its officers, directors and employees for certain events or occurrences that happen by reason of their relationship with or position held at the Company.

As of December 31, 2014 and 2015, the Company had not experienced any losses related to these indemnification obligations and no material claims were outstanding. The Company does not expect significant claims related to these indemnification obligations and, consequently, concluded that the fair value of these obligations is negligible, and no related liabilities were recorded in its consolidated financial statements.

Litigation

From time to time, and in the ordinary course of business, the Company may be subject to various claims, charges and litigation. As of December 31, 2015, the Company did not have any pending claims, charges or litigation that it expects would have a material adverse effect on its consolidated financial position, results of operations or cash flows.

17. Employee Benefit Plan

The Company has a Section 401(k) defined contribution savings plan for its employees. The plan covers substantially all employees in the United States who meet minimum age and service requirements and allows

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participants to defer a portion of their annual compensation on a pre-tax basis, subject to certain limitations. Company contributions to the plan may be made at the discretion of the board of directors. Effective January 1, 2014, the Company commenced matching contributions in the amount of 50% of the employee's contributions of up to 6% of eligible wages. The Company made matching contributions to the plan of \$628 and \$977 in the years ended December 31, 2014 and 2015, respectively.

18. Subsequent Events

For its consolidated financial statements as of December 31, 2015 and for the year then ended, the Company evaluated subsequent events through December 13, 2016, the date on which those financial statements were issued.

Special Dividend to Holders of Common and Preferred Stock

On June 17, 2016, the board of directors declared and the shareholders approved a special dividend to the holders of common stock and preferred stock of record on that date. The cash dividend declared to stockholders was \$2.9455 per share of common stock, \$5.8910 per share of Series B Preferred Stock and \$5.8910 per share of Series C Preferred Stock. In connection with this special dividend, the board of directors also approved cash payments to be made to holders of the Company's stock options, SARs and restricted stock units as an equitable adjustment to the holders of such instruments in accordance with the provisions of the Company's 2011 Plan. The equitable adjustments to the holders of stock options, SARs and restricted stock units is equal to \$2.9455 per share multiplied by the weighted number of shares granted as calculated using the treasury stock method. The cash payments to such holders will be made as their equity awards vest through fiscal year 2020.

The cash dividends declared to the holders of common stock and preferred stock aggregated \$43,148 and the equitable adjustment to the holders of stock options, SARs and restricted stock units, net of estimated forfeitures, aggregated \$6,733.

CASA SYSTEMS, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
(Amounts in thousands, except per share amounts)
(Unaudited)

| | December 31, 2015 | September 30, 2016 | Pro Forma September 30, 2016 |
|---|----------------------|-----------------------|------------------------------------|
| Assets | | | |
| Current assets: | | | |
| Cash and cash equivalents | \$ 92,496 | \$ 161,706 | \$ |
| Accounts receivable, net of provision for doubtful accounts of \$768 and \$735 as of December 31, 2015 and September 30, 2016, respectively | 90,945 | 64,907 | 64,907 |
| Inventory | 47,501 | 44,259 | 44,259 |
| Prepaid expenses and other current assets | 4,173 | 5,881 | 5,881 |
| Prepaid income taxes | 945 | 1,129 | 1,129 |
| Total current assets | 236,060 | 277,882 | |
| Property and equipment, net | 22,328 | 24,789 | 24,789 |
| Accounts receivable, net of current portion | 9,839 | 10,023 | 10,023 |
| Deferred tax assets | 14,280 | 18,269 | 18,269 |
| Other assets | 590 | 705 | 705 |
| Total assets | <u>\$ 283,097</u> | <u>\$ 331,668</u> | <u>\$</u> |
| Liabilities, Convertible Preferred Stock and Stockholders' Equity | | | |
| Current liabilities: | | | |
| Accounts payable | \$ 7,218 | \$ 22,178 | \$ 22,178 |
| Accrued expenses and other current liabilities | 25,354 | 37,985 | |
| Accrued income taxes | 4,882 | — | — |
| Deferred revenue | 35,353 | 58,763 | 58,763 |
| Current portion of long-term debt | 272 | 281 | 281 |
| Total current liabilities | 73,079 | 119,207 | |
| Accrued income taxes, net of current portion | 449 | 463 | 463 |
| Deferred revenue, net of current portion | 22,109 | 20,834 | 20,834 |
| Long-term debt, net of current portion | 7,523 | 7,312 | |
| Total liabilities | <u>103,160</u> | <u>147,816</u> | |
| Commitments and contingencies (Note 15) | | | |
| Convertible preferred stock (Series A, B and C), \$0.001 par value; 5,502 shares authorized as of December 31, 2015 and September 30, 2016; 4,038 shares issued and outstanding as of December 31, 2015 and September 30, 2016; aggregate liquidation preference of \$131,577 and \$135,978 as of December 31, 2015 and September 30, 2016, respectively; no shares issued or outstanding, pro forma as of September 30, 2016 | 97,479 | 97,479 | — |
| Stockholders' equity: | | | |
| Common stock, \$0.001 par value; 20,000 shares authorized as of December 31, 2015 and September 30, 2016; 6,362 and 6,587 shares issued and outstanding as of December 31, 2015 and September 30, 2016, respectively; 14,663 shares issued and outstanding, pro forma as of September 30, 2016 | 6 | 6 | |
| Additional paid-in capital | 14,745 | 20,298 | |
| Accumulated other comprehensive loss | (214) | (788) | |
| Retained earnings | 67,921 | 66,857 | |
| Total stockholders' equity | <u>82,458</u> | <u>86,373</u> | |
| Total liabilities, convertible preferred stock and stockholders' equity | <u>\$ 283,097</u> | <u>\$ 331,668</u> | <u>\$</u> |

The accompanying notes are an integral part of these condensed consolidated financial statements.

CASA SYSTEMS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME
(Amounts in thousands, except per share amounts)
(Unaudited)

| | Nine Months Ended September 30, | |
|---|------------------------------------|------------------|
| | 2015 | 2016 |
| Revenue: | | |
| Product | \$ 166,167 | \$ 191,763 |
| Service | 16,376 | 25,139 |
| Total revenue | <u>182,543</u> | <u>216,902</u> |
| Cost of revenue: | | |
| Product | 48,484 | 68,793 |
| Service | 3,652 | 5,983 |
| Total cost of revenue | <u>52,136</u> | <u>74,776</u> |
| Gross profit | <u>130,407</u> | <u>142,126</u> |
| Operating expenses: | | |
| Research and development | 27,408 | 37,213 |
| Sales and marketing | 23,876 | 27,289 |
| General and administrative | 12,558 | 13,532 |
| Total operating expenses | <u>63,842</u> | <u>78,034</u> |
| Income from operations | <u>66,565</u> | <u>64,092</u> |
| Other income (expense): | | |
| Interest income | 762 | 811 |
| Interest expense | (123) | (256) |
| Gain (loss) on foreign currency | (2,642) | (45) |
| Other income | 442 | 443 |
| Total other income (expense), net | <u>(1,561)</u> | <u>953</u> |
| Income before provision for income taxes | 65,004 | 65,045 |
| Provision for income taxes | <u>23,405</u> | <u>16,228</u> |
| Net income | 41,599 | 48,817 |
| Other comprehensive expense—foreign currency translation adjustment | <u>(767)</u> | <u>(574)</u> |
| Comprehensive income | <u>\$ 40,832</u> | <u>\$ 48,243</u> |

CASA SYSTEMS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS AND
COMPREHENSIVE INCOME (Continued)
(Amounts in thousands, except per share amounts)
(Unaudited)

| | Nine Months Ended September 30, | |
|---|------------------------------------|----------|
| | 2015 | 2016 |
| Cash dividends declared per common share or common share equivalent | \$ — | \$2,9455 |
| Net income attributable to common stockholders: | | |
| Basic | \$16,365 | \$19,928 |
| Diluted | \$18,144 | \$20,006 |
| Net income per share attributable to common stockholders: | | |
| Basic | \$ 2.58 | \$ 3.04 |
| Diluted | \$ 2.36 | \$ 2.37 |
| Weighted-average shares used to compute net income per share attributable to common stockholders: | | |
| Basic | 6,344 | 6,564 |
| Diluted | 7,690 | 8,427 |
| Pro forma net income per share attributable to common stockholders (unaudited): | | |
| Basic | | \$ |
| Diluted | | \$ |
| Weighted-average shares used to compute pro forma net income per share attributable to common stockholders (unaudited): | | |
| Basic | | |
| Diluted | | |

The accompanying notes are an integral part of these condensed consolidated financial statements.

CASA SYSTEMS, INC.

CONDENSED CONSOLIDATED STATEMENTS OF CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' EQUITY
(Amounts in thousands, except per share amounts)
(Unaudited)

| | Series A, B and C Convertible Preferred Stock | | Common Stock | | Additional Paid-in Capital | Accumulated Other Comprehensive Income (Loss) | Retained Earnings | Total Stockholders' Equity |
|---|---|-----------------|--------------|-------------|----------------------------|---|-------------------|----------------------------|
| | Shares | Amount | Shares | Amount | | | | |
| Balances at January 1, 2016 | 4,038 | \$97,479 | 6,362 | \$ 6 | \$ 14,745 | \$ (214) | \$ 67,921 | \$ 82,458 |
| Common stock issued, net of shares withheld for employee taxes | — | — | 226 | — | (146) | — | — | (146) |
| Foreign currency translation adjustment, net of tax of \$0 | — | — | — | — | — | (574) | — | (574) |
| Cash dividends declared (\$2.9455 per share of common stock, \$5.8910 per share of convertible preferred stock and \$2.9455 per share to holders of stock-based awards) | — | — | — | — | — | — | (49,881) | (49,881) |
| Stock-based compensation | — | — | — | — | 5,699 | — | — | 5,699 |
| Net income | — | — | — | — | — | — | 48,817 | 48,817 |
| Balances at September 30, 2016 | <u>4,038</u> | <u>\$97,479</u> | <u>6,588</u> | <u>\$ 6</u> | <u>\$ 20,298</u> | <u>\$ (788)</u> | <u>\$ 66,857</u> | <u>\$ 86,373</u> |

The accompanying notes are an integral part of these condensed consolidated financial statements.

CASA SYSTEMS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Amounts in thousands, except per share amounts)
(Unaudited)

| | Nine Months Ended September 30, | |
|---|------------------------------------|-------------------|
| | 2015 | 2016 |
| Cash flows from operating activities: | | |
| Net income | \$ 41,599 | \$ 48,817 |
| Adjustments to reconcile net income to net cash provided by operating activities: | | |
| Depreciation and amortization | 3,713 | 4,451 |
| Stock-based compensation | 5,407 | 5,974 |
| Deferred income taxes | (969) | (4,015) |
| Excess and obsolete inventory valuation adjustment | 657 | (19) |
| Increase in provision for doubtful accounts | 378 | 17 |
| Changes in operating assets and liabilities: | | |
| Accounts receivable | 24,182 | 25,848 |
| Inventory | (27,946) | 1,741 |
| Prepaid expenses and other assets | (2,122) | (1,851) |
| Prepaid income taxes | (1,638) | (185) |
| Accounts payable | 9,397 | 15,562 |
| Accrued expenses and other current liabilities | 1,770 | 10,282 |
| Accrued income taxes | (15,683) | (4,873) |
| Deferred revenue | (11,659) | 22,320 |
| Net cash provided by operating activities | <u>27,086</u> | <u>124,069</u> |
| Cash flows used in investing activities: | | |
| Purchases of property and equipment | (14,009) | (6,159) |
| Net cash used in investing activities | <u>(14,009)</u> | <u>(6,159)</u> |
| Cash flows from financing activities: | | |
| Proceeds from issuance of debt, net of issuance costs | 7,905 | — |
| Principal repayments of debt | (46) | (210) |
| Proceeds from exercise of stock options | 198 | 172 |
| Employee taxes paid related to net share settlement of restricted stock units | — | (315) |
| Payments of dividends and equitable adjustments | (629) | (47,793) |
| Net cash provided by (used in) financing activities | <u>7,428</u> | <u>(48,146)</u> |
| Effect of exchange rate changes on cash and cash equivalents | (661) | (554) |
| Net increase in cash and cash equivalents | 19,844 | 69,210 |
| Cash and cash equivalents at beginning of period | 77,155 | 92,496 |
| Cash and cash equivalents at end of period | <u>\$ 96,999</u> | <u>\$ 161,706</u> |
| Supplemental disclosures of cash flow information: | | |
| Cash paid for interest | \$ 47 | \$ 207 |
| Cash paid for income taxes | \$ 41,695 | \$ 25,200 |
| Supplemental disclosures of non-cash investing and financing activities: | | |
| Purchases of property and equipment included in accounts payable | \$ 932 | \$ 552 |
| Unpaid equitable adjustments included in accrued expenses and other current liabilities | \$ 470 | \$ 2,471 |

The accompanying notes are an integral part of these condensed consolidated financial statements.

CASA SYSTEMS, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Amounts in thousands, except per share amounts)
(Unaudited)

1. Nature of Business and Basis of Presentation

Casa Systems, Inc. (the “Company”) was incorporated under the laws of the State of Delaware on February 28, 2003. The Company is a global communications technology company headquartered in Andover, Massachusetts and has wholly owned subsidiaries in China, France, Canada, Ireland and the Netherlands.

The Company provides a suite of software-centric infrastructure solutions that allow cable service providers to deliver voice, video and data services over a single platform at multi-gigabit speeds. In addition, the Company offers solutions for next-generation distributed and virtualized architectures in cable operator, fixed telecom and wireless networks. The Company’s innovative solutions enable customers to cost-effectively and dynamically increase network speed, add bandwidth capacity, reconfigure and add new services for consumers and enterprises, reduce network complexity and reduce operating and capital expenditures.

The Company is subject to a number of risks similar to other companies of comparable size and other companies selling and providing services to the communications industry. These risks include, but are not limited to, the level of capital spending by the communications industry, a lengthy sales cycle, dependence on the development of new products and services, unfavorable economic and market conditions, competition from larger and more established companies, limited management resources, dependence on a limited number of contract manufacturers and suppliers, the rapidly changing nature of the technology used by the communications industry and reliance on resellers and sales agents. Failure by the Company to anticipate or to respond adequately to technological developments in its industry, changes in customer or supplier requirements, changes in regulatory requirements or industry standards, or any significant delays in the development or introduction of products could have a material adverse effect on the Company’s operating results, financial condition and cash flows.

The accompanying condensed consolidated balance sheet as of September 30, 2016, the condensed consolidated statements of operations and comprehensive income and of cash flows for the nine months ended September 30, 2015 and 2016, and the condensed consolidated statement of convertible preferred stock and stockholders’ equity for the nine months ended September 30, 2016 are unaudited. The financial data and other information disclosed in these notes related to the nine months ended September 30, 2015 and 2016 are also unaudited. The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with generally accepted accounting principles in the United States (“GAAP”) regarding interim financial reporting. Certain information and note disclosures normally included in the consolidated financial statements prepared in accordance with GAAP have been condensed or omitted. Therefore, these condensed consolidated financial statements should be read in conjunction with the consolidated financial statements and notes included in the Company’s audited consolidated financial statements for the year ended December 31, 2015.

The unaudited interim condensed consolidated financial statements have been prepared on a basis consistent with that used to prepare the audited annual consolidated financial statements and, in the opinion of management, include all adjustments, consisting of only normal recurring adjustments, necessary for a fair statement of the financial position, results of operations and cash flows for the interim periods, but are not necessarily indicative of the results of operations to be anticipated for the full year ending December 31, 2016 or any future period.

The accompanying condensed consolidated financial statements include the accounts and results of operations of the Company and its wholly owned subsidiaries. All intercompany transactions and balances have been eliminated in consolidation.

CASA SYSTEMS, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Amounts in thousands, except per share amounts)
(Unaudited)

2. Summary of Significant Accounting Policies

Unaudited Pro Forma Information

The accompanying unaudited pro forma condensed consolidated balance sheet as of September 30, 2016 has been prepared to give effect, upon the closing of a qualified initial public offering, to the automatic conversion of all outstanding shares of convertible preferred stock into 8,076 shares of common stock, the Company's borrowing in _____, 2016 of \$ _____ under its Term Loan B and the accrual of a special dividend of \$ _____, which was declared by its board of directors on _____.

In the accompanying condensed consolidated statements of operations and comprehensive income, the calculation of the unaudited pro forma basic and diluted net income per share attributable to common stockholders for the year ended December 31, 2015 has been prepared to give effect, upon the closing of a qualified initial public offering, to (i) the automatic conversion of all outstanding shares of convertible preferred stock into shares of common stock as if the proposed initial public offering had occurred on January 1, 2015 and (ii) the number of shares offered in the initial public offering whose proceeds are deemed necessary, based on an assumed initial public offering price of \$ _____ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, to pay (a) the special cash dividend of \$43,148 declared by the Company's board of directors on June 17, 2016 and (b) the special cash dividend of \$ _____ declared by the Company's board of directors on _____ because the Company's earnings for the twelve months ended September 30, 2016 were not sufficient to fully fund those dividends.

The unaudited pro forma net income per share data have been presented in accordance with Securities and Exchange Commission Staff Accounting Bulletin Topic 1B.3 ("SAB Topic 1B.3"). In accordance with SAB Topic 1B.3, dividends declared at or in the year preceding an initial public offering are deemed to be in contemplation of the offering with the intention of repayment out of the offering proceeds to the extent that the amount of dividends exceeded the amount of earnings during the twelve-month period ended on the balance sheet date. For the twelve months ended September 30, 2016, the Company's net income was \$75,140 (unaudited).

Accounts Receivable

Accounts receivable are presented net of a provision for doubtful accounts, which is an estimate of amounts that may not be collectible. Accounts receivable for arrangements with customary payment terms, which are one year or less, are recorded at invoiced amounts and do not bear interest. The Company generally does not require collateral, but the Company may, in certain instances based on its credit assessment, require full or partial prepayment prior to shipment.

For certain customers and/or for certain transactions, the Company provides extended payment arrangements to allow the customer to pay for the purchased equipment in monthly, other periodic or lump sum payments over a period of one to five years. Certain of these arrangements are collateralized by the underlying assets during the term of the arrangement. Payments due beyond 12 months from the balance sheet date are recorded as non-current assets. In addition, amounts recorded as current and non-current accounts receivable for extended payment term arrangements at any balance sheet date have a corresponding amount recorded as deferred revenue because the Company defers the recognition of revenue for all extended payment term arrangements and only recognizes revenue to the extent of the payment amounts that become due from the customer.

Although there is no contractual interest rate for customer arrangements with extended payment terms, the Company imputes interest on the accounts receivable related to these arrangements and reduces the arrangement

CASA SYSTEMS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Amounts in thousands, except per share amounts)
(Unaudited)

fee that will be recognized as revenue for the amount of the imputed interest, which is recorded as interest income over the payment term using the effective interest method. For the periods presented in the accompanying condensed consolidated financial statements, the impact of imputing interest on revenue and interest income was insignificant.

Accounts receivable as of December 31, 2015 and September 30, 2016 consisted of the following:

| | <u>December 31,</u> <u>2015</u> | <u>September 30,</u> <u>2016</u> |
|--|------------------------------------|-------------------------------------|
| Current portion of accounts receivable, net: | | |
| Accounts receivable, net | \$ 71,155 | \$ 53,784 |
| Amounts due from related party (see Note 14) | 12,367 | 3,714 |
| Accounts receivable, extended payment arrangements | 7,423 | 7,409 |
| | <u>90,945</u> | <u>64,907</u> |
| Accounts receivable, net of current portion: | | |
| Accounts receivable, extended payment arrangements | 9,839 | 10,023 |
| | <u>\$ 100,784</u> | <u>\$ 74,930</u> |

The Company performs ongoing credit evaluations of its customers and, if necessary, provides a provision for doubtful accounts and expected losses. When assessing and recording its provision for doubtful accounts, the Company evaluates the age of its accounts receivable, current economic trends, creditworthiness of the customers, customer payment history, and other specific customer and transaction information. The Company writes off accounts receivable against the provision when it determines a balance is uncollectible and no longer actively pursues collection of the receivable. Adjustments to the provision for doubtful accounts are recorded as general and administrative expenses in the consolidated statements of operations and comprehensive income.

Deferred Offering Costs

The Company capitalizes certain legal, professional accounting and other third-party fees that are directly associated with in-process equity financings as deferred offering costs until such financings are consummated. After consummation of the equity financing, these costs are recorded in stockholders' equity as a reduction of additional paid-in capital generated as a result of the offering. Should the planned equity financing be abandoned, the deferred offering costs will be expensed immediately as a charge to operating expenses in the statement of operations and comprehensive income. The Company did not record any deferred offering costs as of December 31, 2015 or September 30, 2016.

Concentration of Risks

Financial instruments that potentially subject the Company to concentrations of credit risk, consist principally of cash and cash equivalents and accounts receivable. Cash and cash equivalents consist of demand deposits, savings accounts, money market mutual funds, commercial paper, and certificates of deposits with financial institutions, which may exceed Federal Deposit Insurance Corporation limits. The Company has not experienced any losses related to its cash and cash equivalents and does not believe that it is subject to unusual credit risk beyond the normal credit risk associated with commercial banking relationships.

CASA SYSTEMS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Amounts in thousands, except per share amounts)
(Unaudited)

Significant customers are those that represent 10% or more of revenue or accounts receivable balances as set forth in the following table:

| | <u>Revenue</u> | | <u>Accounts Receivable, Net</u> | |
|------------|---|-------------|------------------------------------|-------------------------------------|
| | <u>Nine Months Ended September 30,</u> <u>2015</u> | <u>2016</u> | <u>December 31,</u> <u>2015</u> | <u>September 30,</u> <u>2016</u> |
| Customer A | 17% | 26% | * | * |
| Customer B | * | 17% | * | 11% |
| Customer C | 12% | * | * | * |
| Customer D | 20% | * | 12% | * |
| Customer E | * | * | 15% | 21% |
| Customer F | * | * | 17% | * |
| Customer G | * | * | 12% | * |

* Less than 10% of total

Customer D is a related party, Liberty Global Services B.V. and its affiliates (see Note 14).

Certain of the components and subassemblies included in the Company's products are obtained from a single source or a limited group of suppliers. In addition, the Company primarily relies on two third-parties to manufacture its products. Although the Company seeks to reduce dependence on those limited sources of suppliers and manufacturers, the partial or complete loss of certain of these sources could have a material adverse effect on the Company's operating results, financial condition, and cash flows and damage its customer relationships.

Impact of Recently Adopted Accounting Standards

In March 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2016-09, *Improvements to Employee Share-Based Payment Accounting* ("ASU 2016-09"), which simplifies the accounting for share-based payments. The amendments of the updated standard include, among other things, the requirement to recognize excess tax benefits (or deficiencies) through earnings instead of additional paid-in capital, changes to the classification of excess tax benefits on the statement of cash flows, and the election of a policy to either estimate forfeitures when determining periodic expense or recognize actual forfeitures when they occur. The standard is effective for annual periods beginning after December 15, 2016. Early adoption is permitted.

The Company elected to early adopt ASU 2016-09 as of January 1, 2016 and has applied the standard to the related unaudited condensed consolidated financial statements on a prospective basis. Prior periods were not retrospectively adjusted. The primary impacts of the adoption were (i) the recognition of excess tax benefits from equity transactions as a reduction of the provision for income taxes rather than as an increase to additional paid-in capital and (ii) excluding from the calculation diluted net income per share attributable to common stockholders the effect of the excess tax benefit when applying the treasury stock method to determine the dilutive effect of outstanding stock-based awards. If the Company had not adopted the standard as of January 1, 2016, it would have reported a higher provision for income taxes for the nine months ended September 30, 2016 of \$1,439 for the excess tax benefit of restricted stock vesting and of \$1,516 for the equitable adjustment payments. Similarly, if the Company had not adopted the standard as of January 1, 2016, it would have reported lower net cash provided by operating activities of \$2,955 and lower net cash used in financing activities of

CASA SYSTEMS, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Amounts in thousands, except per share amounts)
(Unaudited)

\$2,955 for the nine months ended September 30, 2016. The Company elected to maintain its existing policy to estimate forfeitures when determining periodic expense. The other provisions of the guidance had an insignificant impact on the Company's condensed consolidated financial statements.

Impact of Recently Issued Accounting Standards

In May 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers (Topic 606)* ("ASU 2014-09"), which supersedes existing revenue recognition guidance under GAAP. The core principle of this standard is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. In August 2015, the FASB issued ASU 2015-14, *Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date*, which delays the effective date of ASU 2014-09 such that the standard is effective for annual periods beginning after December 15, 2017 and for interim periods within those fiscal years. Early adoption of the standard is permitted for annual periods beginning after December 15, 2016. This standard can be adopted either retrospectively to each prior reporting period presented or as a cumulative effect adjustment as of the date of adoption. In March 2016, the FASB issued ASU No. 2016-08, *Revenue from Contracts with Customers (Topic 606): Principal versus Agent Considerations* ("ASU 2016-08"), which further clarifies the implementation guidance on principal versus agent considerations in ASU 2014-09. In April 2016, the FASB issued ASU No. 2016-10, *Revenue from Contracts with Customers (Topic 606): Identifying Performance Obligations and Licensing*, clarifying the implementation guidance on identifying performance obligations and licensing. In May 2016, the FASB issued ASU No. 2016-12, *Revenue from Contracts with Customers (Topic 606): Narrow-Scope Improvements and Practical Expedients* ("ASU 2016-12"), which clarifies the objective of the collectibility criterion, presentation of taxes collected from customers, non-cash consideration, contract modifications at transition, completed contracts at transition and how guidance in ASU 2014-09 is retrospectively applied. ASU 2016-08, ASU 2016-10 and ASU 2016-12 have the same effective dates and transition requirements as ASU 2014-09. The Company is currently assessing the potential impact that the adoption of ASU 2014-09, ASU 2016-08, ASU 2016-10 and ASU 2016-12 will have on its consolidated financial statements.

In July 2015, the FASB issued ASU 2015-11, *Simplifying the Measurement of Inventory*. Under ASU 2015-11, subsequent measurement of inventory is based on the lower of cost or net realizable value. Net realizable value is estimated selling price in the ordinary course of business, less the estimated cost of completion and disposal. This update does not apply to inventory that is measured using last-in, first-out or the retail inventory method. The new guidance is effective for annual periods beginning after December 15, 2016. Early application is permitted. The Company is currently assessing the potential impact that the adoption of ASU 2015-11 will have on its consolidated financial statements.

In February 2016, the FASB issued ASU 2016-02, *Leases*, which will require lessees to recognize most leases on their balance sheets as a right-of-use asset with a corresponding lease liability, and lessors to recognize a net lease investment. Additional qualitative and quantitative disclosures will also be required. The new guidance is effective for annual periods beginning after December 15, 2018 and for interim periods within those fiscal years. Early application is permitted. The Company is currently assessing the potential impact that the adoption of ASU 2016-02 will have on its consolidated financial statements.

In June 2016, the FASB issued ASU 2016-13, *Measurement of Credit Losses on Financial Instruments*. This guidance requires that financial assets measured at amortized cost be presented at the net amount expected to be

CASA SYSTEMS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Amounts in thousands, except per share amounts)
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collected. The measurement of expected credit losses is based on historical experience, current conditions and reasonable and supportable forecasts that affect the collectibility. This guidance is effective for annual reporting periods beginning after December 15, 2019 and for interim periods within those fiscal years. The Company is currently assessing the potential impact that the adoption of ASU 2016-13 will have on its consolidated financial statements.

In August 2016, the FASB issued ASU 2016-15, *Statement of Cash Flows: Classification of Certain Cash Receipts and Cash Payments* (“ASU 2016-15”), to address diversity in practice in how certain cash receipts and cash payments are presented and classified in the statement of cash flows. The standard is effective for annual periods beginning after December 15, 2017, including interim periods within those fiscal years. The Company is currently assessing the potential impact that the adoption of ASU 2016-15 will have on its consolidated financial statements.

In October 2016, the FASB issued ASU 2016-16, *Income Taxes (Topic 740): Intra-Entity Transfer of Assets Other than Inventory* (“ASU 2016-16”), which requires the recognition of the income tax consequences of an intra-entity transfer of an asset, other than inventory, when the transfer occurs. The standard is effective for annual periods beginning after December 15, 2017, including interim periods within those fiscal years. The Company is currently assessing the potential impact that the adoption of ASU 2016-16 will have on its consolidated financial statements.

3. Inventory

Inventory as of December 31, 2015 and September 30, 2016 consisted of the following:

| | <u>December 31,</u> <u>2015</u> | <u>September 30,</u> <u>2016</u> |
|--|------------------------------------|-------------------------------------|
| Raw materials | \$ 4,267 | \$ 5,275 |
| Work in process | 361 | 359 |
| Finished goods: | | |
| Manufactured finished goods | 40,052 | 36,122 |
| Deferred inventory costs | 5,680 | 5,333 |
| | <u>50,360</u> | <u>47,089</u> |
| Valuation adjustment for excess and obsolete inventory | (2,859) | (2,830) |
| | <u>\$ 47,501</u> | <u>\$ 44,259</u> |

CASA SYSTEMS, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Amounts in thousands, except per share amounts)
(Unaudited)

4. Property and Equipment

Property and equipment as of December 31, 2015 and September 30, 2016 consisted of the following:

| | <u>December 31, 2015</u> | <u>September 30, 2016</u> |
|---|------------------------------|-------------------------------|
| Computers and purchased software | \$ 6,570 | \$ 8,538 |
| Leasehold improvements | 905 | 1,011 |
| Furniture and fixtures | 1,416 | 1,459 |
| Machinery and equipment | 8,068 | 10,477 |
| Land | 3,091 | 3,091 |
| Building | 4,765 | 4,765 |
| Building improvements | 3,152 | 4,648 |
| Trial systems at customers' sites | 6,028 | 6,784 |
| | <u>33,995</u> | <u>40,773</u> |
| Less: Accumulated depreciation and amortization | <u>(11,667)</u> | <u>(15,984)</u> |
| | <u>\$ 22,328</u> | <u>\$ 24,789</u> |

During nine months ended September 30, 2015 and 2016, the Company transferred trial systems from inventory into property and equipment with a value of \$1,203 and \$758, respectively, net of transfers of trial systems to cost of revenue. In addition, the Company transferred \$791 and \$571 of equipment from inventory into property and equipment during the nine months ended September 30, 2015 and 2016, respectively.

Total depreciation and amortization expense was \$3,713 and \$4,451 for the nine months ended September 30, 2015 and 2016.

5. Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities as of December 31, 2015 and September 30, 2016 consisted of the following:

| | <u>December 31, 2015</u> | <u>September 30, 2016</u> |
|---|------------------------------|-------------------------------|
| Accrued compensation and related taxes | \$ 17,346 | \$ 17,392 |
| Accrued warranty | 993 | 1,413 |
| Equitable adjustments payable (see Note 10) | 383 | 2,471 |
| Accrued customer incentives | — | 13,873 |
| Other accrued expenses | 6,632 | 2,836 |
| | <u>\$ 25,354</u> | <u>\$ 37,985</u> |

Accrued Warranty

Substantially all of the Company's products are covered by a warranty for software and hardware for periods ranging from 90 days to one year. In addition, in conjunction with renewals of maintenance and support contracts, the Company offers an extended warranty for periods typically of one to three years for agreed-upon fees. The Company's warranty reserve, which is presented as accrued warranty in the table above, reflects

CASA SYSTEMS, INC.
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(Amounts in thousands, except per share amounts)
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estimated material, labor and other costs related to potential or actual software and hardware warranty claims for which the Company expects to incur an obligation.

A summary of changes in the amount reserved for warranty costs for the nine months ended September 30, 2015 and 2016 is as follows:

| | Nine Months Ended September 30, | |
|---|------------------------------------|-----------------|
| | 2015 | 2016 |
| Warranty reserve at beginning of period | \$ 949 | \$ 993 |
| Provisions | 899 | 1,595 |
| Charges | (917) | (1,175) |
| Warranty reserve at end of period | <u>\$ 931</u> | <u>\$ 1,413</u> |

Accrued Customer Incentives

In limited instances, the Company has offered future rebates to customers based on a fixed or variable percentage of actual sales volumes over specified periods. The future rebates earned based on the customer's purchasing from the Company in one period may be used as credits to be applied by them against accounts receivable due to the Company in later periods. The Company accounts for these future rebates as a reduction of the revenue recorded for the customer's current purchasing activity giving rise to the future rebates. The liability for these future rebates is recorded as accrued customer incentives until the credits have been applied by the customer against accounts receivable due to the Company or the credits expire.

6. Fair Value Measurements

Certain assets and liabilities are carried at fair value under GAAP. Fair value is defined as the price that would be received for an asset or the exit price that would be paid to transfer a liability in the principal or most advantageous market in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. Financial assets and liabilities carried at fair value are to be classified and disclosed in one of the following three levels of the fair value hierarchy, of which the first two are considered observable and the last is considered unobservable:

Level 1—Quoted prices in active markets for identical assets and liabilities.

Level 2—Observable inputs (other than Level 1 quoted prices) such as quoted prices in active markets for similar assets or liabilities at the measurement date; quoted prices in markets that are not active for identical or similar assets and liabilities; or other inputs that are observable or can be corroborated by observable market data.

Level 3—Unobservable inputs that involve management judgment and are supported by little or no market activity, including pricing models, discounted cash flow methodologies and similar techniques.

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The following tables present information about the Company's financial assets and liabilities measured at fair value on a recurring basis and indicate the level of the fair value hierarchy utilized to determine such fair values:

| | Fair Value Measurements as of December 31, 2015 Using: | | | |
|---------------------------|--|---------------|---------------|------------------|
| | Level 1 | Level 2 | Level 3 | Total |
| Assets: | | | | |
| Certificates of deposit | \$ — | \$ 342 | \$ — | \$ 342 |
| Money market mutual funds | 45,065 | — | — | 45,065 |
| | <u>\$ 45,065</u> | <u>\$ 342</u> | <u>\$ —</u> | <u>\$ 45,407</u> |
| Liabilities: | | | | |
| SARs | \$ — | \$ — | \$ 737 | \$ 737 |
| | <u>\$ —</u> | <u>\$ —</u> | <u>\$ 737</u> | <u>\$ 737</u> |

| | Fair Value Measurements as of September 30, 2016 Using: | | | |
|----------------------------|---|------------------|-----------------|-------------------|
| | Level 1 | Level 2 | Level 3 | Total |
| Assets: | | | | |
| Certificates of deposit | \$ — | \$ 15,017 | \$ — | \$ 15,017 |
| Commercial paper | — | 12,493 | — | 12,493 |
| Money market mutual funds | 93,837 | — | — | 93,837 |
| | <u>\$ 93,837</u> | <u>\$ 27,510</u> | <u>\$ —</u> | <u>\$ 121,347</u> |
| Liabilities: | | | | |
| SARs | \$ — | \$ — | \$ 1,013 | \$ 1,013 |
| Foreign currency contracts | — | 12 | — | 12 |
| | <u>\$ —</u> | <u>\$ 12</u> | <u>\$ 1,013</u> | <u>\$ 1,025</u> |

During the nine months ended September 30, 2015 and 2016, there were no transfers between Level 1, Level 2 and Level 3.

There were no changes to the valuation techniques used to measure asset and liability fair values on a recurring basis during the nine months ended September 30, 2016 from those included in the Company's audited consolidated financial statements for the year ended December 31, 2015. The following table provides a summary of changes in the fair value of the Company's liability for stock appreciation rights ("SARs"), for which fair value is determined by Level 3 inputs:

| | Nine Months Ended September 30, | |
|-----------------------------------|------------------------------------|-----------------|
| | 2015 | 2016 |
| Fair value at beginning of period | \$ 271 | \$ 737 |
| Change in fair value | 462 | 276 |
| Fair value at end of period | <u>\$ 733</u> | <u>\$ 1,013</u> |

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7. Derivative Instruments

The Company has certain international customers that are billed in foreign currencies. To mitigate the volatility related to fluctuations in the foreign exchange rates for accounts receivable denominated in foreign currencies, the Company enters into foreign currency forward contracts. As of September 30, 2016, the Company had foreign currency forward contracts outstanding with notional amounts totaling 2,300 euros maturing in the fourth quarter of 2016. The Company had no outstanding derivative instruments as of December 31, 2015.

The Company's foreign currency forward contracts economically hedge certain risk but are not designated as hedges for financial reporting purposes, and accordingly, all changes in the fair value of these derivative instruments are recorded as unrealized foreign currency transaction gains or losses and are included in the condensed consolidated statements of operations and comprehensive income. The Company records all derivative instruments on the balance sheet at fair value and had a liability of \$12 related to foreign currency forward contracts outstanding as of September 30, 2016, which is included in accrued expenses and other current liabilities on the condensed consolidated balance sheet.

8. Income Taxes

The Company's effective income tax rate was 36.0% and 24.9% for the nine months ended September 30, 2015 and 2016, respectively. The effective income tax rate is based on the estimated annual effective tax rate, adjusted for discrete tax items recorded in the period. The provision for income taxes was \$23,405 and \$16,228 for the nine months ended September 30, 2015 and 2016, respectively.

The effective income tax rate for the nine months ended September 30, 2016 differed from the federal statutory rate due to state taxes, research and development tax credits, permanent differences, and the excess tax benefit from stock-based transactions due to the Company's adoption of the new accounting guidance relating to stock-based compensation (see Note 2). Permanent differences included the domestic production activities deduction, nondeductible stock-based compensation expense, and taxes in foreign jurisdictions with a tax rate different from the U.S. federal statutory rate.

The change in the income tax provision for the nine months ended September 30, 2016 compared to the nine months ended September 30, 2015 was primarily due to changes in U.S. federal research and development tax credits, foreign tax rate differential, and the excess tax benefit from stock-based transactions due to the Company's adoption of the new accounting guidance relating to stock-based compensation. For the nine months ended September 30, 2016, the Company recorded tax benefits attributed to U.S. federal research and development tax credits, foreign jurisdiction earnings income with lower effective tax rates, and excess tax benefits from stock-based transactions due to the Company's adoption of the new accounting guidance relating to stock-based compensation. For the nine months ended September 30, 2015, the Company did not record benefits attributed to U.S. federal research and development tax credits, as the tax credit had not been reenacted.

The Company's intent is to reinvest the total amount of its unremitted earnings in the local international jurisdictions to support business growth. As such, the Company has not provided for U.S. taxes on the unremitted earnings of its international subsidiaries. It is not practicable to estimate the amount of deferred tax liability related to the unremitted earnings of these foreign subsidiaries.

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9. Debt

Revolving Credit Agreement

On July 1, 2016, the Company amended its revolving credit agreement (the “Revolver”) to increase the amount of the line of credit, extend the maturity date and decrease the fee for the unused amount of the Revolver. The amended Revolver expires on June 30, 2019 and provides for borrowings of up to \$25,000, subject to certain limitations, that accrue interest, at the Company’s election, at either (i) the bank’s prime rate or (ii) LIBOR plus two percentage points. Interest on amounts borrowed under the Revolver is due quarterly in arrears, and the Company is required to pay a fee of 0.20% per year, payable quarterly in arrears, on the unused amount of the Revolver.

As of December 31, 2015 and September 30, 2016, the Company did not have any borrowings under the Revolver but used \$1,000 under the Revolver as collateral for a stand-by letter of credit to guarantee the Company’s contractual performance with a customer. For the nine months ended September 30, 2015 and 2016, interest expense related to the fee for the unused amount of the Revolver was \$19 and \$11, respectively.

Borrowings under the Revolver are secured by substantially all of the Company’s assets, excluding its intellectual property, as defined, and its investments in foreign subsidiaries. In connection with the Revolver, the Company is subject to various affirmative, negative and financial covenants, including a funded debt to consolidated EBITDA ratio and a basic fixed charge coverage ratio. The Company was in compliance with all covenants of the Revolver as of December 31, 2015 and September 30, 2016.

Commercial Mortgage Loan Agreement

On July 1, 2015, the Company entered into a commercial mortgage loan agreement in the amount of \$7,950 (the “Loan”). Borrowings under the Loan bear interest at a rate of 3.5% per annum and are repayable in 60 monthly installments of \$46, consisting of principal and interest based on a 20-year amortization schedule. The remaining amount of unpaid principal under the Loan is due on the maturity date of July 1, 2020. Upon entering into the Loan, the Company incurred debt issuance costs of \$45, which was initially recorded as a direct deduction from the debt liability and are amortized to interest expense using the effective interest rate method from issuance date of the Loan until the maturity date.

The Company made principal payments under the Loan of \$46 and \$210 during the nine months ended September 30, 2015 and 2016, respectively. Interest expense, including the amortization of debt issuance costs, related to the Loan totaled \$73 and \$212 for the nine months ended September 30, 2015 and 2016, respectively.

The Loan is secured by the land and building purchased in March 2015 and subjects the Company to various affirmative, negative and financial covenants, including maintenance of a minimum debt service ratio. The Company was in compliance with all annual covenants of the Loan as of September 30, 2016.

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As of September 30, 2016, minimum future principal payments of debt are summarized as follows:

| <u>Year Ending December 31,</u> | |
|---------------------------------|----------------|
| 2016 | \$ 72 |
| 2017 | 292 |
| 2018 | 303 |
| 2019 | 314 |
| 2020 | 6,645 |
| | <u>7,626</u> |
| Unamortized debt issuance costs | <u>(33)</u> |
| | <u>\$7,593</u> |

10. Stockholders' Equity

Special Dividends to Holders of Common and Preferred Stock

On June 17, 2016, the board of directors declared and the shareholders approved a special dividend to the holders of common stock and preferred stock of record on that date. The cash dividend declared to stockholders was \$2.9455 per share of common stock, \$5.8910 per share of Series B convertible preferred stock (the "Series B Preferred Stock"), and \$5.8910 per share of Series C convertible preferred stock (the "Series C Preferred Stock"). Related to this special dividend declared in June 2016, the Company paid \$43,148 in dividends to the common and preferred stockholders during the nine months ended September 30, 2016, and, as of September 30, 2016, no dividends were payable.

In connection with the special dividend declared in June 2016, the board of directors also approved cash payments to be made to holders of the Company's stock options, SARs and restricted stock units ("RSUs") as an equitable adjustment to the holders of such instruments in accordance with the provisions of the Company's 2011 Stock Incentive Plan. The equitable adjustments to the holders of stock options, SARs and RSUs is equal to \$2.9455 per share multiplied by the weighted number of shares granted as calculated using the treasury stock method. The cash payments to such holders will be made as their equity awards vest through fiscal year 2020. During the nine months ended September 30, 2016, the Company paid \$4,487 to the holders of such vested equity awards. As of September 30, 2016, equitable adjustment payments to be made through fiscal 2020, net of estimated forfeitures, totaled \$2,246 and were included in accrued expenses and other current liabilities in the accompanying condensed consolidated balance sheet.

The cash dividends declared to the holders of common stock, Series B Preferred Stock and Series C Preferred Stock totaled \$19,359, \$1,054 and \$22,735, respectively, and the equitable adjustment to the holders of stock options, SARs and RSUs, net of estimated forfeitures, totaled \$6,733. The \$49,881 aggregate amount of such dividends was recorded as a charge to retained earnings during the nine months ended September 30, 2016.

On November 30, 2014, the board of directors declared and the shareholders approved a special cash dividend to the holders of common stock and preferred stock of record on that date. The cash dividend to stockholders was \$1.9173 per share of common stock, \$3.8346 per share of the Series B Preferred Stock and \$3.8346 per share of the Series C Preferred Stock. Related to this special dividend declared in November 2014, the Company paid \$345 in dividends to the common and preferred stockholders during the nine months ended September 30, 2015, and no dividends were payable as of September 30, 2016.

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In connection with the special dividend declared in November 2014, the board of directors also approved cash payments to be made to holders of the Company's stock options and SARs as an equitable adjustment to the holders of such instruments in accordance with the provisions of the Company's 2011 Stock Incentive Plan. During the nine months ended September 30, 2015 and 2016, the Company paid \$284 and \$158, respectively to the holders of stock options and SARs for vested equity awards. As of December 31, 2015 and September 30, 2016, equitable adjustment payments to be made as equity awards vest through fiscal 2018, net of estimated forfeitures, totaled \$383 and \$225, respectively, and were included in accrued expenses and other current liabilities in the accompanying condensed consolidated balance sheets.

11. Stock-Based Compensation

2011 Stock Incentive Plan

The Company's 2011 Stock Incentive Plan (the "2011 Plan") provides for the grant of qualified incentive stock options, nonqualified stock options, SARs, restricted stock, RSUs or other stock-based awards to the Company's employees, officers, directors, advisers and outside consultants. The total number of shares authorized for issuance under the 2011 Plan was 4,605 shares as of September 30, 2016, of which 660 shares remained available for future grant.

Stock Options

The following table summarizes the outstanding stock option activity and a summary of information related to stock options as of and for the nine months ended September 30, 2016:

| | <u>Number of Shares</u> | <u>Weighted- Average Exercise Price</u> | <u>Weighted- Average Remaining Contractual Term (in years)</u> | <u>Aggregate Intrinsic Value</u> |
|--|-----------------------------|---|--|--|
| Outstanding at January 1, 2016 | 2,681 | \$ 14.42 | 7.41 | \$ 73,852 |
| Granted | 356 | 46.44 | | |
| Exercised | (44) | 3.95 | | |
| Forfeited | (27) | 41.71 | | |
| Outstanding at September 30, 2016 | <u>2,966</u> | \$ 18.16 | 7.03 | \$ 106,929 |
| Options exercisable at September 30, 2016 | 1,906 | \$ 10.41 | 6.09 | \$ 83,501 |
| Vested or expected to vest at September 30, 2016 | 2,897 | \$ 17.75 | 6.99 | \$ 105,656 |

The fair value of each option is estimated on the date of grant using the Black-Scholes option-pricing model using the following assumptions, presented on a weighted-average basis:

| | <u>Nine Months Ended September 30,</u> | |
|--------------------------|--|---------------|
| | <u>2015</u> | <u>2016</u> |
| Risk-free interest rate | 1.4% - 1.9% | 1.1% - 1.6% |
| Expected term (in years) | 5.6 - 6.2 | 4.7 - 6.2 |
| Expected volatility | 41.8% - 52.5% | 34.2% - 40.4% |
| Expected dividend yield | 0.0% | 0.0% |

The weighted-average grant-date fair value of options granted during the nine months ended September 30, 2016 was \$18.55 per share. Cash proceeds received upon the exercise of options were \$198 and \$172 during the

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nine months ended September 30, 2015 and 2016, respectively. The intrinsic value of stock options exercised was \$664 and \$1,982 for the nine months ended September 30, 2015 and 2016, respectively.

Restricted Stock Units

The following table summarizes the outstanding activity of RSUs and a summary of information related to RSUs:

| | <u>Number of Shares</u> | <u>Weighted-Average Grant Date Fair Value</u> | <u>Aggregate Fair Value</u> |
|--|-----------------------------|---|---------------------------------|
| Unvested balance at January 1, 2016 | 421 | \$ 20.92 | |
| Granted | 49 | \$ 41.97 | |
| Vested | <u>(190)</u> | \$ 20.92 | \$ 7,967 |
| Unvested balance at September 30, 2016 | <u>280</u> | \$ 24.60 | |

During the nine months ended September 30, 2016, the Company withheld 8 shares of common stock in settlement of employee tax withholding obligations due upon the vesting of RSUs. The Company had no RSUs that vested during the nine months ended September 30, 2015.

Stock Appreciation Rights

In September 2016, the Company granted 6 SARs that allow the holder the right, upon exercise, to receive in cash the amount of the difference between the fair value of the Company's common stock at the date of exercise and the price of the underlying common stock at the date of grant of each SAR. The price of the underlying common stock on the date of grant was \$54.22 per share and the grant-date fair value was \$20.52 per SAR. The SARs vest over a four-year period from the date of grant and expire ten years from the date of grant. As of September 30, 2016, 28 SARs were outstanding and 6 were unvested. As of September 30, 2016, there were 22 SARs exercisable and the fair value of each SAR was \$45.76 per SAR. The Company records the fair value of the SARs as a liability with a corresponding charge as stock-based compensation expense. The fair value of the SAR liability at December 31, 2015 and September 30, 2016 was \$737 and \$1,013, respectively, and was included in accrued expenses and other current liabilities in the accompanying condensed consolidated balance sheets.

Stock-Based Compensation Expense

Stock-based compensation expense related to stock options, RSUs and SARs for the nine months ended September 30, 2015 and 2016 was recorded in the condensed consolidated statements of operations and comprehensive income as follows:

| | <u>Nine Months Ended September 30,</u> | |
|-------------------------------------|--|-----------------|
| | <u>2015</u> | <u>2016</u> |
| Cost of revenue | \$ 103 | \$ 178 |
| Research and development expenses | 1,422 | 1,637 |
| Sales and marketing expenses | 542 | 846 |
| General and administrative expenses | <u>3,340</u> | <u>3,313</u> |
| | <u>\$5,407</u> | <u>\$ 5,974</u> |

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As of September 30, 2016, there was \$16,769 of unrecognized compensation cost related to stock options, RSUs and SARs, which is expected to be recognized over a weighted-average period of 2.79 years.

12. Net Income per Share and Unaudited Pro Forma Net Income per Share

Net Income per Share

Basic and diluted net income per share attributable to common stockholders was calculated as follows:

| | Nine Months Ended September 30, | |
|---|------------------------------------|------------------|
| | 2015 | 2016 |
| Numerator: | | |
| Net income | \$ 41,599 | \$ 48,817 |
| Cumulative dividends on convertible preferred stock | (4,401) | (4,401) |
| Dividends declared on convertible preferred stock | — | (23,789) |
| Undistributed earnings allocated to participating securities | (20,833) | (699) |
| Net income attributable to common stockholders, basic | 16,365 | 19,928 |
| Undistributed earnings reallocated to dilutive potential common shares | 1,779 | 78 |
| Net income attributable to common stockholders, diluted | <u>\$ 18,144</u> | <u>\$ 20,006</u> |
| Denominator: | | |
| Weighted-average shares used to compute net income per share attributable to common stockholders, basic | 6,344 | 6,564 |
| Dilutive effect of stock options | 1,222 | 1,703 |
| Dilutive effect of restricted stock units | 124 | 160 |
| Weighted-average shares used to compute net income per share attributable to common stockholders, diluted | <u>7,690</u> | <u>8,427</u> |
| Net income per share attributable to common stockholders: | | |
| Basic | <u>\$ 2.58</u> | <u>\$ 3.04</u> |
| Diluted | <u>\$ 2.36</u> | <u>\$ 2.37</u> |

The following outstanding shares of common stock equivalents were excluded from the computation of diluted net income per share attributable to common stockholders for the periods presented because including them would have been anti-dilutive (presented on a weighted-average basis):

| | Nine Months Ended September 30, | |
|--|------------------------------------|-------|
| | 2015 | 2016 |
| Convertible preferred stock (on an as-converted basis) | 8,076 | 8,076 |
| Options to purchase common stock | 318 | 488 |

Unaudited Pro Forma Net Income per Share

The unaudited pro forma basic and diluted net income per share attributable to common stockholders for the nine months ended September 30, 2016 have been prepared to give effect, upon the closing of a qualified initial

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public offering, to (i) the automatic conversion of all outstanding shares of convertible preferred stock into shares of common stock as if the proposed initial public offering had occurred on January 1, 2015 and (ii) the number of shares offered in the initial public offering whose proceeds are deemed necessary, based on an assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, to pay (a) the special cash dividend of \$43,148 declared by the Company's board of directors on June 17, 2016 and (b) the special cash dividend of \$ declared by the Company's board of directors on because the Company's earnings for the twelve months ended September 30, 2016 were not sufficient to fully fund those dividends.

The unaudited pro forma earnings per share data have been presented in accordance with Securities and Exchange Commission SAB Topic 1B.3. In accordance with SAB Topic 1B.3, dividends declared at or in the year preceding an initial public offering are deemed to be in contemplation of the offering with the intention of repayment out of the offering proceeds to the extent that the amount of dividends exceeded the amount of earnings during the twelve-month period ended on the balance sheet date. For the twelve months ended September 30, 2016, the Company's net income was \$75,140 (unaudited).

Unaudited pro forma basic and diluted net income per share attributable to common stockholders was calculated as follows:

| | Nine Months Ended September 30, 2016 |
|--|---|
| Numerator: | |
| Net income | \$ 48,817 |
| Denominator: | |
| Weighted-average shares used to compute net income per share attributable to common stockholders, basic | 6,564 |
| Pro forma adjustment to reflect assumed conversion of convertible preferred stock upon closing of initial public offering | 8,076 |
| Pro forma adjustments to reflect the number of shares whose proceeds are deemed necessary to pay dividends in excess of earnings | _____ |
| Pro forma weighted-average shares used in computing pro forma net income per share attributable to common stockholders, basic | _____ |
| Dilutive effect of stock options | 1,703 |
| Dilutive effect of restricted stock units | 160 |
| Pro forma weighted-average shares used in computing pro forma net income per share attributable to common stockholders, diluted | _____ |
| Pro forma net income per share attributable to common stockholders: | |
| Basic | \$ _____ |
| Diluted | \$ _____ |

13. Segment Information

The Company operates as one operating segment. Operating segments are defined as components of an enterprise for which separate financial information is regularly evaluated by the Company's chief operating

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decision maker, or decision-making group in deciding how to allocate resources and assess performance. The Company has determined that its chief operating decision maker is its President and Chief Executive Officer. The Company's chief operating decision maker reviews the Company's financial information on a consolidated basis for purposes of allocating resources and assessing financial performance. Since the Company operates as one operating segment, all required financial segment information can be found in these condensed consolidated financial statements.

The following table summarizes the Company's revenue based on the customer's location, as determined by the customer's shipping address:

| | Nine Months Ended September 30, | |
|--|------------------------------------|--------------------------|
| | 2015 | 2016 |
| North America: | | |
| United States | \$ 44,711 | \$ 77,790 |
| Canada | 109 | 50,508 |
| Total North America | <u>44,820</u> | <u>128,298</u> |
| Latin America: | | |
| Mexico | 35,050 | 10,825 |
| Other | 13,586 | 22,218 |
| Total Latin America | <u>48,636</u> | <u>33,043</u> |
| Europe, Middle East and Africa: | | |
| Belgium | 23,862 | 702 |
| Other | 26,489 | 26,675 |
| Total Europe, Middle East and Africa | <u>50,351</u> | <u>27,377</u> |
| Asia-Pacific: | | |
| Japan | 20,997 | 12,247 |
| Other | 17,739 | 15,937 |
| Total Asia-Pacific | <u>38,736</u> | <u>28,184</u> |
| Total revenue(1) | <u><u>\$ 182,543</u></u> | <u><u>\$ 216,902</u></u> |

(1) Other than the United States, Canada, Mexico, Belgium and Japan, no individual countries represented 10% or more of the Company's total revenue for each of the periods presented in the table.

The Company's property and equipment, net by location was as follows:

| | December 31, 2015 | September 30, 2016 |
|-----------------------------------|-------------------------|-------------------------|
| United States | \$ 18,465 | \$ 20,881 |
| China | 2,460 | 2,632 |
| Other | 1,403 | 1,276 |
| Total property and equipment, net | <u><u>\$ 22,328</u></u> | <u><u>\$ 24,789</u></u> |

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14. Related Parties

Sales to Liberty Global Ventures Holding B.V. and its Affiliates

Liberty Global Ventures Holding B.V. is a principal stockholder of the Company through its ownership of Series B Preferred Stock. Liberty Global Ventures Holding B.V. is an affiliate of Liberty Global Services B.V. and its affiliates, which are customers of the Company. During the nine months ended September 30, 2015 and 2016, the Company recognized revenue of \$35,886 and \$16,332, respectively, from transactions with these customers and amounts received in cash from these customers totaled \$34,869 and \$24,981, respectively. As of December 31, 2015 and September 30, 2016, amounts due from Liberty Global Services B.V. and its affiliates totaled \$12,367 and \$4,047, respectively.

Consulting Agreement with Bill Styslinger

In March 2012, the Company entered into a consulting agreement with Bill Styslinger, a member of its board of directors, for the provision of sales management, corporate strategy and advisory services. The Company extended the term of the consulting agreement, which was initially scheduled to expire on January 31, 2014, on two occasions, and it will expire on December 31, 2016. During the nine months ended September 30, 2015 and 2016, the Company recognized sales and marketing expenses of \$228 and \$242, respectively, and paid Mr. Styslinger \$466 and \$379, respectively, for his services under this consulting agreement. As of December 31, 2015 and September 30, 2016, amounts due to Mr. Styslinger for his consulting services totaled \$137 and \$0, respectively.

Employment of Rongke Xie

Rongke Xie, who serves as Deputy General Manager of Guangzhou Casa Communication Technology LTD, one of the Company's subsidiaries, is the sister of Lucy Xie, the Company's Senior Vice President of Operations and a member of its board of directors. During the nine months ended September 30, 2015 and 2016, the Company paid Rongke Xie \$124 and \$130, respectively, for her services as an employee of the Company.

15. Commitments and Contingencies

Operating Leases

The Company leases manufacturing and office spaces in the United States, China and Ireland under non-cancelable operating leases, which expire at various dates through 2021. Rent expense was \$634 and \$363 for the nine months ended September 30, 2015 and 2016, respectively. Rent expense is recorded on a straight-line basis, and, as a result, as of December 31, 2015 and September 30, 2016, the Company had a deferred rent liability of \$64 and \$55, respectively, which is included in accrued expenses and other current liabilities in the accompanying condensed consolidated balance sheets.

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Future minimum lease payments under non-cancelable operating leases as of September 30, 2016 were as follows:

| <u>Year Ending December 31,</u> | |
|---------------------------------|----------------|
| 2016 | \$ 83 |
| 2017 | 585 |
| 2018 | 764 |
| 2019 | 515 |
| 2020 | 508 |
| Thereafter | 322 |
| | <u>\$2,777</u> |

In January 2016, the Company entered into a lease for 9,000 square feet of manufacturing space in China through 2019. In September 2016, the Company entered into a lease for 29,880 square feet of manufacturing, warehouse and office space in Ireland through 2026, with a right to terminate in 2021. The minimum lease payments of these two new leases are included in the table above.

Indemnification

The Company has, in the ordinary course of business, agreed to defend and indemnify certain customers against third-party claims asserting infringement of certain intellectual property rights, which may include patents, copyrights, trademarks or trade secrets.

As permitted under Delaware law, the Company indemnifies its officers, directors and employees for certain events or occurrences that happen by reason of their relationship with or position held at the Company.

As of December 31, 2015 and September 30, 2016, the Company had not experienced any losses related to these indemnification obligations and no material claims were outstanding. The Company does not expect significant claims related to these indemnification obligations and, consequently, concluded that the fair value of these obligations is negligible, and no related liabilities were recorded in the condensed consolidated financial statements.

Litigation

From time to time, and in the ordinary course of business, the Company may be subject to various claims, charges and litigation. As of September 30, 2016, the Company did not have any pending claims, charges or litigation that it expects would have a material adverse effect on its consolidated financial position, results of operations or cash flows.

16. Subsequent Events

For its interim condensed consolidated financial statements as of September 30, 2016 and for the nine months then ended, the Company evaluated subsequent events through December 13, 2016, the date on which those financial statements were issued.



PART II**INFORMATION NOT REQUIRED IN PROSPECTUS****Item 13. Other Expenses of Issuance and Distribution.**

The following table indicates the expenses to be incurred in connection with the offering described in this registration statement, other than underwriting discounts and commissions, all of which will be paid by us. All amounts are estimated except the SEC registration fee, the Financial Industry Regulatory Authority, Inc., or FINRA, filing fee and the Nasdaq Global Market listing fee.

| | <u>Amount</u> |
|--|---------------|
| SEC registration fee | \$ * |
| FINRA filing fee | * |
| Nasdaq Global Market listing fee | * |
| Legal fees and expenses | * |
| Accountants' fees and expenses | * |
| Printing and engraving expenses | * |
| Blue Sky fees and expenses | * |
| Transfer Agent's and registrar fees and expenses | * |
| Miscellaneous expenses | * |
| Total expenses | <u>\$ *</u> |

* To be filed by amendment.

Item 14. Indemnification of Directors and Officers.

Section 102 of the General Corporation Law of the State of Delaware permits a corporation to eliminate the personal liability of directors of a corporation to the corporation or its stockholders for monetary damages for a breach of fiduciary duty as a director, except where the director breached his duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit. Our restated certificate of incorporation that will be effective upon the closing of this offering provides that no director of the Registrant shall be personally liable to it or its stockholders for monetary damages for any breach of fiduciary duty as a director, notwithstanding any provision of law imposing such liability, except to the extent that the General Corporation Law of the State of Delaware prohibits the elimination or limitation of liability of directors for breaches of fiduciary duty.

Section 145 of the General Corporation Law of the State of Delaware provides that a corporation has the power to indemnify a director, officer, employee, or agent of the corporation, or a person serving at the request of the corporation for another corporation, partnership, joint venture, trust or other enterprise in related capacities against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with an action, suit or proceeding to which he was or is a party or is threatened to be made a party to any threatened, ending or completed action, suit or proceeding by reason of such position, if such person acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful, except that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

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Our restated certificate of incorporation that will be effective upon the closing of this offering provides that we will indemnify each person who was or is a party or threatened to be made a party to any threatened, pending or completed action, suit or proceeding (other than an action by or in the right of us) by reason of the fact that he or she is or was, or has agreed to become, a director or officer, or is or was serving, or has agreed to serve, at our request as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise (all such persons being referred to as an "Indemnitee"), or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding and any appeal therefrom, if such Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, our best interests, and, with respect to any criminal action or proceeding, he or she had no reasonable cause to believe his or her conduct was unlawful.

Our restated certificate of incorporation that will be effective upon the closing of this offering provides that we will indemnify any Indemnitee who was or is a party to an action or suit by or in the right of us to procure a judgment in our favor by reason of the fact that the Indemnitee is or was, or has agreed to become, a director or officer, or is or was serving, or has agreed to serve, at our request as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise, or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees) and, to the extent permitted by law, amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding, and any appeal therefrom, if the Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, our best interests, except that no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to us, unless a court determines that, despite such adjudication but in view of all of the circumstances, he or she is entitled to indemnification of such expenses. Notwithstanding the foregoing, to the extent that any Indemnitee has been successful, on the merits or otherwise, he or she will be indemnified by us against all expenses (including attorneys' fees) actually and reasonably incurred in connection therewith. Expenses must be advanced to an Indemnitee under certain circumstances.

We intend to enter into indemnification agreements with each of our directors and executive officers. These indemnification agreements may require us, among other things, to indemnify each such director or executive officer for some expenses, including attorneys' fees, judgments, fines and settlement amounts incurred by him or her in any action or proceeding arising out of his or her service as one of our directors or executive officers.

We maintain a general liability insurance policy that covers certain liabilities of directors and officers of our corporation arising out of claims based on acts or omissions in their capacities as directors or officers.

In any underwriting agreement we enter into in connection with the sale of common stock being registered hereby, the underwriters will agree to indemnify, under certain conditions, us, our directors, our officers and persons who control us within the meaning of the Securities Act of 1933, as amended, against certain liabilities.

Item 15. Recent Sales of Unregistered Securities.

Set forth below is information regarding shares of capital stock issued by us since December 1, 2013, that were not registered under the Securities Act. Also included is the consideration received by us for such shares and information relating to the section of the Securities Act, or rule of the Securities and Exchange Commission, under which exemption from registration was claimed.

- (1) Under our 2011 Stock Incentive Plan, we granted stock options to purchase an aggregate of 1,582,658 shares of our common stock, with exercise prices ranging from \$11.47 to \$54.22 per share. 560,405 shares of common stock have been issued pursuant to the exercise of stock options for aggregate consideration of \$4,705,760.
- (2) Under our 2011 Stock Incentive Plan, we granted an aggregate of 469,571 restricted stock units to be settled in shares of our common stock to certain of our employees.

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- (3) Under our 2003 Stock Incentive Plan, we issued 25,000 shares of common stock upon the exercise of stock options at a weighted-average exercise price of \$1.35 per share, for aggregate consideration of \$18,500.
- (4) We issued 528,580 shares of our common stock to Liberty Global Ventures Holding B.V. on March 31, 2014, upon Liberty Global Ventures Holding B.V.'s exercise of outstanding warrants, for aggregate consideration of \$2,369,000.

None of the foregoing transactions involved any underwriters, underwriting discounts or commissions, or any public offering. The stock options and the common stock issuable upon the exercise of such options, the restricted stock units and the restricted common stock described in paragraph (1) of this Item 15 were issued under our 2011 Stock Incentive Plan in reliance on the exemption provided by Rule 701 promulgated under the Securities Act. Each of the recipients of securities in these transactions had adequate access, through employment, business or other relationships, to information about us. The sales of these securities were made without any general solicitation or advertising.

Item 16. Exhibits and Financial Statement Schedules.

(a) Exhibits.

The exhibits to the registration statement of which this prospectus is a part are listed in the Exhibit Index attached hereto and incorporated by reference herein.

(b) Financial Statement Schedules.

No financial statement schedules have been submitted because they are not required or are not applicable or because the information required is included in the consolidated financial statements or the notes thereto.

Item 17. Undertakings.

The undersigned registrant hereby undertakes to provide to the underwriter, at the closing specified in the underwriting agreement, certificates in such denominations and registered in such names as required by the underwriter to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned hereby undertakes that:

- (1) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.
- (2) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the Town of Andover, Commonwealth of Massachusetts, on this day of , 2017.

CASA SYSTEMS, INC.

By: _____
Jerry Guo
President, Chief Executive Officer and Chairman

SIGNATURES AND POWER OF ATTORNEY

We, the undersigned officers and directors of Casa Systems, Inc., hereby severally constitute and appoint Jerry Guo, Gary Hall and Todd Keebaugh, and each of them singly (with full power to each of them to act alone), our true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution in each of them for him and in his name, place and stead, and in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement (and any other registration statement for the same offering that is to be effective upon filing pursuant to Rule 462(b) under the Securities Act of 1933), and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite or necessary to be done in and about the premises, as full to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or their or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities held on the dates indicated.

| <u>Signature</u> | <u>Title</u> | <u>Date</u> |
|--------------------------|--|-------------|
| _____ Jerry Guo | President, Chief Executive Officer and Chairman (Principal Executive Officer) | , 2017 |
| _____ Gary Hall | Chief Financial Officer (Principal Financial and Accounting Officer) | , 2017 |
| _____ Lucy Xie | Senior Vice President of Operations and Director | , 2017 |
| _____ Weidong Chen | Chief Technology Officer and Director | , 2017 |
| _____ Bruce R. Evans | Director | , 2017 |
| _____ Bill Styslinger | Director | , 2017 |

EXHIBIT INDEX

Some of the agreements included as exhibits to this registration statement contain representations and warranties by the parties to the applicable agreement. These representations and warranties were made solely for the benefit of the other parties to the applicable agreement and (1) were not intended to be treated as categorical statements of fact, but rather as a way of allocating the risk to one of the parties if those statements prove to be inaccurate; (2) may have been qualified in such agreement by disclosures that were made to the other party in connection with the negotiation of the applicable agreement; (3) may apply contract standards of “materiality” that are different from “materiality” under the applicable securities laws; and (4) were made only as of the date of the applicable agreement or such other date or dates as may be specified in the agreement.

The Registrant acknowledges that, notwithstanding the inclusion of the foregoing cautionary statements, it is responsible for considering whether additional specific disclosures of material information regarding contractual provisions are required to make the statements in this registration statement not misleading.

| <u>Exhibit</u> | <u>Description</u> |
|----------------|---|
| 1.1* | Form of Underwriting Agreement |
| 3.1 | Certificate of Incorporation of the Registrant |
| 3.2 | Bylaws of the Registrant |
| 3.3* | Form of Restated Certificate of Incorporation of the Registrant (to be effective immediately prior to the closing of this offering) |
| 3.4* | Form of Amended and Restated Bylaws of the Registrant (to be effective immediately prior to the closing of this offering) |
| 4.1* | Specimen stock certificate evidencing shares of common stock |
| 5.1* | Opinion of Wilmer Cutler Pickering Hale and Dorr LLP |
| 10.1 | Form of Indemnification Agreement for Jerry Guo, Lucy Xie, Weidong Chen and Bruce Evans |
| 10.2 | 2003 Stock Incentive Plan, as amended |
| 10.3 | Form of Incentive Stock Option Agreement under 2003 Stock Incentive Plan |
| 10.4 | Form of Non-statutory Stock Option Agreement under 2003 Stock Incentive Plan |
| 10.5 | Form of Restricted Stock Agreement under 2003 Stock Incentive Plan |
| 10.6 | 2011 Stock Incentive Plan, as amended |
| 10.7 | Form of Incentive Stock Option Agreement under 2011 Stock Incentive Plan |
| 10.8 | Form of Non-statutory Stock Option Agreement under 2011 Stock Incentive Plan |
| 10.9 | Form of Restricted Stock Agreement under 2011 Stock Incentive Plan |
| 10.10 | Form of Restricted Stock Unit Agreement under 2011 Stock Incentive Plan |
| 10.11* | 2017 Stock Incentive Plan |
| 10.12* | Form of Incentive Stock Option Agreement under 2017 Stock Incentive Plan |
| 10.13* | Form of Non-statutory Stock Option Agreement under 2017 Stock Incentive Plan |
| 10.14 | Offer Letter between the Registrant and Gary Hall, dated May 25, 2011 |
| 10.15 | Offer Letter between the Registrant and Abraham Pucheril, dated August 18, 2012 |
| 10.16 | Consulting Agreement between the Registrant and Bill Styslinger, dated March 5, 2012, as amended |
| 10.17 | Mortgage, Security Agreement and Financing Statement, dated July 1, 2015, between Casa Properties LLC and Middlesex Savings Bank |

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| <u>Exhibit</u> | <u>Description</u> |
|----------------|---|
| 10.18 | Registration Rights Agreement, dated April 26, 2010, between the Registrant and the investors party thereto |
| 10.19* | Revolving Credit Agreement, dated April 11, 2014, between the Registrant and Bank of America, N.A., as amended |
| 10.20* | Master Purchase Agreement, dated October 31, 2013, between Time Warner Cable Enterprises LLC and Casa Systems, Inc., as amended |
| 21.1 | List of Subsidiaries |
| 23.1* | Consent of PricewaterhouseCoopers LLP, independent registered public accounting firm |
| 23.2* | Consent of Wilmer Cutler Pickering Hale and Dorr LLP (included in Exhibit 5.1) |
| 24.1* | Powers of Attorney (included on signature page) |

* To be filed by amendment.

State of Delaware
Secretary of State
Division of Corporations
Delivered 03:03 PM 04/28/2003
FILED 02:58 PM 04/28/2003
SRV 030273818 - 3630717 FILE

AMENDED AND RESTATED CERTIFICATE OF INCORPORATION
OF
CASA SYSTEMS, INC.

Casa Systems, Inc. (hereinafter called the "Corporation"), a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware, does hereby certify as follows:

1. The name of the corporation is Casa Systems, Inc. The original Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on February 28, 2003.

2. The Corporation has not received any payment for any of its stock. This Amended and Restated Certificate of Incorporation was duly adopted by unanimous written consent of the board of directors of the Corporation in accordance with the applicable provisions of Sections 141, 241 and 245 of the General Corporation Law of the State of Delaware.

3. This Amended and Restated Certificate of Incorporation restates, integrates and amends the Certificate of Incorporation, and the text of the Certificate of Incorporation is hereby amended and restated to read as herein set forth in full:

FIRST. The name of the Corporation is: Casa Systems, Inc.

SECOND. The address of its registered office in the State of Delaware is Corporation Trust Center, 1209 Orange Street, in the City of Wilmington, County of New Castle. The name of its registered agent at such address is The Corporation Trust Company.

THIRD. The nature of the business or purposes to be conducted or promoted by the Corporation is as follows:

To engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of the State of Delaware.

FOURTH. The total number of shares of stock which the Corporation shall have authority to issue is 5,000,000 shares of Common Stock, \$.001 par value per share.

The number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote, irrespective of the provisions of Section 242(b)(2) of the General Corporation Law of Delaware.

FIFTH. In furtherance of and not in limitation of powers conferred by statute, it is further provided:

1. Election of directors need not be by written ballot.

2. The Board of Directors is expressly authorized to adopt, amend or repeal the By-Laws of the Corporation.

SIXTH: Except to the extent that the General Corporation Law of Delaware prohibits the elimination or limitation of liability of directors for breaches of fiduciary duty, no director of the Corporation shall be personally liable to the Corporation or its stockholders for monetary damages for any breach of fiduciary duty as a director, notwithstanding any provision of law imposing such liability. No amendment to or repeal of this provision shall apply to or have any effect on the liability or alleged liability of any director of the Corporation for or with respect to any acts or omissions of such director occurring prior to such amendment.

SEVENTH: The Corporation shall provide indemnification as follows:

1. Actions, Suits and Proceedings Other than by or in the Right of the Corporation. The Corporation shall indemnify each person who was or is a party or threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the Corporation) by reason of the fact that he or she is or was, or has agreed to become, a director or officer of the Corporation, or is or was serving, or has agreed to serve, at the request of the Corporation, as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise (including any employee benefit plan) (all such persons being referred to hereafter as an "Indemnitee"), or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by or on behalf of Indemnitee in connection with such action, suit or proceeding and any appeal therefrom, if Indemnitee acted in good faith and in a manner which Indemnitee reasonably believed to be in, or not opposed to, the best interests of the Corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful. The termination of any action, suit or proceeding by judgment, order, settlement, conviction or upon a plea of nolo contendere or its equivalent, shall not, of itself, create a presumption that Indemnitee did not act in good faith and in a manner which Indemnitee reasonably believed to be in, or not opposed to, the best interests of the Corporation, and, with respect to any criminal action or proceeding, had reasonable cause to believe that his or her conduct was unlawful.
2. Actions or Suits by or in the Right of the Corporation. The Corporation shall indemnify any Indemnitee who was or is a party to or threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the Corporation to procure a judgment in its favor by reason of the fact that Indemnitee is or was, or has agreed to become, a director or officer of the Corporation, or is or was serving, or has agreed to serve, at the request of the Corporation, as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise (including any employee benefit plan), or by reason of any action

alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees) and, to the extent permitted by law, amounts paid in settlement actually and reasonably incurred by or on behalf of Indemnitee in connection with such action, suit or proceeding and any appeal therefrom, if Indemnitee acted in good faith and in a manner which Indemnitee reasonably believed to be in, or not opposed to, the best interests of the Corporation, except that no indemnification shall be made under the Section 2 in respect of any claim, issue or matter as to which Indemnitee shall have been adjudged to be liable to the Corporation, unless, and only to the extent, that the Court of Chancery of Delaware shall determine upon application that, despite the adjudication of such liability but in view of all the circumstances of the case, Indemnitee is fairly and reasonably entitled to indemnity for such expenses (including attorneys' fees) which the Court of Chancery of Delaware shall deem proper.

3. Indemnification for Expenses of Successful Party. Notwithstanding any other provisions of this Article, to the extent that an Indemnitee has been successful, on the merits or otherwise, in defense of any action, suit or proceeding referred to in Sections 1 and 2 of this Article SEVENTH, or in defense of any claim, issue or matter therein, or on appeal from any such action, suit or proceeding, Indemnitee shall be indemnified against all expenses (including attorneys' fees) actually and reasonably incurred by or on behalf of Indemnitee in connection therewith.
4. Notification and Defense of Claim. As a condition precedent to an Indemnitee's right to be indemnified, such Indemnitee must notify the Corporation in writing as soon as practicable of any action, suit, proceeding or investigation involving such Indemnitee for which indemnity will or could be sought. With respect to any action, suit, proceeding or investigation of which the Corporation is so notified, the Corporation will be entitled to participate therein at its own expense and/or to assume the defense thereof at its own expense, with legal counsel reasonably acceptable to Indemnitee. After notice from the Corporation to Indemnitee of its election so to assume such defense, the Corporation shall not be liable to Indemnitee for any legal or other expenses subsequently incurred by Indemnitee in connection with such action, suit, proceeding or investigation, other than as provided below in this Section 4. Indemnitee shall have the right to employ his or her own counsel in connection with such action, suit, proceeding or investigation, but the fees and expenses of such counsel incurred after notice from the Corporation of its assumption of the defense thereof shall be at the expense of Indemnitee unless (i) the employment of counsel by Indemnitee has been authorized by the Corporation, (ii) counsel to Indemnitee shall have reasonably concluded that there may be a conflict of interest or position on any significant issue between the Corporation and Indemnitee in the conduct of the defense of such action, suit, proceeding or investigation or (iii) the Corporation shall not in fact have employed counsel to assume the defense of such action, suit, proceeding or investigation, in each of which cases the fees and expenses of counsel for Indemnitee shall be at the expense of the Corporation, except as otherwise expressly provided by this Article. The Corporation shall not be entitled, without the consent of Indemnitee, to assume the defense of any claim brought by or in

the right of the Corporation or as to which counsel for Indemnitee shall have reasonably made the conclusion provided for in clause (ii) above. The Corporation shall not be required to indemnify Indemnitee under this Article SEVENTH for any amounts paid in settlement of any action, suit, proceeding or investigation effected without its written consent. The Corporation shall not settle any action, suit, proceeding or investigation in any manner which would impose any penalty or limitation on Indemnitee without Indemnitee's written consent. Neither the Corporation nor Indemnitee will unreasonably withhold or delay its consent to any proposed settlement.

5. Advance of Expenses. Subject to the provisions of Section 6 of this Article SEVENTH, in the event that the Corporation does not assume the defense pursuant to Section 4 of this Article SEVENTH of any action, suit, proceeding or investigation of which the Corporation receives notice under this Article, any expenses (including attorneys' fees) incurred by or on behalf of an Indemnitee in defending an action, suit, proceeding or investigation or any appeal therefrom shall be paid by the Corporation in advance of the final disposition of such matter; provided, however, that the payment of such expenses incurred by or on behalf of Indemnitee in advance of the final disposition of such matter shall be made only upon receipt of an undertaking by or on behalf of Indemnitee to repay all amounts so advanced in the event that it shall ultimately be determined that Indemnitee is not entitled to be indemnified by the Corporation as authorized in this Article; and further provided that no such advancement of expenses shall be made under this Article SEVENTH if it is determined (in the manner described in Section 6) that (i) Indemnitee did not act in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the best interests of the Corporation, or (ii) with respect to any criminal action or proceeding, Indemnitee had reasonable cause to believe his or her conduct was unlawful. Such undertaking shall be accepted without reference to the financial ability of Indemnitee to make such repayment.
6. Procedure for Indemnification. In order to obtain indemnification or advancement of expenses pursuant to Section 1, 2, 3 or 5 of this Article SEVENTH, an Indemnitee shall submit to the Corporation a written request. Any such advancement of expenses shall be made promptly, and in any event within 30 days after receipt by the Corporation of the written request of Indemnitee, unless the Corporation determines within such 30-day period that Indemnitee did not meet the applicable standard of conduct set forth in Section 1, 2 or 5 of this Article SEVENTH, as the case may be. Any such indemnification, unless ordered by a court, shall be made with respect to requests under Section 1 or 2 only as authorized in the specific case upon a determination by the Corporation that the indemnification of Indemnitee is proper because Indemnitee has met the applicable standard of conduct set forth in Section 1 or 2, as the case may be. Such determination shall be made in each instance (a) by a majority vote of the directors of the Corporation consisting of persons who are not at that time parties to the action, suit or proceeding in question ("disinterested directors"), whether or not a quorum, (b) by a committee of disinterested directors designated by majority

vote of disinterested directors, whether or not a quorum, (c) if there are no disinterested directors, or if the disinterested directors so direct, by independent legal counsel (who may, to the extent permitted by law, be regular legal counsel to the Corporation) in a written opinion, or (d) by the stockholders of the Corporation.

7. **Remedies.** The right to indemnification or advancement of expenses as granted by this Article shall be enforceable by Indemnitee in any court of competent jurisdiction. Neither the failure of the Corporation to have made a determination prior to the commencement of such action that indemnification is proper in the circumstances because Indemnitee has met the applicable standard of conduct, nor an actual determination by the Corporation pursuant to Section 6 of this Article SEVENTH that Indemnitee has not met such applicable standard of conduct, shall be a defense to the action or create a presumption that Indemnitee has not met the applicable standard of conduct. Indemnitee's expenses (including attorneys' fees) reasonably incurred in connection with successfully establishing Indemnitee's right to indemnification, in whole or in part, in any such proceeding shall also be indemnified by the Corporation.
8. **Limitations.** Notwithstanding anything to the contrary in this Article, except as set forth in Section 7 of the Article SEVENTH, the Corporation shall not indemnify an Indemnitee pursuant to this Article SEVENTH in connection with a proceeding (or part thereof) initiated by such Indemnitee unless the initiation thereof was approved by the Board of Directors of the Corporation. Notwithstanding anything to the contrary in this Article, the Corporation shall not indemnify an Indemnitee to the extent such Indemnitee is reimbursed from the proceeds of insurance, and in the event the Corporation makes any indemnification payments to an Indemnitee and such Indemnitee is subsequently reimbursed from the proceeds of insurance, Indemnitee shall promptly refund such indemnification payments to the Corporation to the extent of such insurance reimbursement.
9. **Subsequent Amendment.** No amendment, termination or repeal of this Article or of the relevant provisions of the General Corporation Law of Delaware or any other applicable laws shall affect or diminish in any way the rights of any Indemnitee to indemnification under the provisions hereof with respect to any action, suit, proceeding or investigation arising out of or relating to any actions, transactions or facts occurring prior to the final adoption of such amendment, termination or repeal.

EIGHTH: The Corporation reserves the right to amend, alter, change or repeal any provision contained in this Certificate of Incorporation, in the manner now or hereafter prescribed by statute and this Certificate of Incorporation, and all rights conferred upon stockholders herein are granted subject to this reservation.

IN WITNESS WHEREOF, the Corporation has caused this Amended and Restated Certificate of Incorporation to be signed by its President this 28th day of April, 2003.

CASA SYSTEMS, INC.

/s/ Jerry Guo

Jerry Guo
President

CERTIFICATE OF AMENDMENT
OF
AMENDED AND RESTATED CERTIFICATE OF INCORPORATION
OF
CASA SYSTEMS, INC.

Casa Systems, Inc. (the "Corporation"), organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the "General Corporation Law"), does hereby certify as follows:

The Board of Directors of the Corporation duly adopted a resolution, pursuant to Sections 141(f) and 242 of the General Corporation Law, setting forth an amendment to the Amended and Restated Certificate of Incorporation of the Corporation and declaring said amendment to be advisable. The stockholders of the Corporation duly approved said proposed amendment by written consent in accordance with Sections 228 and 242 of the General Corporation Law. The resolution setting forth the amendment is as follows:

RESOLVED: That Article FOURTH of the Amended and Restated Certificate of Incorporation of the Corporation be and hereby is deleted in its entirety and the following Article FOURTH is inserted in lieu thereof:

"The total number of shares of stock which the Corporation shall have authority to issue is 10,000,000 shares of Common Stock, \$.001 par value per share."

IN WITNESS WHEREOF, the Corporation has caused this Certificate of Amendment to be signed by its President this 26th day of April, 2004.

CASA SYSTEMS, INC.

By: /s/ Jerry Guo

Jerry Guo
President

CERTIFICATE OF AMENDMENT
OF
AMENDED AND RESTATED CERTIFICATE OF INCORPORATION
OF
CASA SYSTEMS, INC.

Casa Systems, Inc. (the "Corporation"), organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the "General Corporation Law"), does hereby certify as follows:

The Board of Directors of the Corporation duly adopted a resolution, pursuant to Sections 141(f) and 242 of the General Corporation Law, setting forth an amendment to the Amended and Restated Certificate of Incorporation, as amended (the "Amended and Restated Certificate of Incorporation"), of the Corporation and declaring said amendment to be advisable. The stockholders of the Corporation duly approved said proposed amendment by written consent in accordance with Sections 228 and 242 of the General Corporation Law. The resolution setting forth the amendment is as follows:

RESOLVED: That Article FOURTH of the Amended and Restated Certificate of Incorporation of the Corporation be and hereby is deleted in its entirety and the following Article FOURTH is inserted in lieu thereof:

"FOURTH. The Corporation is authorized to have two classes of shares, designated as Common Stock and Preferred Stock. The total number of shares of Common Stock which the Corporation is authorized to issue is 7,300,000 shares, and the par value of each of the shares of Common Stock is one tenth of one cent (\$.001). The total number of shares of Preferred Stock which the Corporation is authorized to issue is 1,290,679 shares, and the par value of each of the shares of Preferred Stock is one tenth of one cent (\$.001). A total of 1,290,679 shares of Preferred Stock, par value \$.001 per share, shall be designated the "Series A Convertible Preferred Stock." The Series A Convertible Preferred Stock is sometimes referred to herein as the "Preferred Stock."

1. Voting. Except as may be otherwise provided in these terms of Preferred Stock or by law, the Series A Convertible Preferred Stock shall vote together with all other classes and series of stock of the Corporation as a single class on all actions to be taken by the stockholders of the Corporation. Each share of Series A Convertible Preferred Stock shall entitle the holder thereof to such number of votes per share on each

such action as shall equal the number of shares of Common Stock (including fractions of a share) into which each share of Series A Convertible Preferred Stock is then convertible.

2. Dividends.

2A. Dividends. In the event the Board of Directors of the Corporation shall declare a dividend (other than a dividend payable in Common Stock) payable upon the then outstanding shares of the Common Stock of the Corporation, the Board of Directors shall declare at the same time a dividend upon the then outstanding shares of Series A Convertible Preferred Stock, payable at the same time as the dividend paid on the Common Stock, in an amount equal to the amount of dividends per share of Series A Convertible Preferred Stock as would have been payable on the largest number of whole shares of Common Stock into which all shares of Series A Convertible Preferred Stock held by each holder thereof would be converted if such Series A Convertible Preferred Stock had been converted to Common Stock pursuant to the provisions of Paragraph 5 hereof as of the record date for the determination of holders of Common Stock entitled to receive such dividends. All dividends declared upon the Preferred Stock pursuant to this Paragraph 2A shall be declared and paid pro rata per share.

2B. Accruing Dividends. From and after the date of the issuance of any shares of Series A Convertible Preferred Stock, the holders of such shares of the Series A Convertible Preferred Stock shall be entitled to receive, out of funds legally available therefor, when and if declared by the Board of Directors, dividends at the rate per annum of \$.3832 per share (the "Accruing Dividends"). Accruing Dividends shall accrue from day to day, whether or not earned or declared, and shall be cumulative; provided however, that except as provided in paragraph 3, the Corporation shall be under no obligation to pay such Accruing Dividends unless so declared by the Board of Directors.

3. Liquidation, Dissolution and Winding-up.

3A. Liquidation. Upon any liquidation, dissolution or winding up of the Corporation (a "Liquidation Event"), whether voluntary or involuntary, the holders of the shares of Series A Convertible Preferred Stock shall be paid an amount equal to \$6.3868 per share (subject to appropriate adjustment to reflect any stock split, stock dividend, reverse stock split or similar corporate event affecting the Series A Convertible Preferred Stock) plus, in the case of each share, an amount equal to all accrued and unpaid dividends thereon (whether or not declared) computed to the date payment thereof is made available, together with payment to any class of stock ranking equally with the Series A Convertible Preferred Stock, and before any payment shall be made to the holders of any stock ranking on liquidation junior to the Series A Convertible Preferred Stock. If upon any Liquidation Event, the assets to be distributed to the holders of the Series A Convertible Preferred Stock shall be insufficient to permit payment to such stockholders of the full preferential amounts aforesaid, then all of the assets of the Corporation available for distribution to holders of the Preferred Stock shall be distributed to such holders of the Preferred Stock pro rata, so that each holder receives

that portion of the assets available for distribution as the amount of the full liquidation preference to which such holder would otherwise be entitled bears to the amount of the full liquidation preference to which all holders of Series A Convertible Preferred Stock would otherwise be entitled pursuant to this paragraph 3.

3B. Upon any Liquidation Event, immediately after the holders of Series A Convertible Preferred Stock and holders of any class of stock ranking equally with the Series A Convertible Preferred Stock have been paid in full pursuant to subsection 3A above, the remaining net assets of the Corporation available for distribution shall be distributed ratably among the holders of the shares of Common Stock.

3C. Written notice of such liquidation, dissolution or winding up, stating a payment date and the place where said payments shall be made, shall be given by mail, postage prepaid, or by facsimile to non-U.S. residents, not less than 20 days prior to the payment date stated therein, to the holders of record of Series A Convertible Preferred Stock, such notice to be addressed to each such holder at its address as shown by the records of the Corporation.

3D. The (x) consolidation or merger of the Corporation into or with any other entity or entities (except a consolidation or merger into a Subsidiary or merger in which the Corporation is the surviving corporation and the holders of the Corporation's voting stock outstanding immediately prior to the transaction constitute the holders of a majority of the voting stock outstanding immediately following the transaction), or (y) the sale or transfer by the Corporation of all or substantially all its assets, or (z) the sale, exchange or transfer by the Corporation's stockholders, in a single transaction or series of related transactions, of capital stock representing a majority of the voting power at elections of directors of the Corporation shall be deemed to be a Liquidation Event within the meaning of the provisions of this paragraph 3 (subject to the provisions of this paragraph 3 and not the provisions of subparagraph 5G hereof, unless subparagraph 5G is elected in the following proviso); provided, however, that the holders of at least a majority in interest of the then outstanding shares of Series A Convertible Preferred Stock shall have the right to elect the benefits of the provisions of subparagraph 5G in lieu of receiving payment in liquidation, dissolution or winding up of the Corporation pursuant to this paragraph 3.

3E. Whenever the distribution provided for in this paragraph 3 shall be payable in property other than cash, the value of such distribution shall be the fair market value of such property as determined in good faith by the Board of Directors of the Corporation.

3F. The Corporation shall not effect any transaction constituting a deemed Liquidation Event pursuant to subparagraph 3D above unless (i) the agreement or plan of merger or consolidation provides that the consideration payable to the stockholders of the Corporation shall be allocated among the holders of capital stock of the Corporation in accordance with subparagraphs 3A and 3B above or (ii) the holders of

at least a majority in interest of the shares of Series A Convertible Preferred Stock specifically consent in writing to the allocation of such consideration in a manner different from that provided in subparagraphs 3A and 3B above.

3G. In the event of a deemed Liquidation Event pursuant to subparagraph 3D above, if the Corporation does not effect a dissolution of the Corporation under the Delaware General Corporation Law within 60 days after such deemed Liquidation Event, then (i) the Corporation shall deliver a written notice to each holder of Series A Convertible Preferred Stock no later than the 60th day after the deemed Liquidation Event advising such holders of their right (and the requirements to be met to secure such right) pursuant to the terms of the following clause (ii) to require the redemption of such shares of Series A Convertible Preferred Stock, and (ii) if the holders of shares of Series A Convertible Preferred Stock representing at least a majority in interest of the votes represented by the then outstanding shares of Preferred Stock so request in a written instrument delivered to the Corporation not later than 75 days after such deemed Liquidation Event, the Corporation shall use the consideration received by the Corporation for such deemed Liquidation Event (net of any liabilities associated with the assets sold, as determined in good faith by the Board of Directors of the Corporation), to the extent legally available therefor (the "Net Proceeds"), to redeem, on the 90th day after such deemed Liquidation Event (the "Liquidation Redemption Date"), all outstanding shares of Series A Convertible Preferred Stock at a price per share equal to the maximum amount payable to each holder of Series A Convertible Preferred Stock pursuant to subparagraph 3A as of the date of the deemed Liquidation Event. If the Net Proceeds are not sufficient to so redeem all outstanding shares of Series A Convertible Preferred Stock, the Corporation shall redeem a pro rata portion (based on the aggregate amounts that would have been payable on redemption of the Series A Convertible Preferred Stock) of each holder's shares of Series A Convertible Preferred Stock out of the Net Proceeds. Prior to the distribution or redemption provided for in this subparagraph 3G, the Corporation shall not expend or dissipate the consideration received for such deemed Liquidation Event, except to discharge expenses incurred in the ordinary course of business.

4. Restrictions. At any time when shares of Series A Convertible Preferred Stock are outstanding, except where the vote or written consent of the holders of a greater number of shares of the Corporation is required by law or by the Certificate of Incorporation, and in addition to any other vote required by law or the Certificate of Incorporation, without the written consent of the holders of at least a majority in interest of the then outstanding shares of Series A Convertible Preferred Stock, given in writing or by vote at a meeting, consenting or voting (as the case may be) separately as one series, the Corporation will not:

(a) Amend, alter or repeal any provision of, or add any provision to, its Certificate of Incorporation (by means of amendment or by merger, consolidation or otherwise) or By-laws to change the rights of the Series A Convertible Preferred Stock or to increase or decrease the number of authorized shares of Series A Convertible Preferred Stock;

(b) Create or authorize the creation of any additional class or series of shares of stock which ranks senior to the Series A Convertible Preferred Stock as to dividends or the distribution of assets on the liquidation, dissolution or winding up of the Corporation, or increase the authorized amount of any additional class or series of shares of stock which ranks senior to such Series A Convertible Preferred Stock as to dividends or the distribution of assets on the liquidation, dissolution or winding up of the Corporation, or create or authorize any obligation or security convertible into shares of any series of Preferred Stock or into shares of any other class or series of stock which ranks senior to such Series A Convertible Preferred Stock as to dividends or the distribution of assets on the liquidation, dissolution or winding up of the Corporation, whether any such creation, authorization or increase shall be by means of amendment to the Certificate of Incorporation or by merger, consolidation or otherwise;

(c) Create, or authorize the creation of, or issue, or authorize the issuance of, any debt security of the Corporation which by its terms is convertible into or exchangeable for any equity security of the Corporation or any security of the Corporation which is a combination of debt and equity, if such equity security ranks senior to the Series A Convertible Preferred Stock as to dividends or the distribution of assets on the liquidation, dissolution or winding up of the Corporation;

(d) Purchase or redeem, or set aside any sums for the purchase or redemption of, or pay any dividend or make any distribution on, any shares of stock other than the Series A Convertible Preferred Stock, except for dividends or other distributions payable on the Common Stock solely in the form of additional shares of Common Stock and other than shares of Common Stock repurchased from employees, advisors, officers, directors or consultants or service providers of the Corporation at the original purchase price thereof (not to exceed an aggregate amount of \$100,000);

(e) Increase the number of Reserved Employee Shares (as defined in paragraph 6 hereof) by more than an aggregate of 500,000 shares; or

(f) Change the nature of the Corporation's business.

5. Conversion of the Series A Convertible Preferred Stock. The holders of shares of Series A Convertible Preferred Stock shall have the following conversion rights:

5A. Right to Convert. Subject to the terms and conditions of this paragraph 5, the holder of any share or shares of Series A Convertible Preferred Stock shall have the right, at its option at any time, to convert any such shares of Series A Convertible Preferred Stock (except that upon any liquidation of the Corporation the right of conversion shall terminate at the close of business on the business day fixed for payment of the amounts distributable on the Series A Convertible Preferred Stock) into

such number of fully paid and nonassessable shares of Common Stock as is obtained by (i) multiplying the number of shares of Series A Convertible Preferred Stock so to be converted by \$6.3868 and (ii) dividing the result by the conversion price of \$6.3868 per share or in case an adjustment of such price has taken place pursuant to the further provisions of this paragraph 5, then by the conversion price as last adjusted and in effect at the date any share or shares of Series A Convertible Preferred Stock are surrendered for conversion (such price, or such price as last adjusted, being referred to as the "Series A Conversion Price"). Such rights of conversion shall be exercised by the holder thereof by giving written notice that the holder elects to convert a stated number of shares of Series A Convertible Preferred Stock into Common Stock and by surrender of a certificate or certificates for the shares so to be converted to the Corporation at its principal office (or such other office or agency of the Corporation as the Corporation may designate by notice in writing to the holders of the Series A Convertible Preferred Stock) at any time during its usual business hours on the date set forth in such notice, together with a statement of the name or names (with address) in which the certificate or certificates for shares of Common Stock shall be issued. Notwithstanding any other provisions hereof, if a conversion of Series A Convertible Preferred Stock is to be made in connection with any transaction affecting the Corporation, the conversion of any shares of Series A Convertible Preferred Stock, may, at the election of the holder thereof, be conditioned upon the consummation of such transaction, in which case such conversion shall not be deemed to be effective until such transaction has been consummated, subject in all events to the terms hereof applicable to such transaction.

5B. Issuance of Certificates; Time Conversion Effected. Promptly after the receipt of the written notice referred to in paragraph 5A and surrender of the certificate or certificates for the share or shares of Series A Convertible Preferred Stock to be converted, the Corporation shall issue and deliver, or cause to be issued and delivered, to the holder, registered in such name or names as such holder may direct, a certificate or certificates for the number of whole shares of Common Stock issuable upon the conversion of such share or shares of Series A Convertible Preferred Stock. To the extent permitted by law, such conversion shall be deemed to have been effected and the Series A Conversion Price shall be determined as of the close of business on the date on which such written notice shall have been received by the Corporation and the certificate or certificates for such share or shares shall have been surrendered as aforesaid, and at such time the rights of the holder of such share or shares of Series A Convertible Preferred Stock shall cease, and the person or persons in whose name or names any certificate or certificates for shares of Common Stock shall be issuable upon such conversion shall be deemed to have become the holder or holders of record of the shares represented thereby.

5C. Fractional Shares; Partial Conversion. No fractional shares shall be issued upon conversion of Series A Convertible Preferred Stock into Common Stock and no payment or adjustment shall be made upon any such conversion with respect to any cash dividends previously payable on the Common Stock issued upon such conversion. In case the number of shares of Series A Convertible Preferred Stock represented by the certificate or certificates surrendered pursuant to paragraph 5A

exceeds the number of shares converted, the Corporation shall, upon such conversion, execute and deliver to the holder, at the expense of the Corporation, a new certificate or certificates for the number of shares of Series A Convertible Preferred Stock represented by the certificate or certificates surrendered which are not to be converted. If any fractional share of Common Stock would, except for the provisions of the first sentence of this paragraph 5C, be delivered upon such conversion, the Corporation, in lieu of delivering such fractional share, shall pay to the holder surrendering the Series A Convertible Preferred Stock for conversion an amount in cash equal to the current market price of such fractional share as determined in good faith by the Board of Directors of the Corporation, and based upon the aggregate number of shares of Series A Convertible Preferred Stock surrendered by any one holder.

5D. Adjustment of Series A Conversion Price Upon Issuance of Common Stock. Except as provided in paragraphs 5E and 5F, if and whenever the Corporation shall issue or sell, or is, in accordance with subparagraphs 5D(1) through 5D(7), deemed to have issued or sold, any shares of Common Stock for a consideration per share less than the Series A Conversion Price (the "Applicable Conversion Price") in effect immediately prior to the time of such issue or sale, (such number being appropriately adjusted to reflect the occurrence of any event described in paragraph 5F), then, forthwith upon such issue or sale, the Applicable Conversion Price shall be reduced to the price determined by dividing (i) an amount equal to the sum of (a) the number of shares of Common Stock outstanding immediately prior to such issue or sale (including, for this purpose, shares of Common Stock issuable upon conversion of the Series A Convertible Preferred Stock) multiplied by the then existing Applicable Conversion Price and (b) the consideration, if any, received by the Corporation upon such issue or sale, by (ii) an amount equal to the sum of (a) the total number of shares of Common Stock outstanding immediately prior to such issue or sale (including, for this purpose, shares of Common Stock issuable upon conversion of the Series A Convertible Preferred Stock) and (b) the total number of shares of Common Stock issuable in such issue or sale.

For purposes of this paragraph 5D, the following subparagraphs 5D(1) to 5D(7) shall also be applicable:

5D(1) Issuance of Rights or Options. In case at any time the Corporation shall in any manner grant (whether directly or by assumption in a merger or otherwise) any warrants or other rights to subscribe for or to purchase, or any options for the purchase of, Common Stock or any stock or security convertible into or exchangeable for Common Stock (such warrants, rights or options being called "Options" and such convertible or exchangeable stock or securities being called "Convertible Securities") whether or not such Options or the right to convert or exchange any such Convertible Securities are immediately exercisable, and the price per share for which Common Stock is issuable upon the exercise of such Options or upon the conversion or exchange of such Convertible Securities (determined by dividing (i) the total amount, if any, received or receivable by the Corporation as consideration for the granting of such Options, plus the minimum aggregate amount of additional consideration payable to the Corporation upon the exercise of all such

Options, plus, in the case of such Options which relate to Convertible Securities, the minimum aggregate amount of additional consideration, if any, payable upon the issue or sale of such Convertible Securities and upon the conversion or exchange thereof, by (ii) the total maximum number of shares of Common Stock issuable upon the exercise of such Options or upon the conversion or exchange of all such Convertible Securities issuable upon the exercise of such Options) shall be less than the Series A Conversion Price in effect immediately prior to the time of the granting of such Options, then the total maximum number of shares of Common Stock issuable upon the exercise of such Options or upon conversion or exchange of the total maximum amount of such Convertible Securities issuable upon the exercise of such Options shall be deemed to have been issued for such price per share as of the date of granting of such Options or the issuance of such Convertible Securities and thereafter shall be deemed to be outstanding. Except as otherwise provided in subparagraph 5D(3), no adjustment of the Series A Conversion Price shall be made upon the actual issue of such Common Stock or of such Convertible Securities upon exercise of such Options or upon the actual issue of such Common Stock upon conversion or exchange of such Convertible Securities.

5D(2) Issuance of Convertible Securities. In case the Corporation shall in any manner issue (whether directly or by assumption in a merger or otherwise) or sell any Convertible Securities, whether or not the rights to exchange or convert any such Convertible Securities are immediately exercisable, and the price per share for which Common Stock is issuable upon such conversion or exchange (determined by dividing (i) the total amount received or receivable by the Corporation as consideration for the issue or sale of such Convertible Securities, plus the minimum aggregate amount of additional consideration, if any, payable to the Corporation upon the conversion or exchange thereof, by (ii) the total maximum number of shares of Common Stock issuable upon the conversion or exchange of all such Convertible Securities) shall be Less than the Series A Conversion Price in effect immediately prior to the time of such issue or sale, then the total maximum number of shares of Common Stock issuable upon conversion or exchange of all such Convertible Securities shall be deemed to have been issued for such price per share as of the date of the issue or sale of such Convertible Securities and thereafter shall be deemed to be outstanding, provided that (a) except as otherwise provided in subparagraph 5D(3), no adjustment of the Series A Conversion Price shall be made upon the actual issue of such Common Stock upon conversion or exchange of such Convertible Securities and (b) if any such issue or sale of such Convertible Securities is made upon exercise of any Options to purchase any such Convertible Securities for which adjustments of the Series A Conversion Price have been or are to be made pursuant to other provisions of this paragraph 5D, no further adjustment of the Series A Conversion Price shall be made by reason of such issue or sale.

5D(3) Change in Option Price or Conversion Rate. Upon the happening of any of the following events, namely, if the purchase price provided for in any Option referred to in subparagraph 5D(1), the additional consideration, if any, payable upon the conversion or exchange of any Convertible Securities referred to in

subparagraph 5D(1) or 5D(2), or the rate at which Convertible Securities referred to in subparagraph 5D(1) or 5D(2) are convertible into or exchangeable for Common Stock shall change at any time (including, but not limited to, changes under or by reason of provisions designed to protect against dilution), the Series A Conversion Price in effect at the time of such event shall forthwith be readjusted (in each case by an amount equal to not less than one cent (\$.01)) to the Series A Conversion Price which would have been in effect at such time had such Options or Convertible Securities still outstanding provided for such changed purchase price, additional consideration or conversion rate, as the case may be, at the time initially granted, issued or sold; and on the expiration of any such Option or the termination of any such right to convert or exchange such Convertible Securities, the Series A Conversion Price then in effect hereunder shall forthwith be increased to the Conversion Price which would have been in effect at the time of such expiration or termination had such Option or Convertible Securities, to the extent outstanding immediately prior to such expiration or termination, never been issued.

5D(4) Stock Dividends. In case the Corporation shall declare a dividend or make any other distribution upon any stock of the Corporation payable in Common Stock (except for the issue of stock dividends or distributions upon the outstanding Common Stock for which adjustment is made pursuant to paragraph 5F), Options or Convertible Securities, any Common Stock, Options or Convertible Securities, as the case may be, issuable in payment of such dividend or distribution shall be deemed to have been issued or sold without consideration.

5D(5) Consideration for Stock. In case any shares of Common Stock, Options or Convertible Securities shall be issued or sold for cash, the consideration received therefor shall be deemed to be the amount received by the Corporation therefor, without deduction therefrom of any expenses incurred or any underwriting commissions or concessions paid or allowed by the Corporation in connection therewith. In case any shares of Common Stock, Options or Convertible Securities shall be issued or sold for a consideration other than cash, the amount of the consideration other than cash received by the Corporation shall be deemed to be the fair value of such consideration as determined in good faith by the Board of Directors of the Corporation, without deduction of any expenses incurred or any underwriting commissions or concessions paid or allowed by the Corporation in connection therewith. In case any Options shall be issued in connection with the issue and sale of other securities of the Corporation, together comprising one integral transaction in which no specific consideration is allocated to such Options by the parties thereto, such Options shall be deemed to have been issued for such consideration as determined in good faith by the Board of Directors of the Corporation.

5D(6) Record Date. In case the Corporation shall take a record of the holders of its Common Stock for the purpose of entitling them (i) to receive a dividend or other distribution payable in Common Stock, Options or Convertible Securities or (ii) to subscribe for or purchase Common Stock, Options or

Convertible Securities, then such record date shall be deemed to be the date of the issue or sale of the shares of Common Stock deemed to have been issued or sold upon the declaration of such dividend or the making of such other distribution or the date of the granting of such right of subscription or purchase, as the case may be.

5D(7) Treasury Shares. The number of shares of Common Stock outstanding at any given time shall not include shares owned or held by or for the account of the Corporation, and the disposition of any such shares shall be considered an issue or sale of Common Stock for the purpose of this paragraph 5D.

5E. Certain Issues of Common Stock Excepted. Anything herein to the contrary notwithstanding, the Corporation shall not be required to make any adjustment of the Series A Conversion Price in the case of the issuance of (i) shares of Common Stock issuable upon conversion of the Preferred Stock, and (ii) Reserved Employee Shares (as defined in paragraph 6 hereof).

5F. Subdivision or Combination of Common Stock. In case the Corporation shall at any time subdivide (by any stock split, stock dividend or otherwise) its outstanding shares of Common Stock into a greater number of shares, the Series A Conversion Price in effect immediately prior to such subdivision shall be proportionately reduced, and, conversely, in case the outstanding shares of Common Stock shall be combined into a smaller number of shares, the Series A Conversion Price in effect immediately prior to such combination shall be proportionately increased.

5G. Reorganization or Reclassification. If any capital reorganization, reclassification, recapitalization, consolidation, merger, sale of all or substantially all of the Corporation's assets or other similar transaction (any such transaction being referred to herein as an "Organic Change") shall be effected in such a way that holders of Common Stock shall be entitled to receive (either directly or upon subsequent liquidation) stock, securities or assets with respect to or in exchange for Common Stock, then, as a condition of such Organic Change, lawful and adequate provisions shall be made whereby each holder of a share or shares of Series A Convertible Preferred Stock shall thereupon have the right to receive, upon the basis and upon the terms and conditions specified herein and in lieu of or in addition to, as the case may be, the shares of Common Stock immediately theretofore receivable upon the conversion of such share or shares of Series A Convertible Preferred Stock such shares of stock, securities or assets as may be issued or payable with respect to or in exchange for a number of outstanding shares of such Common Stock equal to the number of shares of such Common Stock immediately theretofore receivable upon such conversion had such Organic Change not taken place, and in any case of a reorganization or reclassification only appropriate provisions shall be made with respect to the rights and interests of such holder to the end that the provisions hereof (including without limitation provisions for adjustments of the Series A Conversion Price) shall thereafter be applicable, as nearly as may be, in relation to any shares of stock, securities or assets thereafter deliverable upon the exercise of such conversion rights.

5H. Notice of Adjustment. Upon any adjustment of the Series A Conversion Price, then and in each such case the Corporation shall give written notice thereof, by first class mail, postage prepaid, or by facsimile transmission to non-U.S. residents, addressed to each holder of shares of Series A Convertible Preferred Stock at the address of such holder as shown on the books of the Corporation, which notice shall state the Series A Conversion Price, as applicable, resulting from such adjustment, setting forth in reasonable detail the method upon which such calculation is based.

5I. Other Notices. In case at any time:

(1) the Corporation shall declare any dividend upon its Common Stock payable in cash or stock or make any other distribution to the holders of its Common Stock;

(2) the Corporation shall offer for subscription pro rata to the holders of its Common Stock any additional shares of stock of any class or other rights;

(3) there shall be any capital reorganization or reclassification of the capital stock of the Corporation, or a consolidation or merger of the Corporation with or into, or a sale of all or substantially all its assets to, another entity or entities; or

(4) there shall be a voluntary or involuntary dissolution, liquidation or winding up of the Corporation;

then, in any one or more of said cases, the Corporation shall give, by first class mail, postage prepaid, or by facsimile transmission to non-U.S. residents, addressed to each holder of any shares of Preferred Stock at the address of such holder as shown on the books of the Corporation, (a) at least 20 days' prior written notice of the date on which the books of the Corporation shall close or a record shall be taken for such dividend, distribution or subscription rights or for determining rights to vote in respect of any such reorganization, reclassification, consolidation, merger, sale, dissolution, liquidation or winding up, and (b) in the case of any such reorganization, reclassification, consolidation, merger, sale, dissolution, liquidation or winding up, at least 20 days' prior written notice of the date when the same shall take place. Such notice in accordance with the foregoing clause (a) shall also specify, in the case of any such dividend, distribution or subscription rights, the date on which the holders of Common Stock shall be entitled thereto and such notice in accordance with the foregoing clause (b) shall also specify the date on which the holders of Common Stock shall be entitled to exchange their Common Stock for securities or other property deliverable upon such reorganization, reclassification, consolidation, merger, sale, dissolution, liquidation or winding up, as the case may be.

5J. Stock to be Reserved. The Corporation will at all times reserve and keep available out of its authorized Common Stock, solely for the purpose of issuance upon the conversion of Series A Convertible Preferred Stock as herein provided, such number of shares of Common Stock as shall then be issuable upon the conversion of

all outstanding shares of Series A Convertible Preferred Stock. The Corporation covenants that all shares of Common Stock which shall be so issued shall be duly and validly issued and fully paid and nonassessable and free from all taxes, liens and charges with respect to the issue thereof, and, without limiting the generality of the foregoing, the Corporation covenants that it will from time to time take all such action as may be requisite to assure that the par value per share of the Common Stock is at all times equal to or less than the Series A Conversion Price in effect at the time. The Corporation will take all such action as may be necessary to assure that all such shares of Common Stock may be so issued without violation of any applicable law or regulation, or of any requirement of any national securities exchange upon which the Common Stock may be listed.

5K. No Reissuance of Series A Convertible Preferred Stock. Shares of Series A Convertible Preferred Stock which are converted into shares of Common Stock as provided herein shall not be reissued.

5L. Issue Tax. The issuance of certificates for shares of Common Stock upon conversion of Series A Convertible Preferred Stock shall be made without charge to the holders thereof for any issuance tax in respect thereof, provided that the Corporation shall not be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of any certificate in a name other than that of the holder of the Series A Convertible Preferred Stock which is being converted.

5M. Closing of Books. The Corporation will at no time close its transfer books against the transfer of any shares of Series A Convertible Preferred Stock or of any shares of Common Stock issued or issuable upon the conversion of any shares of Series A Convertible Preferred Stock, in any manner which interferes with the timely conversion of such Series A Convertible Preferred Stock except as may otherwise be required to comply with applicable securities laws.

5N. Definition of Common Stock. As used in this paragraph 5, the term "Common Stock" shall mean and include the Corporation's authorized Common Stock, par value \$.001 per share, as constituted on the date of filing of these terms of the Preferred Stock, and shall also include any capital stock of any class of the Corporation thereafter authorized which shall neither be limited to a fixed sum or percentage of par value in respect of the rights of the holders thereof to participate in dividends nor entitled to a preference in the distribution of assets upon the voluntary or involuntary liquidation, dissolution or winding up of the Corporation; provided that the shares of Common Stock receivable upon conversion of shares of Series A Convertible Preferred Stock shall include only shares designated as Common Stock of the Corporation on the date of filing of this instrument, or in case of any reorganization or reclassification of the outstanding shares thereof, the stock, securities or assets provided for in subparagraph 5G.

5O. Mandatory Conversion. All outstanding shares of Series A Convertible Preferred Stock shall automatically convert to shares of Common Stock effective upon the closing of a firm commitment underwritten public offering of shares of

Common Stock in which (i) the aggregate net proceeds from such offering to the Corporation shall be at least \$80,000,000 and (ii) the price paid by the public for such shares shall be at least \$12.75 (appropriately adjusted to reflect the occurrence of any event described in paragraph 5F).

6. Definitions. As used herein, the following terms shall have the following meanings:

(a) The term "Reserved Employee Shares" shall mean shares of Common Stock reserved by the Corporation from time to time for (i) the sale of shares of Common Stock to employees, consultants or non-employee directors (other than representatives of the holders of Preferred Stock) of the Corporation or (ii) the issuance and/or exercise of options to purchase Common Stock granted to employees, consultants or non-employee directors (other than representatives of the holders of Preferred Stock) of the Corporation, not to exceed in the aggregate 740,000 shares (appropriately adjusted to reflect an event described in paragraph 5F hereof) of Common Stock after the date hereof (provided that any options for such shares that expire or terminate unexercised or any restricted stock repurchased by the Corporation at cost shall not be counted toward such maximum number unless and until such shares are regranted as new stock grants (or as new options)).

(b) The term "Subsidiary" shall mean any corporation, partnership, trust or other entity of which the Corporation and/or any of its other subsidiaries directly or indirectly owns at the time a majority of the outstanding shares of every class of equity security of such corporation, partnership, trust or other entity.

7. Common Stock.

(a) All preferences, voting powers, relative, participating, optional or other special rights and privileges, and qualifications, limitations, or restrictions of the Common Stock are expressly made subject to those that may be fixed with respect to any shares of Preferred Stock.

(b) The number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote, irrespective of the provisions of Section 242(b)(2) of the General Corporation Law of Delaware."

IN WITNESS WHEREOF, the Corporation has caused this Certificate of Amendment to be signed by its President this 6th day of July, 2005.

CASA SYSTEMS, INC.

By: /s/ Jerry Guo

Jerry Guo
President

CERTIFICATE OF AMENDMENT
OF
AMENDED AND RESTATED CERTIFICATE OF INCORPORATION
OF
CASA SYSTEMS, INC.

Casa Systems, Inc. (the "Corporation"), organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the "General Corporation Law"), does hereby certify as follows:

The Board of Directors of the Corporation duly adopted a resolution, pursuant to Sections 141(f) and 242 of the General Corporation Law, setting forth an amendment to the Amended and Restated Certificate of Incorporation, as amended (the "Amended and Restated Certificate of Incorporation"), of the Corporation and declaring said amendment to be advisable. The stockholders of the Corporation duly approved said proposed amendment by written consent in accordance with Sections 228 and 242 of the General Corporation Law. The resolution setting forth the amendment is as follows:

RESOLVED: That Article FOURTH of the Amended and Restated Certificate of Incorporation of the Corporation be and hereby is deleted in its entirety and the following Article FOURTH is inserted in lieu thereof:

"FOURTH. The Corporation is authorized to have two classes of shares, designated as Common Stock and Preferred Stock. The total number of shares of Common Stock which the Corporation is authorized to issue is 8,200,000 shares, and the par value of each of the shares of Common Stock is one tenth of one cent (\$.001). The total number of shares of Preferred Stock which the Corporation is authorized to issue is 2,000,000 shares, and the par value of each of the shares of Preferred Stock is one tenth of one cent (\$.001). A total of 1,290,679 shares of Preferred Stock shall be designated the "Series A Convertible Preferred Stock" (the "Series A Preferred Stock") and a total of 352,018 shares of Preferred Stock shall be designated the "Series B Convertible Preferred Stock" (the "Series B Preferred Stock" and together with the Series A Preferred Stock, the "Series Preferred Stock").

Preferred Stock may also be issued from time to time in one or more further series, each of such series to have such terms as stated or expressed herein and in the resolution or resolutions providing for the issue of such series adopted by the Board of

Directors of the Corporation as hereinafter provided. Any shares of Preferred Stock which may be redeemed, purchased or acquired by the Corporation may be reissued except as otherwise provided by law or by the terms of any series of Preferred Stock. Different series of Preferred Stock shall not be construed to constitute different classes of shares for the purposes of voting by classes unless expressly provided.

Authority is hereby expressly granted to the Board of Directors from time to time to issue additional shares of Preferred Stock in one or more series, and in connection with the creation of any such series, by resolution or resolutions providing for the issue of the shares thereof, to determine and fix such voting powers, full or limited, or no voting powers, and such designations, preferences and relative participating, optional or other special rights, and qualifications, limitations or restrictions thereof, including without limitation thereof, dividend rights, special voting rights, conversion rights, redemption privileges and liquidation preferences, as shall be stated and expressed in such resolutions, all to the full extent now or hereafter permitted by the General Corporation Law. Without limiting the generality of the foregoing, except as otherwise specifically provided in this Certificate of Incorporation, the resolutions providing for issuance of any series of Preferred Stock may provide that such series shall be superior or rank equally or be junior to the Preferred Stock of any other series to the extent permitted by law. Except as otherwise specifically provided in this Certificate of Incorporation, no vote of the holders of Preferred Stock or Common Stock shall be a prerequisite to the issuance of any shares of any series of Preferred Stock authorized by and complying with the conditions of this Certificate of Incorporation, the right to have such vote being expressly waived by all present and future holders of the capital stock of the Corporation.

The following is a statement of the powers, privileges and rights, and the qualifications, limitations or restrictions thereof, in respect of each series of Series Preferred Stock:

1. Voting. Except as may be otherwise provided in these terms of the Series Preferred Stock or by law, the Series Preferred Stock shall vote together with all other classes and series of stock of the Corporation, including, but not limited to, any other series of Preferred Stock the terms of which so provide, as a single class on all actions to be taken by the stockholders of the Corporation. Each share of Series Preferred Stock shall entitle the holder thereof to such number of votes per share on each such action as shall equal the number of shares of Common Stock (including fractions of a share) into which each share of Series Preferred Stock is then convertible. The number of authorized shares of Preferred Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote, irrespective of the provisions of Section 242(b)(2) of the General Corporation Law.

2. Dividends.

2A. Dividends. In the event the Board of Directors of the Corporation shall declare a dividend (other than a dividend payable in Common Stock) payable upon the then outstanding shares of the Common Stock of the Corporation, the Board of Directors

shall declare at the same time a dividend upon the then outstanding shares of Series A Preferred Stock and Series B Preferred Stock, payable at the same time as the dividend paid on the Common Stock, in an amount equal to the amount of dividends per share of Series A Preferred Stock or Series B Preferred Stock, as the case may be, as would have been payable on the largest number of whole shares of Common Stock into which all shares of Series A Preferred Stock or Series B Preferred Stock, as the case may be, held by each holder thereof would be converted if such Series A Preferred Stock or Series B Preferred Stock, as the case may be, had been converted to Common Stock pursuant to the provisions of paragraph 5 hereof as of the record date for the determination of holders of Common Stock entitled to receive such dividends. All dividends declared upon the Series Preferred Stock pursuant to this subparagraph 2A shall be declared and paid pro rata per share.

2B. Series A Accruing Dividends. From and after the date of the issuance of any shares of Series A Preferred Stock, the holders of such shares of Series A Preferred Stock shall be entitled to receive, out of funds legally available therefor, when and if declared by the Board of Directors, dividends at the rate per annum of \$.3832 per share (the "Series A Accruing Dividends"). The Series A Accruing Dividends shall accrue from day to day, whether or not earned or declared, and shall be cumulative; provided however, that except as provided in paragraph 3, the Corporation shall be under no obligation to pay such Series A Accruing Dividends unless so declared by the Board of Directors. The Series A Accruing Dividends set forth in this subparagraph 2B shall be in addition to any dividends declared and paid pursuant to subparagraph 2A.

2C. Series B Accruing Dividends. From and after the date of the issuance of any shares of Series B Preferred Stock, the holders of such shares of Series B Preferred Stock shall be entitled to receive, out of funds legally available therefor, when and if declared by the Board of Directors, dividends at the rate per annum of \$.5376 per share (the "Series B Accruing Dividends"). The Series B Accruing Dividends shall accrue from day to day, whether or not earned or declared, and shall be cumulative; provided however, that except as provided in paragraph 3, the Corporation shall be under no obligation to pay such Series B Accruing Dividends unless so declared by the Board of Directors. The Series B Accruing Dividends set forth in this subparagraph 2C shall be in addition to any dividends declared and paid pursuant to subparagraph 2A.

3. Liquidation, Dissolution and Winding-up.

3A. Liquidation. Upon any liquidation, dissolution or winding up of the Corporation (a "Liquidation Event"), whether voluntary or involuntary, (i) the holders of the shares of Series A Preferred Stock shall be paid an amount equal to \$6.3868 per share (subject to appropriate adjustment to reflect any stock split, stock dividend, reverse stock split or similar corporate event affecting the Series A Preferred Stock) plus, in the case of each share, an amount equal to all accrued and unpaid dividends thereon (whether or not declared) computed to the date payment thereof is made available and (ii) the holders of the shares of Series B Preferred Stock shall be paid an amount equal to \$8.96 per share (subject to appropriate adjustment to reflect any stock split, stock dividend,

reverse stock split or similar corporate event affecting the Series B Preferred Stock) plus, in the case of each share, an amount equal to all accrued and unpaid dividends thereon (whether or not declared) computed to the date payment thereof is made available, together, in each case, with payment to any class or series of stock ranking on liquidation on a parity with the Series Preferred Stock, before any payment shall be made to the holders of any other class or series of stock ranking on liquidation junior to the Series Preferred Stock. If upon any Liquidation Event, the assets to be distributed to the holders of the Series Preferred Stock and any class or series of stock ranking on liquidation on a parity with the Series Preferred Stock shall be insufficient to permit payment to such stockholders of the full preferential amounts to which they are entitled, then all of the assets of the Corporation available for distribution to such holders shall be distributed to such holders pro rata, so that each holder receives that portion of the assets available for distribution as the amount of the full liquidation preference to which such holder would otherwise be entitled bears to the amount of the full liquidation preference to which all such holders would otherwise be entitled.

3B. Upon any Liquidation Event, immediately after the holders of Series Preferred Stock and any class or series of stock ranking on liquidation on a parity with the Series Preferred Stock have been paid the full liquidation preference to which such holders are entitled, the remaining net assets of the Corporation available for distribution shall be distributed ratably among the holders of the shares of Common Stock and any other class or series of stock entitled to participate in liquidation distributions with the holders of Common Stock, pro rata based on the number of shares of Common Stock held by each such holder (assuming, where applicable, conversion into Common Stock of all such shares).

3C. Written notice of a Liquidation Event, stating a payment date and the place where said payments shall be made, shall be given by mail, postage prepaid, or by facsimile to non-U.S. residents, not less than 20 days prior to the payment date stated therein, to the holders of record of Series Preferred Stock, such notice to be addressed to each such holder at its address as shown by the records of the Corporation.

3D. The (x) consolidation or merger of the Corporation into or with any other entity or entities (except a consolidation or merger into a Subsidiary (as defined in paragraph 6 below) or merger in which the Corporation is the surviving corporation and the holders of the Corporation's voting stock outstanding immediately prior to the transaction constitute the holders of a majority of the voting stock outstanding immediately following the transaction), or (y) the sale or transfer by the Corporation of all or substantially all its assets, or (z) the sale, exchange or transfer by the Corporation's stockholders, in a single transaction or series of related transactions, of capital stock representing a majority of the voting power at elections of directors of the Corporation shall be deemed to be a Liquidation Event within the meaning of the provisions of this paragraph 3 (subject to the provisions of this paragraph 3 and not the provisions of subparagraph 5G hereof, unless subparagraph 5G is elected in accordance with the following proviso); provided, however, that (i) the holders of at least a majority of the then outstanding shares of Series A Preferred Stock shall have the right to elect the

benefits of the provisions of subparagraph 5G in lieu of receiving payment in a Liquidation Event pursuant to this paragraph 3 with respect to the Series A Preferred Stock, on behalf of all holders of Series A Preferred Stock and (ii) the holders of at least a majority of the then outstanding shares of Series B Preferred Stock shall have the right to elect the benefits of the provisions of subparagraph 5G in lieu of receiving payment in a Liquidation Event pursuant to this paragraph 3 with respect to the Series B Preferred Stock, on behalf of all holders of Series B Preferred Stock.

3E. Whenever the distribution provided for in this paragraph 3 shall be payable in property other than cash, the value of such distribution shall be the fair market value of such property as determined in good faith by the Board of Directors of the Corporation, and the same form of property shall be distributed, on a *pari passu* basis in accordance with this paragraph 3, to the holders of Series A Preferred Stock and Series B Preferred Stock, provided, however, that (i) with respect to such distribution allocable to the Series A Preferred Stock, the holders of at least a majority of the then outstanding shares of Series A Preferred Stock, voting together as a single class, may consent otherwise, on behalf of all holders of Series A Preferred Stock, and (ii) with respect to such distribution allocable to the Series B Preferred Stock, a majority of the then outstanding shares of Series B Preferred Stock, voting together as a single class, may consent otherwise, on behalf of all holders of Series B Preferred Stock.

3F. The Corporation shall not effect any transaction constituting a deemed Liquidation Event pursuant to subparagraph 3D above unless the agreement or plan of merger or consolidation provides that the consideration payable to the stockholders of the Corporation shall be allocated among the holders of capital stock of the Corporation in accordance with subparagraphs 3A and 3B above, provided, however, that the holders of at least (i) a majority of the votes represented by the outstanding shares of Series A Preferred Stock, voting together as a single class, may specifically consent in writing to the allocation of such consideration with respect to the Series A Preferred Stock in a manner different from that provided in subparagraphs 3A and 3B above, on behalf of all holders of Series A Preferred Stock and (B) a majority of the votes represented by the outstanding shares of Series B Preferred Stock, voting together as a single class, may specifically consent in writing to the allocation of such consideration with respect to the Series B Preferred Stock in a manner different from that provided in subparagraphs 3A and 3B above, on behalf of all holders of Series B Preferred Stock.

3G. In the event of a deemed Liquidation Event pursuant to subparagraph 3D above, if the Corporation does not effect a dissolution of the Corporation under the General Corporation Law within 60 days after such deemed Liquidation Event, then (i) the Corporation shall deliver a written notice to each holder of Series Preferred Stock no later than the 60th day after the deemed Liquidation Event advising such holders of their right (and the requirements to be met to secure such right) pursuant to the terms of the following clause (ii) to require the redemption of such shares of Series Preferred Stock, and (ii) if the holders of shares of Series A Preferred Stock and Series B Preferred Stock, voting together as a single class, representing at least a majority of the votes represented by the then outstanding shares of Series Preferred Stock so

request in a written instrument delivered to the Corporation not later than 75 days after such deemed Liquidation Event, the Corporation shall use the consideration received by the Corporation for such deemed Liquidation Event (net of any liabilities associated with the assets sold, as determined in good faith by the Board of Directors of the Corporation), to the extent legally available therefor (the "Net Proceeds"), to redeem, on the 90th day after such deemed Liquidation Event (the "Liquidation Redemption Date"), (i) all outstanding shares of Series A Preferred Stock at a price per share equal to the maximum amount payable to each holder of Series A Preferred Stock pursuant to subparagraph 3A as of the date of the deemed Liquidation Event, and (ii) all outstanding shares of Series B Preferred Stock at a price per share equal to the maximum amount payable to each holder of Series B Preferred Stock pursuant to subparagraph 3A as of the date of the deemed Liquidation Event. If the Net Proceeds are not sufficient to so redeem all outstanding shares of Series A Preferred Stock and Series B Preferred Stock, the Corporation shall redeem a pro rata portion (based on the aggregate amounts that would have been payable on redemption of the Series A Preferred Stock and the Series B Preferred Stock) of each holder's shares of Series A Preferred Stock or Series B Preferred Stock, as the case may be, out of the Net Proceeds. Prior to the distribution or redemption provided for in this subparagraph 3G, the Corporation shall not expend or dissipate the consideration received for such deemed Liquidation Event, except to discharge expenses incurred in the ordinary course of business. At any time and from time to time thereafter, when additional funds of the Corporation are legally available for such purpose, such funds shall immediately be used to redeem the shares of Series Preferred Stock which were required to be redeemed pursuant to this subparagraph 3G, but which the Corporation failed to so redeem, until the balance of such shares have been redeemed. The redemption of shares pursuant to the immediately preceding sentence shall be made, as nearly as practicable, on a pro rata basis among the holders of shares of Series Preferred Stock.

4. Restrictions.

4A. At any time when shares of Series Preferred Stock are outstanding, except where the vote or written consent of the holders of a greater number of shares of Series Preferred Stock of the Corporation is required by law or by this Certificate of Incorporation, and in addition to any other vote required by law or this Certificate of Incorporation, without the written consent of the holders of at least a majority of the votes represented by the then outstanding shares of Series A Preferred Stock and Series B Preferred Stock, voting together as a single class, given in writing or by vote at a meeting, the Corporation will not:

(a) Amend, alter or repeal any provision of, or add any provision to, this Certificate of Incorporation (by means of amendment or by merger, consolidation or otherwise) or the Corporation's By-laws to change the rights of the Series A Preferred Stock or the Series B Preferred Stock;

(b) Create or authorize the creation of any additional class or series of shares of stock which ranks senior to the Series A Preferred Stock or the Series B Preferred Stock as to dividends or the distribution of assets on the liquidation, dissolution

or winding up of the Corporation, or increase the authorized amount of any additional class or series of shares of stock which ranks senior to such Series A Preferred Stock or Series B Preferred Stock as to dividends or the distribution of assets on the liquidation, dissolution or winding up of the Corporation, or create or authorize any obligation or security convertible into shares of any series of Series Preferred Stock or into shares of any other class or series of stock which ranks senior to such Series A Preferred Stock or Series B Preferred Stock as to dividends or the distribution of assets on the liquidation, dissolution or winding up of the Corporation, whether any such creation, authorization or increase shall be by means of amendment to this Certificate of Incorporation or by merger, consolidation or otherwise;

(c) Create, or authorize the creation of, or issue, or authorize the issuance of, any debt security of the Corporation which by its terms is convertible into or exchangeable for any equity security of the Corporation or any security of the Corporation which is a combination of debt and equity, if such equity security ranks senior to the Series A Preferred Stock or the Series B Preferred Stock as to dividends or the distribution of assets on the liquidation, dissolution or winding up of the Corporation;

(d) Purchase or redeem, or set aside any sums for the purchase or redemption of, or pay any dividend or make any distribution on, any shares of stock other than the Series A Preferred Stock and the Series B Preferred Stock, except for dividends or other distributions payable on the Common Stock solely in the form of additional shares of Common Stock and other than shares of Common Stock repurchased from employees, advisors, officers, directors or consultants or service providers of the Corporation at the original purchase price thereof (not to exceed an aggregate amount of \$100,000);

(e) Increase the number of Reserved Employee Shares (as defined in paragraph 6 hereof) by more than an aggregate of 500,000 shares; or

(f) Change the nature of the Corporation's business.

4B. Notwithstanding anything in subparagraph 4A to the contrary, at any time when shares of Series A Preferred Stock are outstanding, except where the vote or written consent of the holders of a greater number of shares of Series A Preferred Stock of the Corporation is required by law or by this Certificate of Incorporation, and in addition to any other vote required by law or this Certificate of Incorporation, without the written consent of the holders of at least a majority of the then outstanding shares of Series A Preferred Stock, voting as a separate class, given in writing or by vote at a meeting, the Corporation will not (i) amend, alter or repeal any provision of, or add any provision to, this Certificate of Incorporation (by means of amendment or by merger, consolidation or otherwise), in a manner that alters or changes the powers, preferences, or special rights of the Series A Preferred Stock so as to affect the Series A Preferred Stock adversely, but does not similarly adversely affect the Series B Preferred Stock and each other series of Preferred Stock, or (ii) amend, alter or repeal any provision of, or add any provision to, this Certificate of Incorporation (by means of amendment or by merger, consolidation or otherwise) to change the rights of the Series A Preferred Stock with respect to (A) the distribution of assets on the liquidation, dissolution or winding up of the Corporation, (B) the payment of dividends or (C) conversion.

4C. Notwithstanding anything in subparagraph 4A to the contrary, at any time when shares of Series B Preferred Stock are outstanding, except where the vote or written consent of the holders of a greater number of shares of Series B Preferred Stock of the Corporation is required by law or by this Certificate of Incorporation, and in addition to any other vote required by law or this Certificate of Incorporation, without the written consent of the holders of at least a majority of the then outstanding shares of Series B Preferred Stock, voting as a separate class, given in writing or by vote at a meeting, the Corporation will not (i) amend, alter or repeal any provision of, or add any provision to, this Certificate of Incorporation (by means of amendment or by merger, consolidation or otherwise), in a manner that alters or changes the powers, preferences, or special rights of the Series B Preferred Stock so as to affect the Series B Preferred Stock adversely, but does not similarly adversely affect the Series A Preferred Stock and each other series of Preferred Stock, or (ii) amend, alter or repeal any provision of, or add any provision to, this Certificate of Incorporation (by means of amendment or by merger, consolidation or otherwise) to change the rights of the Series B Preferred Stock with respect to (A) the distribution of assets on the liquidation, dissolution or winding up of the Corporation, (B) the payment of dividends or (C) conversion.

5. Conversion of the Series Preferred Stock. The holders of shares of Series Preferred Stock shall have the following conversion rights:

5A. Right to Convert. Subject to the terms and conditions of this paragraph 5, the holder of any share or shares of Series A Preferred Stock shall have the right, at its option at any time, to convert any such shares of Series A Preferred Stock (except that upon any liquidation, dissolution or winding up of the Corporation the right of conversion shall terminate at the close of business on the business day fixed for payment of the amounts distributable on the Series A Preferred Stock) into such number of fully paid and nonassessable shares of Common Stock as is obtained by (i) multiplying the number of shares of Series A Preferred Stock so to be converted by \$6.3868 (subject to appropriate adjustment to reflect any stock split, stock dividend, reverse stock split or similar corporate event affecting the Series A Preferred Stock) and (ii) dividing the result by the conversion price of \$6.3868 per share or in case an adjustment of such price has taken place pursuant to the further provisions of this paragraph 5, then by the conversion price as last adjusted and in effect at the date any share or shares of Series A Preferred Stock are surrendered for conversion (such price, or such price as last adjusted, being referred to as the "Series A Conversion Price"). Subject to the terms and conditions of this paragraph 5, the holder of any share or shares of Series B Preferred Stock shall have the right, at its option at any time, to convert any such shares of Series B Preferred Stock (except that upon any liquidation, dissolution or winding up of the Corporation the right of conversion shall terminate at the close of business on the business day fixed for payment of the amounts distributable on the Series B Preferred Stock) into such number of fully paid and nonassessable shares of Common Stock as is obtained by (i) multiplying the number of shares of Series B Preferred Stock so to be converted by \$8.96 (subject to

appropriate adjustment to reflect any stock split, stock dividend, reverse stock split or similar corporate event affecting the Series B Preferred Stock) and (ii) dividing the result by the conversion price of \$8.96 per share or in case an adjustment of such price has taken place pursuant to the further provisions of this paragraph 5, then by the conversion price as last adjusted and in effect at the date any share or shares of Series B Preferred Stock are surrendered for conversion (such price, or such price as last adjusted, being referred to as the "Series B Conversion Price"). Such rights of conversion shall be exercised by the holder thereof by giving written notice to the Corporation at its principal office that the holder elects to convert a stated number of shares of Series A Preferred Stock or Series B Preferred Stock, as the case may be, into Common Stock and by surrender of a certificate or certificates for the shares so to be converted to the Corporation at its principal office (or such other office or agency of the Corporation as the Corporation may designate by notice in writing to the holders of the Series Preferred Stock) at any time during its usual business hours on the date set forth in such notice, together with a statement of the name or names (with address) in which the certificate or certificates for shares of Common Stock shall be issued. Notwithstanding any other provisions hereof, if a conversion of Series A Preferred Stock or Series B Preferred Stock is to be made in connection with any transaction affecting the Corporation, the conversion of any shares of Series A Preferred Stock or Series B Preferred Stock, as the case may be, may, at the election of the holder thereof, be conditioned upon the consummation of such transaction, in which case such conversion shall not be deemed to be effective until immediately prior to the time such transaction has been consummated, subject in all events to the terms hereof applicable to such transaction.

5B. Issuance of Certificates; Time Conversion Effected. Promptly after the receipt of the written notice referred to in subparagraph 5A and surrender of the certificate or certificates for the share or shares of Series A Preferred Stock or Series B Preferred Stock, as the case may be, to be converted, the Corporation shall issue and deliver, or cause to be issued and delivered, to the holder, registered in such name or names as such holder may direct, a certificate or certificates for the number of whole shares of Common Stock issuable upon the conversion of such share or shares of Series A Preferred Stock or Series B Preferred Stock, as the case may be. To the extent permitted by law, such conversion shall be deemed to have been effected and the Series A Conversion Price or the Series B Conversion Price, as the case may be, shall be determined as of the close of business on the date on which such written notice shall have been received by the Corporation and the certificate or certificates for such share or shares shall have been surrendered as aforesaid, and at such time the rights of the holder of such share or shares of Series A Preferred Stock or Series B Preferred Stock, as the case may be, shall cease, and the person or persons in whose name or names any certificate or certificates for shares of Common Stock shall be issuable upon such conversion shall be deemed to have become the holder or holders of record of the shares represented thereby.

5C. Fractional Shares; Partial Conversion. No fractional shares shall be issued upon conversion of Series Preferred Stock into Common Stock and no payment or adjustment shall be made upon any such conversion with respect to any cash dividends

previously payable on the Common Stock issued upon such conversion. In case the number of shares of Series A Preferred Stock or Series B Preferred Stock, as the case may be, represented by the certificate or certificates surrendered pursuant to subparagraph 5A exceeds the number of shares converted, the Corporation shall, upon such conversion, execute and deliver to the holder, at the expense of the Corporation, a new certificate or certificates for the number of shares of Series A Preferred Stock or Series B Preferred Stock, as the case may be, represented by the certificate or certificates surrendered which are not to be converted. If any fractional share of Common Stock would, except for the provisions of the first sentence of this subparagraph 5C, be delivered upon such conversion, the Corporation, in lieu of delivering such fractional share, shall pay to the holder surrendering the Series Preferred Stock for conversion an amount in cash equal to the fair market value of such fractional share as determined in good faith by the Board of Directors of the Corporation, and based upon the aggregate number of shares of Series A Preferred Stock or Series B Preferred Stock, as the case may be, surrendered by any one holder.

5D. Adjustment of Conversion Price Upon Issuance of Common Stock. Except as provided in subparagraphs 5E and 5F, if and whenever the Corporation shall issue or sell, or is, in accordance with subparagraphs 5D(1) through 5D(7), deemed to have issued or sold, any shares of Common Stock for a consideration per share less than the Series A Conversion Price in effect immediately prior to the time of such issue or sale (such number being appropriately adjusted to reflect the occurrence of any event described in subparagraph 5F), then, forthwith upon such issue or sale, such Series A Conversion Price shall be reduced to the price determined by dividing (i) an amount equal to the sum of (a) the number of shares of Common Stock outstanding immediately prior to such issue or sale (including, for this purpose, shares of Common Stock issuable upon conversion of the Preferred Stock) multiplied by the then existing Series A Conversion Price and (b) the consideration, if any, received by the Corporation upon such issue or sale, by (ii) an amount equal to the sum of (a) the total number of shares of Common Stock outstanding immediately prior to such issue or sale (including, for this purpose, shares of Common Stock issuable upon conversion of the Preferred Stock) and (b) the total number of shares of Common Stock issuable in such issue or sale. Except as provided in subparagraphs 5E and 5F, if and whenever the Corporation shall issue or sell, or is, in accordance with subparagraphs 5D(1) through 5D(7), deemed to have issued or sold, any shares of Common Stock for a consideration per share less than the Series B Conversion Price in effect immediately prior to the time of such issue or sale (such number being appropriately adjusted to reflect the occurrence of any event described in subparagraph 5F), then, forthwith upon such issue or sale, such Series B Conversion Price shall be reduced to the price determined by dividing (i) an amount equal to the sum of (a) the number of shares of Common Stock outstanding immediately prior to such issue or sale (including, for this purpose, shares of Common Stock issuable upon conversion of the Preferred Stock) multiplied by the then existing Series B Conversion Price and (b) the consideration, if any, received by the Corporation upon such issue or sale, by (ii) an amount equal to the sum of (a) the total number of shares of Common Stock outstanding immediately prior to such issue or sale (including, for this purpose, shares of Common Stock issuable upon conversion of the Preferred Stock) and (b) the total number of shares of Common Stock issuable in such issue or sale.

For purposes of this subparagraph 5D, the following subparagraphs 5D(1) to 5D(7) shall also be applicable:

5D(1) Issuance of Rights or Options. In case at any time the Corporation shall in any manner grant (whether directly or by assumption in a merger or otherwise) any warrants or other rights to subscribe for or to purchase, or any options for the purchase of, Common Stock or any stock or security convertible into or exchangeable for Common Stock (such warrants, rights or options being called "Options" and such convertible or exchangeable stock or securities being called "Convertible Securities") whether or not such Options or the right to convert or exchange any such Convertible Securities are immediately exercisable, and the price per share for which Common Stock is issuable upon the exercise of such Options (determined by dividing (i) the total amount, if any, received or receivable by the Corporation as consideration for the granting of such Options, plus the minimum aggregate amount of additional consideration payable to the Corporation upon the exercise of all such Options, plus, in the case of such Options which relate to Convertible Securities, the minimum aggregate amount of additional consideration, if any, payable upon the issue or sale of such Convertible Securities and upon the conversion or exchange thereof, by (ii) the total maximum number of shares of Common Stock issuable upon the exercise of such Options or upon the conversion or exchange of all such Convertible Securities issuable upon the exercise of such Options) shall be less than the Series A Conversion Price or the Series B Conversion Price in effect immediately prior to the time of the granting of such Options, then the total maximum number of shares of Common Stock issuable upon the exercise of such Options or upon conversion or exchange of the total maximum amount of such Convertible Securities issuable upon the exercise of such Options shall be deemed to have been issued for such price per share as of the date of granting of such Options and thereafter shall be deemed to be outstanding. Except as otherwise provided in subparagraph 5D(3), no adjustment of the Series A Conversion Price or the Series B Conversion Price shall be made upon the actual issue of such Common Stock or of such Convertible Securities upon exercise of such Options or upon the actual issue of such Common Stock upon conversion or exchange of such Convertible Securities.

5D(2) Issuance of Convertible Securities. In case the Corporation shall in any manner issue (whether directly or by assumption in a merger or otherwise) or sell any Convertible Securities, except as provided in subparagraph 5D(1), whether or not the rights to exchange or convert any such Convertible Securities are immediately exercisable, and the price per share for which Common Stock is issuable upon such conversion or exchange (determined by dividing (i) the total amount received or receivable by the Corporation as consideration for the issue or sale of such Convertible Securities, plus the minimum aggregate amount of additional consideration, if any, payable to the Corporation upon the conversion or exchange thereof, by (ii) the total maximum number of shares of Common Stock

issuable upon the conversion or exchange of all such Convertible Securities) shall be less than the Series A Conversion Price or the Series B Conversion Price in effect immediately prior to the time of such issue or sale, then the total maximum number of shares of Common Stock issuable upon conversion or exchange of all such Convertible Securities shall be deemed to have been issued for such price per share as of the date of the issue or sale of such Convertible Securities and thereafter shall be deemed to be outstanding, provided that (a) except as otherwise provided in subparagraph 5D(3), no adjustment of the Series A Conversion Price or the Series B Conversion Price shall be made upon the actual issue of such Common Stock upon conversion or exchange of such Convertible Securities and (b) if any such issue or sale of such Convertible Securities is made upon exercise of any Options to purchase any such Convertible Securities for which adjustments of the Series A Conversion Price or the Series B Conversion Price, as the case may be, have been or are to be made pursuant to other provisions of this subparagraph 5D, no further adjustment of the Series A Conversion Price or the Series B Conversion Price, as the case may be, shall be made by reason of such issue or sale.

5D(3) Change in Option Price or Conversion Rate. Upon the happening of any of the following events, namely, if the purchase price provided for in any Option referred to in subparagraph 5D(1), the additional consideration, if any, payable upon the conversion or exchange of any Convertible Securities referred to in subparagraphs 5D(1) or 5D(2), or the rate at which Convertible Securities referred to in subparagraphs 5D(1) or 5D(2) are convertible into or exchangeable for Common Stock shall change at any time (including, but not limited to, changes under or by reason of provisions designed to protect against dilution), the Series A Conversion Price or the Series B Conversion Price, as applicable, in effect at the time of such event shall forthwith be readjusted (in each case by an amount equal to not less than one cent (\$.01)) to the Series A Conversion Price or the Series B Conversion Price, as the case may be, which would have been in effect at such time had such Options or Convertible Securities still outstanding provided for such changed purchase price, additional consideration or conversion rate, as the case may be, at the time initially granted, issued or sold; and on the expiration of any such Option or the termination of any such right to convert or exchange such Convertible Securities, the Series A Conversion Price or the Series B Conversion Price, as applicable, then in effect hereunder shall forthwith be increased to the Series A Conversion Price or the Series B Conversion Price, as the case may be, which would have been in effect at the time of such expiration or termination had such Option or Convertible Securities, to the extent outstanding immediately prior to such expiration or termination, never been issued.

5D(4) Stock Dividends. In case the Corporation shall declare a dividend or make any other distribution upon any stock of the Corporation payable in Common Stock (except for the issue of stock dividends or distributions upon the outstanding Common Stock for which adjustment is made pursuant to subparagraph 5F), Options or Convertible Securities, any Common Stock, Options or Convertible Securities, as the case may be, issuable in payment of such dividend or distribution shall be deemed to have been issued or sold without consideration.

5D(5) Consideration for Stock. In case any shares of Common Stock, Options or Convertible Securities shall be issued or sold for cash, the consideration received therefor shall be deemed to be the amount received by the Corporation therefor, without deduction therefrom of any expenses incurred or any underwriting commissions or concessions paid or allowed by the Corporation in connection therewith. In case any shares of Common Stock, Options or Convertible Securities shall be issued or sold for a consideration other than cash, the amount of the consideration other than cash received by the Corporation shall be deemed to be the fair market value of such consideration as determined in good faith by the Board of Directors of the Corporation, without deduction of any expenses incurred or any underwriting commissions or concessions paid or allowed by the Corporation in connection therewith. In case any Options shall be issued in connection with the issue and sale of other securities of the Corporation, together comprising one integral transaction in which no specific consideration is allocated to such Options by the parties thereto, such Options shall be deemed to have been issued for such consideration as determined in good faith by the Board of Directors of the Corporation.

5D(6) Record Date. In case the Corporation shall take a record of the holders of its Common Stock for the purpose of entitling them (i) to receive a dividend or other distribution payable in Common Stock, Options or Convertible Securities or (ii) to subscribe for or purchase Common Stock, Options or Convertible Securities, then such record date shall be deemed to be the date of the issue or sale of the shares of Common Stock deemed to have been issued or sold upon the declaration of such dividend or the making of such other distribution or the date of the granting of such right of subscription or purchase, as the case may be.

5D(7) Treasury Shares. The number of shares of Common Stock outstanding at any given time shall not include shares owned or held by or for the account of the Corporation, and the disposition of any such shares (other than the retirement and cancellation thereof) shall be considered an issue or sale of Common Stock for the purpose of this subparagraph 5D.

5E. Certain Issues of Common Stock Excepted. Anything herein to the contrary notwithstanding, the Corporation shall not be required to make any adjustment of the Series A Conversion Price or the Series B Conversion Price in the case of the issuance of (i) shares of Series B Preferred Stock and a warrant (the "LGI Warrant") to purchase up to 396,431 shares of Common Stock issued pursuant to that certain Securities Purchase Agreement entered into on or about June 26, 2009 between the Corporation, LGI Ventures B.V. and UPC Broadband Operations B.V., (ii) shares of Common Stock issuable upon conversion of the Series Preferred Stock, (iii) shares of Common Stock issuable upon exercise of the LGI Warrant, (iv) shares of Common Stock actually issued upon the exercise of options to purchase Common Stock outstanding as of June 26, 2009, provided such issuance is pursuant to the terms of such option and (v) Reserved Employee Shares (as defined in paragraph 6 hereof).

5F. Subdivision or Combination of Common Stock. In case the Corporation shall at any time subdivide (by any stock split, stock dividend or otherwise) its outstanding shares of Common Stock into a greater number of shares, the Series A Conversion Price and the Series B Conversion Price in effect immediately prior to such subdivision shall be proportionately reduced, and, conversely, in case the outstanding shares of Common Stock shall be combined into a smaller number of shares, the Series A Conversion Price and the Series B Conversion Price in effect immediately prior to such combination shall be proportionately increased. In the event both subparagraph 5D(4) and this subparagraph 5F would require an adjustment to the Series A Conversion Price or the Series B Conversion Price, then such adjustment shall be made by applying this subparagraph 5F in lieu of subparagraph 5D(4).

5G. Reorganization or Reclassification. If any capital reorganization, reclassification, recapitalization, consolidation, merger, sale of all or substantially all of the Corporation's assets or other similar transaction (any such transaction being referred to herein as an "Organic Change") shall be effected in such a way that holders of Common Stock shall be entitled to receive (either directly or upon subsequent liquidation) stock, securities or assets with respect to or in exchange for Common Stock, then, as a condition of such Organic Change, lawful and adequate provisions shall be made whereby each holder of a share or shares of Series A Preferred Stock or Series B Preferred Stock, as the case may be, shall thereupon have the right to receive, upon the basis and upon the terms and conditions specified herein and in lieu of or in addition to, as the case may be, the shares of Common Stock immediately theretofore receivable upon the conversion of such share or shares of Series A Preferred Stock or Series B Preferred Stock, as the case may be, such shares of stock, securities or assets as may be issued or payable with respect to or in exchange for a number of outstanding shares of such Common Stock equal to the number of shares of such Common Stock immediately theretofore receivable upon such conversion had such Organic Change not taken place, and in any case of a reorganization or reclassification only appropriate provisions shall be made with respect to the rights and interests of such holder to the end that the provisions hereof (including without limitation provisions for adjustments of the Series A Conversion Price and the Series B Conversion Price) shall thereafter be applicable, as nearly as may be, in relation to any shares of stock, securities or assets thereafter deliverable upon the exercise of such conversion rights.

5H. Notice of Adjustment. Upon any adjustment of the Series A Conversion Price or the Series B Conversion Price, then, and in each such case, the Corporation shall give written notice thereof, by first class mail, postage prepaid, or by facsimile transmission to non-U.S. residents, addressed to each holder of shares of Series A Preferred Stock or Series B Preferred Stock, as the case may be, at the address of such holder as shown on the books of the Corporation, which notice shall state the Series A Conversion Price or the Series B Conversion Price, as the case may be, as applicable, resulting from such adjustment, setting forth in reasonable detail the method upon which such calculation is based.

5I. Other Notices. In case at any time:

(1) the Corporation shall declare any dividend upon its Common Stock payable in cash or stock or make any other distribution to the holders of its Common Stock;

(2) the Corporation shall offer for subscription pro rata to the holders of its Common Stock any additional shares of stock of any class or other rights;

(3) there shall be any capital reorganization or reclassification of the capital stock of the Corporation, or a consolidation or merger of the Corporation with or into, or a sale of all or substantially all its assets to, another entity or entities; or

(4) there shall be a voluntary or involuntary dissolution, liquidation or winding up of the Corporation;

then, in any one or more of said cases, the Corporation shall give, by first class mail, postage prepaid, or by facsimile transmission to non-U.S. residents, addressed to each holder of any shares of Series Preferred Stock at the address of such holder as shown on the books of the Corporation, (a) at least 20 days' prior written notice of the date on which the books of the Corporation shall close or a record shall be taken for such dividend, distribution or subscription rights or for determining rights to vote in respect of any such reorganization, reclassification, consolidation, merger, sale, dissolution, liquidation or winding up, and (b) in the case of any such reorganization, reclassification, consolidation, merger, sale, dissolution, liquidation or winding up, at least 20 days' prior written notice of the date when the same shall take place. Such notice in accordance with the foregoing clause (a) shall also specify, in the case of any such dividend, distribution or subscription rights, the date on which the holders of Common Stock shall be entitled thereto and such notice in accordance with the foregoing clause (b) shall also specify the date on which the holders of Common Stock shall be entitled to exchange their Common Stock for securities or other property deliverable upon such reorganization, reclassification, consolidation, merger, sale, dissolution, liquidation or winding up, as the case may be.

5J. Stock to be Reserved. The Corporation will at all times reserve and keep available out of its authorized Common Stock, solely for the purpose of issuance upon the conversion of Series A Preferred Stock and Series B Preferred Stock as herein provided, such number of shares of Common Stock as shall then be issuable upon the conversion of all outstanding shares of Series A Preferred Stock and Series B Preferred Stock. The Corporation covenants that all shares of Common Stock which shall be so issued shall be duly and validly issued and fully paid and nonassessable and free from all taxes, liens and charges with respect to the issue thereof, and, without

limiting the generality of the foregoing, the Corporation covenants that it will from time to time take all such action as may be requisite to assure that the par value per share of the Common Stock is at all times equal to or less than the Series A Conversion Price and the Series B Conversion Price in effect at the time. The Corporation will take all such action as may be necessary to assure that all such shares of Common Stock may be so issued without violation of any applicable law or regulation, or of any requirement of any national securities exchange upon which the Common Stock may be listed.

5K. No Reissuance of Series Preferred Stock. Shares of Series Preferred Stock which are converted into shares of Common Stock as provided herein shall not be reissued.

5L. Issue Tax. The issuance of certificates for shares of Common Stock upon conversion of Series Preferred Stock shall be made without charge to the holders thereof for any issuance tax in respect thereof, provided that the Corporation shall not be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of any certificate in a name other than that of the holder of the Series Preferred Stock which is being converted.

5M. Closing of Books. The Corporation will at no time close its transfer books against the transfer of any shares of Series Preferred Stock or of any shares of Common Stock issued or issuable upon the conversion of any shares of Series Preferred Stock, in any manner which interferes with the timely conversion of such Series Preferred Stock except as may otherwise be required to comply with applicable securities laws.

5N. Definition of Common Stock. As used in this paragraph 5, the term "Common Stock" shall mean and include the Corporation's authorized Common Stock, par value \$.001 per share, as constituted on the date of filing of these terms of the Series Preferred Stock, and shall also include any capital stock of any class of the Corporation thereafter authorized which shall neither be limited to a fixed sum or percentage of par value in respect of the rights of the holders thereof to participate in dividends nor entitled to a preference in the distribution of assets upon the voluntary or involuntary liquidation, dissolution or winding up of the Corporation; provided that the shares of Common Stock receivable upon conversion of shares of Series Preferred Stock shall include only shares designated as Common Stock of the Corporation on the date of filing of this instrument, or in case of any reorganization or reclassification of the outstanding shares thereof, the stock, securities or assets provided for in subparagraph 5G.

5O. Mandatory Conversion. All outstanding shares of Series Preferred Stock shall automatically convert to shares of Common Stock effective upon the closing of a firm commitment underwritten public offering of shares of Common Stock in which (i) the aggregate net proceeds from such offering to the Corporation shall be at least \$80,000,000 and (ii) the price paid by the public for such shares shall be at least \$12.75 (appropriately adjusted to reflect the occurrence of any event described in subparagraph 5F).

6. Definitions. As used herein, the following terms shall have the following meanings:

(a) The term "Reserved Employee Shares" shall mean shares of Common Stock reserved by the Corporation from time to time for (i) the sale of shares of Common Stock to employees, consultants or non-employee directors (other than representatives of the holders of Preferred Stock) of the Corporation or (ii) the issuance and/or exercise of options to purchase Common Stock granted to employees, consultants or non-employee directors (other than representatives of the holders of Preferred Stock) of the Corporation, not to exceed in the aggregate 544,000 shares (appropriately adjusted to reflect an event described in subparagraph 5F hereof) of Common Stock after the date hereof (provided that any options for such shares that expire or terminate unexercised or any restricted stock repurchased by the Corporation at cost shall not be counted toward such maximum number unless and until such shares are regranted as new stock grants (or as new options)).

(b) The term "Subsidiary" shall mean any corporation, partnership, trust or other entity of which the Corporation and/or any of its other subsidiaries directly or indirectly owns at the time a majority of the outstanding shares of every class of equity security of such corporation, partnership, trust or other entity.

7. Common Stock.

(a) All preferences, voting powers, relative, participating, optional or other special rights and privileges, and qualifications, limitations, or restrictions of the Common Stock are expressly made subject to those that may be fixed with respect to any shares of Preferred Stock.

(b) The number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote, irrespective of the provisions of Section 242(b)(2) of the General Corporation Law.

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IN WITNESS WHEREOF, the Corporation has caused this Certificate of Amendment to be signed by its President this 26th day of June, 2009.

CASA SYSTEMS, INC.

By: /s/ Jerry Guo

Jerry Guo
President

CERTIFICATE OF AMENDMENT
OF
AMENDED AND RESTATED CERTIFICATE OF INCORPORATION
OF
CASA SYSTEMS, INC.

Casa Systems, Inc. (the "Corporation"), organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the "General Corporation Law"), does hereby certify as follows:

The Board of Directors of the Corporation duly adopted a resolution, pursuant to Sections 141(f) and 242 of the General Corporation Law, setting forth an amendment to the Amended and Restated Certificate of Incorporation of the Corporation, as amended, and declaring said amendment to be advisable. The stockholders of the Corporation duly approved said proposed amendment by written consent in accordance with Sections 228 and 242 of the General Corporation Law. The resolution setting forth the amendment is as follows:

RESOLVED: That Article FOURTH of the Amended and Restated Certificate of Incorporation of the Corporation, as amended, be and hereby is deleted in its entirety and the following Article FOURTH is inserted in lieu thereof:

"FOURTH. The Corporation is authorized to have two classes of shares, designated as Common Stock and Preferred Stock. The total number of shares of Common Stock which the Corporation is authorized to issue is 12,500,000 shares, and the par value of each of the shares of Common Stock is one tenth of one cent (\$.001). The total number of shares of Preferred Stock which the Corporation is authorized to issue is 6,000,000 shares, and the par value of each of the shares of Preferred Stock is one tenth of one cent (\$.001). A total of 1,290,679 shares of Preferred Stock shall be designated the "Series A Convertible Preferred Stock" (the "Series A Preferred Stock"), a total of 352,018 shares of Preferred Stock shall be designated the "Series B Convertible Preferred Stock" (the "Series B Preferred Stock") and a total of 3,859,200 shares of Preferred Stock shall be designated the "Series C Convertible Preferred Stock" (the "Series C Preferred Stock") and together with the Series A Preferred Stock and the Series B Preferred Stock, the "Series Preferred Stock").

Preferred Stock may also be issued from time to time in one or more further series, each of such series to have such terms as stated or expressed herein and in the resolution or resolutions providing for the issue of such series adopted by the Board of Directors of the Corporation as hereinafter provided. Any shares of Preferred Stock which may be redeemed,

purchased or acquired by the Corporation may be reissued except as otherwise provided by law or by the terms of any series of Preferred Stock. Different series of Preferred Stock shall not be construed to constitute different classes of shares for the purposes of voting by classes unless expressly provided.

Except as otherwise specifically provided for in this Certificate of Incorporation, authority is hereby expressly granted to the Board of Directors from time to time to issue additional shares of Preferred Stock in one or more series, and in connection with the creation of any such series, by resolution or resolutions providing for the issue of the shares thereof, to determine and fix such voting powers, full or limited, or no voting powers, and such designations, preferences and relative participating, optional or other special rights, and qualifications, limitations or restrictions thereof, including without limitation thereof, dividend rights, special voting rights, conversion rights, redemption privileges and liquidation preferences, as shall be stated and expressed in such resolutions, all to the full extent now or hereafter permitted by the General Corporation Law. Without limiting the generality of the foregoing, except as otherwise specifically provided in this Certificate of Incorporation, the resolutions providing for issuance of any series of Preferred Stock may provide that such series shall be superior or rank equally or be junior to the Preferred Stock of any other series to the extent permitted by law. Except as otherwise specifically provided in this Certificate of Incorporation, no vote of the holders of Preferred Stock or Common Stock shall be a prerequisite to the issuance of any shares of any series of Preferred Stock authorized by and complying with the conditions of this Certificate of Incorporation, the right to have such vote being expressly waived by all present and future holders of the capital stock of the Corporation.

For purposes of clarity, no shares of Preferred Stock created pursuant to the authority granted in the preceding two paragraphs shall be deemed to be "Series Preferred Stock" without the prior written consent of the holders of a majority of the then outstanding shares of Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock (voting together as a single class on an as converted to Common Stock basis).

The following is a statement of the powers, privileges and rights, and the qualifications, limitations or restrictions thereof, in respect of each series of Series Preferred Stock:

1. Voting. Except as may be otherwise provided in these terms of the Series Preferred Stock or by law, the Series Preferred Stock shall vote together with all other classes and series of stock of the Corporation, including, but not limited to, any other series of Preferred Stock the terms of which so provide, as a single class on all actions to be taken by the stockholders of the Corporation. Each share of Series Preferred Stock shall entitle the holder thereof to such number of votes per share on each such action as shall equal the number of shares of Common Stock (including fractions of a share) into which each share of Series Preferred Stock is then convertible. The number of authorized shares of Preferred Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote, irrespective of the provisions of Section 242(b)(2) of the General Corporation Law.

2. Dividends.

2A. Dividends. In the event the Board of Directors of the Corporation shall declare a dividend (other than a dividend payable in Common Stock) payable upon the then outstanding shares of the Common Stock of the Corporation, the Board of Directors shall declare at the same time a dividend upon the then outstanding shares of Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock, payable at the same time as the dividend paid on the Common Stock, in an amount equal to the amount of dividends per share of Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock, as the case may be, as would have been payable on the largest number of whole shares of Common Stock into which all shares of Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock, as the case may be, held by each holder thereof would be converted if such Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock, as the case may be, had been converted to Common Stock pursuant to the provisions of paragraph 5 hereof as of the record date for the determination of holders of Common Stock entitled to receive such dividends. All dividends declared upon the Series Preferred Stock pursuant to this subparagraph 2A shall be declared and paid pro rata per share.

2B. Series A Accruing Dividends. From and after the date of the issuance of any shares of Series A Preferred Stock, the holders of such shares of Series A Preferred Stock shall be entitled to receive, out of funds legally available therefor, when and if declared by the Board of Directors, dividends at the rate per annum of \$.3832 per share (the "Series A Accruing Dividends"). The Series A Accruing Dividends shall accrue from day to day, whether or not earned or declared, and shall be cumulative; provided however, that except as provided in paragraph 3, the Corporation shall be under no obligation to pay such Series A Accruing Dividends unless so declared by the Board of Directors. The Series A Accruing Dividends set forth in this subparagraph 2B shall be in addition to any dividends declared and paid pursuant to subparagraph 2A.

2C. Series B Accruing Dividends. From and after the date of the issuance of any shares of Series B Preferred Stock, the holders of such shares of Series B Preferred Stock shall be entitled to receive, out of funds legally available therefor, when and if declared by the Board of Directors, dividends at the rate per annum of \$.5376 per share (the "Series B Accruing Dividends"). The Series B Accruing Dividends shall accrue from day to day, whether or not earned or declared, and shall be cumulative; provided however, that except as provided in paragraph 3, the Corporation shall be under no obligation to pay such Series B Accruing Dividends unless so declared by the Board of Directors. The Series B Accruing Dividends set forth in this subparagraph 2C shall be in addition to any dividends declared and paid pursuant to subparagraph 2A.

2D. Series C Accruing Dividends. From and after the date of the issuance of any shares of Series C Preferred Stock, the holders of such shares of Series C Preferred Stock shall be entitled to receive, out of funds legally available therefor, when and if declared by the Board of Directors, dividends at the rate per annum of \$1.499694 per share (the "Series C Accruing Dividends" and, together with the Series A Accruing Dividends and the Series B Accruing Dividends, the "Accruing Dividends"). The Series C Accruing Dividends shall accrue from day

to day, whether or not earned or declared, and shall be cumulative; provided however, that except as provided in paragraph 3, the Corporation shall be under no obligation to pay such Series C Accruing Dividends unless so declared by the Board of Directors. The Series C Accruing Dividends set forth in this subparagraph 2D shall be in addition to any dividends declared and paid pursuant to subparagraph 2A.

2E. Except with the consent of the holders of a majority of the votes represented by the then outstanding shares of Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock, voting together as a single class on an as converted to Common Stock basis, given in writing or by vote at a meeting, no dividends may be paid on the Common Stock or any other series of Preferred Stock ranking junior to the Series Preferred Stock (other than dividends on shares of Common Stock payable in shares of Common Stock) until the Accruing Dividends have been paid in full. Any payments in respect of the Accruing Dividends shall be made on a *pari passu* basis in proportion to the total amount of Accruing Dividends outstanding on each series of the Series Preferred Stock.

3. Liquidation, Dissolution and Winding-up.

3A. Liquidation. Upon any liquidation, dissolution or winding up of the Corporation (a "Liquidation Event"), whether voluntary or involuntary: (i) the holders of the shares of Series A Preferred Stock shall be paid an amount per share equal to the greater of (a) \$6.3868 (subject to appropriate adjustment to reflect any stock split, stock dividend, reverse stock split or similar corporate event affecting the Series A Preferred Stock) plus, in the case of each share, an amount equal to all accrued and unpaid dividends thereon (whether or not declared) computed to the date payment thereof is made available, and (b) the amount that would have been payable to such share had all shares of Series A Preferred Stock been converted into shares of Common Stock immediately prior to the Liquidation Event pursuant to Section 5; (ii) the holders of the shares of Series B Preferred Stock shall be paid an amount per share equal to the greater of (a) \$8.96 (subject to appropriate adjustment to reflect any stock split, stock dividend, reverse stock split or similar corporate event affecting the Series B Preferred Stock) plus, in the case of each share, an amount equal to all accrued and unpaid dividends thereon (whether or not declared) computed to the date payment thereof is made available, and (b) the amount that would have been payable to such share had all shares of Series B Preferred Stock been converted into shares of Common Stock immediately prior to the Liquidation Event pursuant to Section 5; and (iii) the holders of the shares of Series C Preferred Stock shall be paid an amount per share equal to the greater of (a) \$24.9949 (subject to appropriate adjustment to reflect any stock split, stock dividend, reverse stock split or similar corporate event affecting the Series C Preferred Stock) plus, in the case of each share, an amount equal to all accrued and unpaid dividends thereon (whether or not declared) computed to the date payment thereof is made available, and (b) the amount that would have been payable to such share had all shares of Series C Preferred Stock been converted into shares of Common Stock immediately prior to the Liquidation Event pursuant to Section 5, together, in each case, with payment to any class or series of stock ranking on liquidation on a parity with the Series Preferred Stock, before any payment shall be made to the holders of any other class or series of stock ranking on liquidation junior to the Series Preferred Stock. If upon any Liquidation Event, the assets to be distributed to the holders of the Series Preferred Stock and any class or series of stock ranking on liquidation

on a parity with the Series Preferred Stock shall be insufficient to permit payment to such stockholders of the full preferential amounts to which they are entitled, then all of the assets of the Corporation available for distribution to such holders shall be distributed to such holders pro rata, so that each holder receives that portion of the assets available for distribution as the amount of the full liquidation preference to which such holder would otherwise be entitled bears to the amount of the full liquidation preference to which all such holders would otherwise be entitled.

3B. Upon any Liquidation Event, immediately after the holders of Series Preferred Stock and any class or series of stock ranking on liquidation on a parity with the Series Preferred Stock have been paid the full liquidation preference to which such holders are entitled, the remaining net assets of the Corporation available for distribution shall be distributed ratably among the holders of the shares of Common Stock and any other class or series of stock entitled to participate in liquidation distributions with the holders of Common Stock, pro rata based on the number of shares of Common Stock held by each such holder (assuming, where applicable, conversion into Common Stock of all such shares).

3C. Written notice of a Liquidation Event, stating a payment date and the place where said payments shall be made, shall be given by mail, postage prepaid, or by facsimile to non-U.S. residents, not less than 20 days prior to the payment date stated therein, to the holders of record of Series Preferred Stock, such notice to be addressed to each such holder at its address as shown by the records of the Corporation.

3D. The (x) consolidation or merger of the Corporation into or with any other entity or entities (except (A) a consolidation or merger into a Subsidiary (as defined in paragraph 6 below) where the Corporation is the surviving entity and this Certificate of Incorporation is not altered, or (B) a consolidation or merger in which the holders of the Corporation's voting stock outstanding immediately prior to the transaction constitute the holders of a majority of the voting stock outstanding immediately following the transaction of the surviving or resulting entity in such transaction or the parent entity of such surviving or resulting entity and which does not violate the provisions of Section 4A(a)(i) of this Article FOURTH); (y) the sale or transfer by the Corporation of all or substantially all its assets; or (z) the sale, exchange or transfer by the Corporation's stockholders, in a single transaction or series of related transactions to which the Corporation is a party, of capital stock representing a majority of the voting power at elections of directors of the Corporation, shall be deemed to be a Liquidation Event within the meaning of the provisions of this paragraph 3 (subject to the provisions of this paragraph 3 and not the provisions of subparagraph 5G hereof, unless subparagraph 5G is elected in accordance with the following proviso); provided, however, that (i) the holders of at least a majority of the then outstanding shares of Series A Preferred Stock shall have the right to elect the benefits of the provisions of subparagraph 5G in lieu of receiving payment in a Liquidation Event pursuant to this paragraph 3 with respect to the Series A Preferred Stock, on behalf of all holders of Series A Preferred Stock, (ii) the holders of at least a majority of the then outstanding shares of Series B Preferred Stock shall have the right to elect the benefits of the provisions of subparagraph 5G in lieu of receiving payment in a Liquidation Event pursuant to this paragraph 3 with respect to the Series B Preferred Stock, on behalf of all holders of Series B Preferred Stock, and (iii) the holders of at least a majority of the then outstanding shares of Series C Preferred Stock shall

have the right to elect the benefits of the provisions of subparagraph 5G in lieu of receiving payment in a Liquidation Event pursuant to this paragraph 3 with respect to the Series C Preferred Stock, on behalf of all holders of Series C Preferred Stock. In the event of a deemed Liquidation Event within the meaning of this Section 3D, if any portion of the consideration payable to the stockholders of the Corporation is placed in escrow and/or is payable to the stockholders of the Corporation subject to contingencies, the definitive agreement governing such transaction shall provide that (A) the portion of the consideration that is not placed in escrow and not subject to any contingencies (the "Initial Consideration") shall be allocated among the holders of capital stock of the Corporation in accordance with Sections 3A and 3B as if the Initial Consideration were the only consideration payable in connection with such deemed Liquidation Event and (B) any additional consideration that becomes payable to the stockholders of the Corporation upon release from escrow or satisfaction of contingencies shall be allocated among the holders of capital stock of the Corporation in accordance with Sections 3A and 3B after taking into account the previous payment of the Initial Consideration as part of the same transaction.

3E. Whenever the distribution provided for in this paragraph 3 shall be payable in property other than cash, the value of such distribution shall be the fair market value of such property as determined reasonably and in good faith by the Board of Directors of the Corporation, and the same form of property shall be distributed, on a *pari passu* basis in accordance with this paragraph 3, to the holders of Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock, provided, however, that (i) with respect to such distribution allocable to the Series A Preferred Stock, the holders of at least a majority of the then outstanding shares of Series A Preferred Stock, voting together as a single class, may consent otherwise, on behalf of all holders of Series A Preferred Stock, (ii) with respect to such distribution allocable to the Series B Preferred Stock, a majority of the then outstanding shares of Series B Preferred Stock, voting together as a single class, may consent otherwise, on behalf of all holders of Series B Preferred Stock and (iii) with respect to such distribution allocable to the Series C Preferred Stock, a majority of the then outstanding shares of Series C Preferred Stock, voting together as a single class, may consent otherwise, on behalf of all holders of Series C Preferred Stock.

3F. The Corporation shall not effect any transaction constituting a deemed Liquidation Event pursuant to subparagraph 3D above unless the agreement or plan of merger or consolidation provides that the consideration payable to the stockholders of the Corporation shall be allocated among the holders of capital stock of the Corporation in accordance with subparagraphs 3A and 3B above, provided, however, that the holders of at least (i) a majority of the votes represented by the outstanding shares of Series A Preferred Stock, voting together as a single class, may specifically consent in writing to the allocation of such consideration with respect to the Series A Preferred Stock in a manner different from that provided in subparagraphs 3A and 3B above, on behalf of all holders of Series A Preferred Stock, (B) a majority of the votes represented by the outstanding shares of Series B Preferred Stock, voting together as a single class, may specifically consent in writing to the allocation of such consideration with respect to the Series B Preferred Stock in a manner different from that provided in subparagraphs 3A and 3B above, on behalf of all holders of Series B Preferred Stock, and (C) a majority of the votes represented by the outstanding shares of Series C Preferred Stock, voting together as a

single class, may specifically consent in writing to the allocation of such consideration with respect to the Series C Preferred Stock in a manner different from that provided in subparagraphs 3A and 3B above, on behalf of all holders of Series C Preferred Stock.

3G. In the event of a deemed Liquidation Event pursuant to subparagraph 3D above, if the Corporation does not effect a dissolution of the Corporation under the General Corporation Law within 60 days after such deemed Liquidation Event, then (i) the Corporation shall deliver a written notice to each holder of Series Preferred Stock no later than the 60th day after the deemed Liquidation Event advising such holders of their right (and the requirements to be met to secure such right) pursuant to the terms of the following clause (ii) to require the redemption of such shares of Series Preferred Stock, and (ii) if the holders of shares of Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock, voting together as a single class on an as converted to Common Stock basis, representing at least a majority of the votes represented by the then outstanding shares of Series Preferred Stock so request in a written instrument delivered to the Corporation not later than 75 days after such deemed Liquidation Event, the Corporation shall use the consideration received by the Corporation for such deemed Liquidation Event (net of any liabilities associated with the assets sold, as determined reasonably and in good faith by the Board of Directors of the Corporation), to the extent legally available therefor (the "Net Proceeds"), to redeem, on the 90th day after such deemed Liquidation Event (the "Liquidation Redemption Date"), (i) all outstanding shares of Series A Preferred Stock at a price per share equal to the maximum amount payable to each holder of Series A Preferred Stock pursuant to subparagraph 3A as of the date of the deemed Liquidation Event, (ii) all outstanding shares of Series B Preferred Stock at a price per share equal to the maximum amount payable to each holder of Series B Preferred Stock pursuant to subparagraph 3A as of the date of the deemed Liquidation Event and (iii) all outstanding shares of Series C Preferred Stock at a price per share equal to the maximum amount payable to each holder of Series C Preferred Stock pursuant to subparagraph 3A as of the date of the deemed Liquidation Event. If the Net Proceeds are not sufficient to so redeem all outstanding shares of Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock, the Corporation shall redeem a pro rata portion (based on the aggregate amounts that would have been payable on redemption of the Series A Preferred Stock, the Series B Preferred Stock and the Series C Preferred Stock) of each holder's shares of Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock, as the case may be, out of the Net Proceeds. Prior to the distribution or redemption provided for in this subparagraph 3G, the Corporation shall not expend or dissipate the consideration received for such deemed Liquidation Event, except to discharge expenses incurred in the ordinary course of business. At any time and from time to time thereafter, when additional funds of the Corporation are legally available for such purpose, such funds shall immediately be used to redeem the shares of Series Preferred Stock which were required to be redeemed pursuant to this subparagraph 3G. but which the Corporation failed to so redeem, until the balance of such shares have been redeemed. The redemption of shares pursuant to the immediately preceding sentence shall be made, as nearly as practicable, on a pro rata basis among the holders of shares of Series Preferred Stock.

4. Restrictions.

4A. At any time when shares of Series Preferred Stock are outstanding, except where the vote or written consent of the holders of a greater number of shares of Series Preferred Stock of the Corporation is required by law or by this Certificate of Incorporation, and in addition to any other vote required by law or this Certificate of Incorporation, without the written consent of the holders of at least a majority of the votes represented by the then outstanding shares of Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock, voting together as a single class on an as converted to Common Stock basis, given in writing or by vote at a meeting, the Corporation will not, and will not permit any Subsidiary to:

(a) (i) Amend, alter or repeal any provision of, or add any provision to, this Certificate of Incorporation (by means of amendment or by merger, consolidation or otherwise) or the Corporation's By-laws to change the powers, preferences or rights of the Series A Preferred Stock, the Series B Preferred Stock or the Series C Preferred Stock; or (ii) amend, alter or repeal any provision of, or add any provision to, any organizational document of any Subsidiary in a manner adverse to the holders of Series Preferred Stock;

(b) Create or authorize the creation of any additional class or series of shares of stock which ranks senior to the Series A Preferred Stock, the Series B Preferred Stock or the Series C Preferred Stock as to dividends or the distribution of assets on the liquidation, dissolution or winding up of the Corporation, or provide such stock with a redemption right not provided to the Series A Preferred Stock, the Series B Preferred Stock or the Series C Preferred Stock pursuant to this Certificate of Incorporation; increase the authorized number of shares of Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock; or increase the authorized amount of any additional class or series of shares of stock that ranks senior to the Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock as to dividends or the distribution of assets on the liquidation, dissolution or winding up of the Corporation, or create or authorize any obligation or security convertible into shares of any series of Series Preferred Stock or into shares of any other class or series of stock that ranks senior to such Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock as to dividends or the distribution of assets on the liquidation, dissolution or winding up of the Corporation, whether any such creation, authorization or increase shall be by means of amendment to this Certificate of Incorporation or by merger, consolidation or otherwise;

(c) Create, or authorize the creation of, or issue, or authorize the issuance of, any debt security of the Corporation which by its terms is convertible into or exchangeable for any equity security of the Corporation or any security of the Corporation which is a combination of debt and equity, if such equity security ranks senior to the Series A Preferred Stock, the Series B Preferred Stock or the Series C Preferred Stock as to dividends or the distribution of assets on the liquidation, dissolution or winding up of the Corporation;

(d) Purchase or redeem, or set aside any sums for the purchase or redemption of, or pay any dividend or make any distribution on, any shares of stock, except for dividends or other distributions payable on the Common Stock solely in the form of additional shares of Common Stock and other than (i) shares of Common Stock repurchased from employees, advisors, officers, directors or consultants or service providers of the Corporation at the original purchase price thereof, (ii) shares of Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock redeemed pursuant to Section 3G of Article FOURTH of this Certificate of

Incorporation and (iii) up to 3,859,200 shares of capital stock of the Corporation repurchased at a price of \$24.9949 per share (subject to appropriate adjustment to reflect any stock split, stock dividend, reverse stock split or similar corporate event) as part of the Redemption (as such term is defined in the Series C Convertible Preferred Stock Purchase Agreement, by and between the Corporation and the purchasers party thereto, dated on or around the date hereof);

(e) Change the nature of the Corporation's or any Subsidiary's business;

(f) Acquire, directly or indirectly, all or substantially all of the properties, assets or stock of any other company or entity (except if the amount of consideration involved represents less than 10% of the Corporation's consolidated stockholders equity (determined in accordance with U.S. generally accepted accounting principles, consistently applied) as of the end of the most recent fiscal quarter);

(g) Incur any indebtedness for borrowed money (other than indebtedness for borrowed money of any Subsidiary owed to the Corporation), if the amount of indebtedness for borrowed money of the Corporation and its Subsidiaries exceeds, in the aggregate, 10% of the Corporation's consolidated stockholders equity (determined in accordance with U.S. generally accepted accounting principles, consistently applied) as of the end of the most recent fiscal quarter (for purposes of this clause (g), indebtedness for borrowed money shall include notes, bonds, capital leases and deferred purchase price for assets); or

(h) Effect a Liquidation Event, unless, in connection with such Liquidation Event, the holders of the then outstanding shares of Series C Preferred Stock receive at the closing of such transaction an amount in cash (not including any amounts held in escrow) equal to or greater than \$49.9898 per share (subject to appropriate adjustment to reflect any stock split, stock dividend, reverse stock split or similar corporate event affecting the Series C Preferred Stock).

4B. Notwithstanding anything in subparagraph 4A to the contrary, at any time when shares of Series A Preferred Stock are outstanding, except where the vote or written consent of the holders of a greater number of shares of Series A Preferred Stock of the Corporation is required by law or by this Certificate of Incorporation, and in addition to any other vote required by law or this Certificate of incorporation, without the written consent of the holders of at least a majority of the then outstanding shares of Series A Preferred Stock, voting as a separate class, given in writing or by vote at a meeting, the Corporation will not (i) amend, alter or repeal any provision of, or add any provision to, this Certificate of Incorporation (by means of amendment or by merger, consolidation or otherwise), in a manner that alters or changes the powers, preferences, or special rights of the Series A Preferred Stock so as to affect the Series A Preferred Stock adversely, but does not similarly adversely affect each other series of Preferred Stock, or (ii) amend, alter or repeal any provision of, or add any provision to, this Certificate of incorporation (by means of amendment or by merger, consolidation or otherwise) to change the rights of the Series A Preferred Stock with respect to (A) the distribution of assets on the liquidation, dissolution or winding up of the Corporation, (B) the payment of dividends or (C) conversion.

4C. Notwithstanding anything in subparagraph 4A to the contrary, at any time when shares of Series B Preferred Stock are outstanding, except where the vote or written consent of the holders of a greater number of shares of Series B Preferred Stock of the Corporation is required by law or by this Certificate of Incorporation, and in addition to any other vote required by law or this Certificate of Incorporation, without the written consent of the holders of at least a majority of the then outstanding shares of Series B Preferred Stock, voting as a separate class, given in writing or by vote at a meeting, the Corporation will not (i) amend, alter or repeal any provision of, or add any provision to, this Certificate of Incorporation (by means of amendment or by merger, consolidation or otherwise), in a manner that alters or changes the powers, preferences, or special rights of the Series B Preferred Stock so as to affect the Series B Preferred Stock adversely, but does not similarly adversely affect each other series of Preferred Stock, or (ii) amend, alter or repeal any provision of, or add any provision to, this Certificate of Incorporation (by means of amendment or by merger, consolidation or otherwise) to change the rights of the Series B Preferred Stock with respect to (A) the distribution of assets on the liquidation, dissolution or winding up of the Corporation, (B) the payment of dividends or (C) conversion.

4D. Notwithstanding anything in subparagraph 4A to the contrary, at any time when shares of Series C Preferred Stock are outstanding, except where the vote or written consent of the holders of a greater number of shares of Series C Preferred Stock of the Corporation is required by law or by this Certificate of Incorporation, and in addition to any other vote required by law or this Certificate of Incorporation, without the written consent of the holders of at least a majority of the then outstanding shares of Series C Preferred Stock, voting as a separate class, given in writing or by vote at a meeting, the Corporation will not (i) amend, alter or repeal any provision of, or add any provision to, this Certificate of Incorporation (by means of amendment or by merger, consolidation or otherwise), in a manner that alters or changes the powers, preferences, or special rights of the Series C Preferred Stock so as to affect the Series C Preferred Stock adversely, but does not similarly adversely affect each other series of Preferred Stock; (ii) amend, alter or repeal any provision of, or add any provision to, this Certificate of Incorporation (by means of amendment or by merger, consolidation or otherwise) to change the rights of the Series C Preferred Stock with respect to (A) the distribution of assets on the liquidation, dissolution or winding up of the Corporation, (B) the payment of dividends or (C) conversion; or (iii) amend, alter or repeal any provision of, or add any provision to, this Certificate of Incorporation (by means of amendment or by merger, consolidation or otherwise) in a manner that adversely affects the powers, preferences or rights of the Series C Preferred Stock.

5. Conversion of the Series Preferred Stock. The holders of shares of Series Preferred Stock shall have the following conversion rights:

5A. Right to Convert. Subject to the terms and conditions of this paragraph 5, the holder of any share or shares of Series A Preferred Stock shall have the right, at its option at any time, to convert any such shares of Series A Preferred Stock (except that upon any liquidation, dissolution or winding up of the Corporation the right of conversion shall terminate at the close of business on the business day fixed for payment of the amounts distributable on the Series A Preferred Stock) into such number of fully paid and nonassessable shares of Common

Stock as is obtained by (i) multiplying the number of shares of Series A Preferred Stock so to be converted by \$6.3868 (subject to appropriate adjustment to reflect any stock split, stock dividend, reverse stock split or similar corporate event affecting the Series A Preferred Stock) and (ii) dividing the result by the conversion price of \$6.3868 per share or in case an adjustment of such price has taken place pursuant to the further provisions of this paragraph 5, then by the conversion price as last adjusted and in effect at the date any share or shares of Series A Preferred Stock are surrendered for conversion (such price, or such price as last adjusted, being referred to as the "Series A Conversion Price"). Subject to the terms and conditions of this paragraph 5, the holder of any share or shares of Series B Preferred Stock shall have the right, at its option at any time, to convert any such shares of Series B Preferred Stock (except that upon any liquidation, dissolution or winding up of the Corporation the right of conversion shall terminate at the close of business on the business day fixed for payment of the amounts distributable on the Series B Preferred Stock) into such number of fully paid and nonassessable shares of Common Stock as is obtained by (i) multiplying the number of shares of Series B Preferred Stock so to be converted by \$8.96 (subject to appropriate adjustment to reflect any stock split, stock dividend, reverse stock split or similar corporate event affecting the Series B Preferred Stock) and (ii) dividing the result by the conversion price of \$8.96 per share or in case an adjustment of such price has taken place pursuant to the further provisions of this paragraph 5, then by the conversion price as last adjusted and in effect at the date any share or shares of Series B Preferred Stock are surrendered for conversion (such price, or such price as last adjusted, being referred to as the "Series B Conversion Price"). Subject to the terms and conditions of this paragraph 5, the holder of any share or shares of Series C Preferred Stock shall have the right, at its option at any time, to convert any such shares of Series C Preferred Stock (except that upon any liquidation, dissolution or winding up of the Corporation the right of conversion shall terminate at the close of business on the business day fixed for payment of the amounts distributable on the Series C Preferred Stock) into such number of fully paid and nonassessable shares of Common Stock as is obtained by (i) multiplying the number of shares of Series C Preferred Stock so to be converted by \$24.9949 (subject to appropriate adjustment to reflect any stock split, stock dividend, reverse stock split or similar corporate event affecting the Series C Preferred Stock) and (ii) dividing the result by the conversion price of \$24.9949 per share or in case an adjustment of such price has taken place pursuant to the further provisions of this paragraph 5, then by the conversion price as last adjusted and in effect at the date any share or shares of Series C Preferred Stock are surrendered for conversion (such price, or such price as last adjusted, being referred to as the "Series C Conversion Price"). Such rights of conversion shall be exercised by the holder thereof by giving written notice to the Corporation at its principal office that the holder elects to convert a stated number of shares of Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock, as the case may be, into Common Stock and by surrender of a certificate or certificates for the shares so to be converted to the Corporation at its principal office (or such other office or agency of the Corporation as the Corporation may designate by notice in writing to the holders of the Series Preferred Stock) at any time during its usual business hours on the date set forth in such notice, together with a statement of the name or names (with address) in which the certificate or certificates for shares of Common Stock shall be issued. Notwithstanding any other provisions hereof, if a conversion of Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock is to be made in connection with any transaction affecting the Corporation, the conversion of any shares of Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock, as the case may

be, may, at the election of the holder thereof, be conditioned upon the consummation of such transaction, in which case such conversion shall not be deemed to be effective until immediately prior to the time such transaction has been consummated, subject in all events to the terms hereof applicable to such transaction.

5B. Issuance of Certificates; Time Conversion Effected. Promptly after the receipt of the written notice referred to in subparagraph 5A and surrender of the certificate or certificates for the share or shares of Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock, as the case may be, to be converted, the Corporation shall issue and deliver, or cause to be issued and delivered, to the holder, registered in such name or names as such holder may direct, a certificate or certificates for the number of whole shares of Common Stock issuable upon the conversion of such share or shares of Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock, as the case may be. To the extent permitted by law, such conversion shall be deemed to have been effected and the Series A Conversion Price, the Series B Conversion Price or the Series C Conversion Price, as the case may be, shall be determined as of the close of business on the date on which such written notice shall have been received by the Corporation and the certificate or certificates for such share or shares shall have been surrendered as aforesaid, and at such time the rights of the holder of such share or shares of Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock, as the case may be, shall cease, and the person or persons in whose name or names any certificate or certificates for shares of Common Stock shall be issuable upon such conversion shall be deemed to have become the holder or holders of record of the shares represented thereby.

5C. Fractional Shares; Partial Conversion. No fractional shares shall be issued upon conversion of Series Preferred Stock into Common Stock and no payment or adjustment shall be made upon any such conversion with respect to any cash dividends previously payable on the Common Stock issued upon such conversion. In case the number of shares of Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock, as the case may be, represented by the certificate or certificates surrendered pursuant to subparagraph 5A exceeds the number of shares converted, the Corporation shall, upon such conversion, execute and deliver to the holder, at the expense of the Corporation, a new certificate or certificates for the number of shares of Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock, as the case may be, represented by the certificate or certificates surrendered which are not to be converted. If any fractional share of Common Stock would, except for the provisions of the first sentence of this subparagraph 5C, be delivered upon such conversion, the Corporation, in lieu of delivering such fractional share, shall pay to the holder surrendering the Series Preferred Stock for conversion an amount in cash equal to the fair market value of such fractional share as determined reasonably and in good faith by the Board of Directors of the Corporation, and based upon the aggregate number of shares of Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock, as the case may be, surrendered by any one holder.

5D. Adjustment of Conversion Price Upon Issuance of Common Stock. Except as provided in subparagraphs 5E and 5F, if and whenever the Corporation shall issue or sell, or is, in accordance with subparagraphs 5D(1) through 5D(7), deemed to have issued or sold, any shares of Common Stock for a consideration per share less than the Series A Conversion Price in effect immediately prior to the time of such issue or sale (such number being

appropriately adjusted to reflect the occurrence of any event described in subparagraph 5F), then, forthwith upon such issue or sale, such Series A Conversion Price shall be reduced to the price determined by dividing (i) an amount equal to the sum of (a) the number of shares of Common Stock outstanding immediately prior to such issue or sale (including, for this purpose, shares of Common Stock issuable upon conversion of the Preferred Stock) multiplied by the then existing Series A Conversion Price and (b) the consideration, if any, received by the Corporation upon such issue or sale, by (ii) an amount equal to the sum of (a) the total number of shares of Common Stock outstanding immediately prior to such issue or sale (including, for this purpose, shares of Common Stock issuable upon conversion of the Preferred Stock) and (b) the total number of shares of Common Stock issuable in such issue or sale. Except as provided in subparagraphs 5E and 5F, if and whenever the Corporation shall issue or sell, or is, in accordance with subparagraphs 5D(1) through 5D(7), deemed to have issued or sold, any shares of Common Stock for a consideration per share less than the Series B Conversion Price in effect immediately prior to the time of such issue or sale (such number being appropriately adjusted to reflect the occurrence of any event described in subparagraph 5F), then, forthwith upon such issue or sale, such Series B Conversion Price shall be reduced to the price determined by dividing (i) an amount equal to the sum of (a) the number of shares of Common Stock outstanding immediately prior to such issue or sale (including, for this purpose, shares of Common Stock issuable upon conversion of the Preferred Stock) multiplied by the then existing Series B Conversion Price and (b) the consideration, if any, received by the Corporation upon such issue or sale, by (ii) an amount equal to the sum of (a) the total number of shares of Common Stock outstanding immediately prior to such issue or sale (including, for this purpose, shares of Common Stock issuable upon conversion of the Preferred Stock) and (b) the total number of shares of Common Stock issuable in such issue or sale. Except as provided in subparagraphs 5E and 5F, if and whenever the Corporation shall issue or sell, or is, in accordance with subparagraphs 5D(1) through 5D(7), deemed to have issued or sold, any shares of Common Stock for a consideration per share less than the Series C Conversion Price in effect immediately prior to the time of such issue or sale (such number being appropriately adjusted to reflect the occurrence of any event described in subparagraph 5F), then, forthwith upon such issue or sale, such Series C Conversion Price shall be reduced to the price determined by dividing (i) an amount equal to the sum of (a) the number of shares of Common Stock outstanding immediately prior to such issue or sale (including, for this purpose, shares of Common Stock issuable upon conversion of the Preferred Stock) multiplied by the then existing Series C Conversion Price and (b) the consideration, if any, received by the Corporation upon such issue or sale, by (ii) an amount equal to the sum of (a) the total number of shares of Common Stock outstanding immediately prior to such issue or sale (including, for this purpose, shares of Common Stock issuable upon conversion of the Preferred Stock) and (b) the total number of shares of Common Stock issuable in such issue or sale.

For purposes of this subparagraph 5D, the following subparagraphs 5D(1) to 5D(7) shall also be applicable:

5D(1) Issuance of Rights or Options. In case at any time the Corporation shall in any manner grant (whether directly or by assumption in a merger or otherwise) any warrants or other rights to subscribe for or to purchase, or any options for the purchase of, Common Stock or any stock or security convertible into or exchangeable for Common Stock (such

warrants, rights or options being called “Options” and such convertible or exchangeable stock or securities being called “Convertible Securities”) whether or not such Options or the right to convert or exchange any such Convertible Securities are immediately exercisable, and the price per share for which Common Stock is issuable upon the exercise of such Options (determined by dividing (i) the total amount, if any, received or receivable by the Corporation as consideration for the granting of such Options, plus the minimum aggregate amount of additional consideration payable to the Corporation upon the exercise of all such Options, plus, in the case of such Options which relate to Convertible Securities, the minimum aggregate amount of additional consideration, if any, payable upon the issue or sale of such Convertible Securities and upon the conversion or exchange thereof, by (ii) the total maximum number of shares of Common Stock issuable upon the exercise of such Options or upon the conversion or exchange of all such Convertible Securities issuable upon the exercise of such Options) shall be less than the Series A Conversion Price, the Series B Conversion Price or the Series C Conversion Price in effect immediately prior to the time of the granting of such Options, then the total maximum number of shares of Common Stock issuable upon the exercise of such Options or upon conversion or exchange of the total maximum amount of such Convertible Securities issuable upon the exercise of such Options shall be deemed to have been issued for such price per share as of the date of granting of such Options and thereafter shall be deemed to be outstanding. Except as otherwise provided in subparagraph 5D(3), no adjustment of the Series A Conversion Price, the Series B Conversion Price or the Series C Conversion Price shall be made upon the actual issue of such Common Stock or of such Convertible Securities upon exercise of such Options or upon the actual issue of such Common Stock upon conversion or exchange of such Convertible Securities.

5D(2) Issuance of Convertible Securities. In case the Corporation shall in any manner issue (whether directly or by assumption in a merger or otherwise) or sell any Convertible Securities, except as provided in subparagraph 5D(1), whether or not the rights to exchange or convert any such Convertible Securities are immediately exercisable, and the price per share for which Common Stock is issuable upon such conversion or exchange (determined by dividing (i) the total amount received or receivable by the Corporation as consideration for the issue or sale of such Convertible Securities, plus the minimum aggregate amount of additional consideration, if any, payable to the Corporation upon the conversion or exchange thereof, by (ii) the total maximum number of shares of Common Stock issuable upon the conversion or exchange of all such Convertible Securities) shall be less than the Series A Conversion Price, the Series B Conversion Price or the Series C Conversion Price in effect immediately prior to the time of such issue or sale, then the total maximum number of shares of Common Stock issuable upon conversion or exchange of all such Convertible Securities shall be deemed to have been issued for such price per share as of the date of the issue or sale of such Convertible Securities and thereafter shall be deemed to be outstanding, provided that (a) except as otherwise provided in subparagraph 5D(3), no adjustment of the Series A Conversion Price, the Series B Conversion Price or the Series C Conversion Price shall be made upon the actual issue of such Common Stock upon conversion or exchange of such Convertible Securities and (b) if any such issue or sale of such Convertible Securities is made upon exercise of any Options to purchase any such Convertible Securities for which adjustments of the Series A Conversion Price, the Series B

Conversion Price or the Series C Conversion Price, as the case may be, have been or are to be made pursuant to other provisions of this subparagraph 5D, no further adjustment of the Series A Conversion Price, the Series B Conversion Price or the Series C Conversion Price, as the case may be, shall be made by reason of such issue or sale.

5D(3) Change in Option Price or Conversion Rate. Upon the happening of any of the following events, namely, if the purchase price provided for in any Option referred to in subparagraph 5D(1), the additional consideration, if any, payable upon the conversion or exchange of any Convertible Securities referred to in subparagraphs 5D(1) or 5D(2), or the rate at which Convertible Securities referred to in subparagraphs 5D(1) or 5D(2) are convertible into or exchangeable for Common Stock shall change at any time (including, but not limited to, changes under or by reason of provisions designed to protect against dilution), the Series A Conversion Price, the Series B Conversion Price or the Series C Conversion Price, as applicable, in effect at the time of such event shall forthwith be readjusted (in each case by an amount equal to not less than one cent (\$.01)) to the Series A Conversion Price, the Series B Conversion Price or the Series C Conversion Price, as the case may be, which would have been in effect at such time had such Options or Convertible Securities still outstanding provided for such changed purchase price, additional consideration or conversion rate, as the case may be, at the time initially granted, issued or sold; and on the expiration of any such Option or the termination of any such right to convert or exchange such Convertible Securities, the Series A Conversion Price, the Series B Conversion Price or the Series C Conversion Price, as applicable, then in effect hereunder shall forthwith be increased to the Series A Conversion Price, the Series B Conversion Price or the Series C Conversion Price, as the case may be, which would have been in effect at the time of such expiration or termination had such Option or Convertible Securities, to the extent outstanding immediately prior to such expiration or termination, never been issued.

5D(4) Stock Dividends. In case the Corporation shall declare a dividend or make any other distribution upon any stock of the Corporation payable in Common Stock (except for the issue of stock dividends or distributions upon the outstanding Common Stock for which adjustment is made pursuant to subparagraph 5F), Options or Convertible Securities, any Common Stock, Options or Convertible Securities, as the case may be, issuable in payment of such dividend or distribution shall be deemed to have been issued or sold without consideration.

5D(5) Consideration for Stock. In case any shares of Common Stock, Options or Convertible Securities shall be issued or sold for cash, the consideration received therefor shall be deemed to be the amount received by the Corporation therefor, without deduction therefrom of any expenses incurred or any underwriting commissions or concessions paid or allowed by the Corporation in connection therewith. In case any shares of Common Stock, Options or Convertible Securities shall be issued or sold for a consideration other than cash, the amount of the consideration other than cash received by the Corporation shall be deemed to be the fair market value of such consideration as determined reasonably and in good faith by the Board of Directors of the Corporation, without deduction of any expenses incurred or any underwriting commissions or concessions paid or allowed by the Corporation in connection therewith. In case any Options shall be issued in connection with

the issue and sale of other securities of the Corporation, together comprising one integral transaction in which no specific consideration is allocated to such Options by the parties thereto, such Options shall be deemed to have been issued for such consideration as determined reasonably and in good faith by the Board of Directors of the Corporation.

5D(6) Record Date. In case the Corporation shall take a record of the holders of its Common Stock for the purpose of entitling them (i) to receive a dividend or other distribution payable in Common Stock, Options or Convertible Securities or (ii) to subscribe for or purchase Common Stock, Options or Convertible Securities, then such record date shall be deemed to be the date of the issue or sale of the shares of Common Stock deemed to have been issued or sold upon the declaration of such dividend or the making of such other distribution or the date of the granting of such right of subscription or purchase, as the case may be.

5D(7) Treasury Shares. The number of shares of Common Stock outstanding at any given time shall not include shares owned or held by or for the account of the Corporation, and the disposition of any such shares (other than the retirement and cancellation thereof) shall be considered an issue or sale of Common Stock for the purpose of this subparagraph 5D.

5E. Certain Issues of Common Stock Excepted. Anything herein to the contrary notwithstanding, the Corporation shall not be required to make any adjustment of the Series A Conversion Price, the Series B Conversion Price or the Series C Conversion Price in the case of the issuance of (i) shares of Series C Preferred Stock, (ii) shares of Common Stock issuable upon conversion of the Series Preferred Stock, (iii) shares of Common Stock issuable upon exercise of a warrant to purchase up to 396,431 shares of Common Stock issued pursuant to that certain Securities Purchase Agreement entered into on or about June 26, 2009 between the Corporation, LGI Ventures B.V. and UPC Broadband Operations B.V., (iv) up to 475,000 shares of Common Stock actually issued upon the exercise of options to purchase Common Stock outstanding as of April 26, 2010, provided such issuance is pursuant to the terms of such option and (v) Reserved Employee Shares (as defined in paragraph 6 hereof).

5F. Subdivision or Combination of Common Stock. In case the Corporation shall at any time subdivide (by any stock split, stock dividend or otherwise) its outstanding shares of Common Stock into a greater number of shares, the Series A Conversion Price, the Series B Conversion Price and the Series C Conversion Price in effect immediately prior to such subdivision shall be proportionately reduced, and, conversely, in case the outstanding shares of Common Stock shall be combined into a smaller number of shares, the Series A Conversion Price, the Series B Conversion Price and the Series C Conversion Price in effect immediately prior to such combination shall be proportionately increased. In the event both subparagraph 5D(4) and this subparagraph 5F would require an adjustment to the Series A Conversion Price, the Series B Conversion Price or the Series C Conversion Price, then such adjustment shall be made by applying this subparagraph 5F in lieu of subparagraph 5D(4).

5G. Reorganization or Reclassification. If any capital reorganization, reclassification, recapitalization, consolidation, merger, sale of all or substantially all of the Corporation's assets or other similar transaction (any such transaction being referred to herein as

an “Organic Change”) shall be effected in such a way that holders of Common Stock shall be entitled to receive (either directly or upon subsequent liquidation) stock, securities or assets with respect to or in exchange for Common Stock, then, as a condition of such Organic Change, lawful and adequate provisions shall be made whereby each holder of a share or shares of Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock, as the case may be, shall thereupon have the right to receive, upon the basis and upon the terms and conditions specified herein and in lieu of or in addition to, as the case may be, the shares of Common Stock immediately theretofore receivable upon the conversion of such share or shares of Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock, as the case may be, such shares of stock, securities or assets as may be issued or payable with respect to or in exchange for a number of outstanding shares of such Common Stock equal to the number of shares of such Common Stock immediately theretofore receivable upon such conversion had such Organic Change not taken place, and in any case of a reorganization or reclassification only appropriate provisions shall be made with respect to the rights and interests of such holder to the end that the provisions hereof (including without limitation provisions for adjustments of the Series A Conversion Price, the Series B Conversion Price and the Series C Conversion Price) shall thereafter be applicable, as nearly as may be, in relation to any shares of stock, securities or assets thereafter deliverable upon the exercise of such conversion rights.

5H. Notice of Adjustment. Upon any adjustment of the Series A Conversion Price, the Series B Conversion Price or the Series C Conversion Price, then, and in each such case, the Corporation shall give written notice thereof, by first class mail, postage prepaid, or by facsimile transmission to non-U.S. residents, addressed to each holder of shares of Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock, as the case may be, at the address of such holder as shown on the books of the Corporation, which notice shall state the Series A Conversion Price, the Series B Conversion Price or the Series C Conversion Price, as the case may be, as applicable, resulting from such adjustment, setting forth in reasonable detail the method upon which such calculation is based.

5I. Other Notices. In case at any time:

(1) the Corporation shall declare any dividend upon its Common Stock payable in cash or stock or make any other distribution to the holders of its Common Stock;

(2) the Corporation shall offer for subscription pro rata to the holders of its Common Stock any additional shares of stock of any class or other rights;

(3) there shall be any capital reorganization or reclassification of the capital stock of the Corporation, or a consolidation or merger of the Corporation with or into, or a sale of all or substantially all its assets to, another entity or entities; or

(4) there shall be a voluntary or involuntary dissolution, liquidation or winding up of the Corporation;

then, in any one or more of said cases, the Corporation shall give, by first class mail, postage prepaid, or by facsimile transmission to non-U.S. residents, addressed to each holder of any

shares of Series Preferred Stock at the address of such holder as shown on the books of the Corporation, (a) at least 20 days' prior written notice of the date on which the books of the Corporation shall close or a record shall be taken for such dividend, distribution or subscription rights or for determining rights to vote in respect of any such reorganization, reclassification, consolidation, merger, sale, dissolution, liquidation or winding up, and (b) in the case of any such reorganization, reclassification, consolidation, merger, sale, dissolution, liquidation or winding up, at least 20 days' prior written notice of the date when the same shall take place. Such notice in accordance with the foregoing clause (a) shall also specify, in the case of any such dividend, distribution or subscription rights, the date on which the holders of Common Stock shall be entitled thereto and such notice in accordance with the foregoing clause (b) shall also specify the date on which the holders of Common Stock shall be entitled to exchange their Common Stock for securities or other property deliverable upon such reorganization, reclassification, consolidation, merger, sale, dissolution, liquidation or winding up, as the case may be.

5J. Stock to be Reserved. The Corporation will at all times reserve and keep available out of its authorized Common Stock, solely for the purpose of issuance upon the conversion of Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock as herein provided, such number of shares of Common Stock as shall then be issuable upon the conversion of all outstanding shares of Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock. The Corporation covenants that all shares of Common Stock which shall be so issued shall be duly and validly issued and fully paid and nonassessable and free from all taxes, liens and charges with respect to the issue thereof, and, without limiting the generality of the foregoing, the Corporation covenants that it will from time to time take all such action as may be requisite to assure that the par value per share of the Common Stock is at all times equal to or less than the Series A Conversion Price, the Series B Conversion Price and the Series C Conversion Price in effect at the time. The Corporation will take all such action as may be necessary to assure that all such shares of Common Stock may be so issued without violation of any applicable law or regulation, or of any requirement of any national securities exchange upon which the Common Stock may be listed.

5K. No Reissuance of Series Preferred Stock. Shares of Series Preferred Stock which are converted into shares of Common Stock as provided herein shall not be reissued.

5L. Issue Tax. The issuance of certificates for shares of Common Stock upon conversion of Series Preferred Stock shall be made without charge to the holders thereof for any issuance tax in respect thereof, provided that the Corporation shall not be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of any certificate in a name other than that of the holder of the Series Preferred Stock which is being converted.

5M. Closing of Books. The Corporation will at no time close its transfer books against the transfer of any shares of Series Preferred Stock or of any shares of Common Stock issued or issuable upon the conversion of any shares of Series Preferred Stock, in any manner which interferes with the timely conversion of such Series Preferred Stock except as may otherwise be required to comply with applicable securities laws.

5N. Definition of Common Stock. As used in this paragraph 5, the term “Common Stock” shall mean and include the Corporation’s authorized Common Stock, par value \$.001 per share, as constituted on the date of filing of these terms of the Series Preferred Stock, and shall also include any capital stock of any class of the Corporation thereafter authorized which shall neither be limited to a fixed sum or percentage of par value in respect of the rights of the holders thereof to participate in dividends nor entitled to a preference in the distribution of assets upon the voluntary or involuntary liquidation, dissolution or winding up of the Corporation; provided that the shares of Common Stock receivable upon conversion of shares of Series Preferred Stock shall include only shares designated as Common Stock of the Corporation on the date of filing of this instrument, or in case of any reorganization or reclassification of the outstanding shares thereof, the stock, securities or assets provided for in subparagraph 5G.

5O. Mandatory Conversion. All outstanding shares of Series Preferred Stock shall automatically convert to shares of Common Stock at the then effective conversion rate for such series of Series Preferred Stock upon either (a) the closing of a firm commitment underwritten public offering of shares of Common Stock in which (i) the aggregate gross proceeds from such offering to the Corporation shall be at least \$100,000,000 and (ii) the price paid by the public for such shares shall be at least \$49.9898 (appropriately adjusted to reflect the occurrence of any event described in subparagraph 5F) (a “Qualified Public Offering”) or (b) the date and time, or the occurrence of an event, specified by vote or written consent of the holders of at least a majority of the votes represented by the then outstanding shares of Series Preferred Stock, voting together as a single class on an as converted to Common Stock basis.

6. Definitions. As used herein, the following terms shall have the following meanings:

(a) The term “Reserved Employee Shares” shall mean shares of Common Stock reserved by the Corporation from time to time for (i) the sale of shares of Common Stock to employees, consultants or non-employee directors (other than representatives of the holders of Preferred Stock) of the Corporation or (ii) the issuance and/or exercise of options to purchase Common Stock granted to employees, consultants or non-employee directors (other than representatives of the holders of Preferred Stock) of the Corporation, not to exceed in the aggregate 214,000 shares (appropriately adjusted to reflect an event described in subparagraph 5F hereof) of Common Stock after the date hereof (provided that any options for such shares that expire or terminate unexercised or any restricted stock repurchased by the Corporation at cost shall not be counted toward such maximum number unless and until such shares are regranted as new stock grants (or as new options)).

(b) The term “Subsidiary” shall mean any corporation, partnership, trust or other entity of which the Corporation and/or any of its other Subsidiaries directly or indirectly owns at the time outstanding equity securities of such corporation, partnership, trust or other entity, other than directors’ qualifying shares, comprising at least fifty percent (50%) of the voting power of such corporation, partnership, trust or other entity.

7. Common Stock.

(a) All preferences, voting powers, relative, participating, optional or other special rights and privileges, and qualifications, limitations, or restrictions of the Common Stock are expressly made subject to those that may be fixed with respect to any shares of Preferred Stock.

(b) The number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote, irrespective of the provisions of Section 242(b)(2) of the General Corporation Law.”

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the Corporation has caused this Certificate of Amendment to be signed by its President this 26th day of April, 2010.

CASA SYSTEMS, INC.

By: /s/ Jerry Guo

Jerry Guo
President

CERTIFICATE OF AMENDMENT
OF
AMENDED AND RESTATED CERTIFICATE OF INCORPORATION
OF
CASA SYSTEMS, INC.

Casa Systems, Inc. (hereinafter, the "Corporation"), a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware, does hereby certify as follows:

1. The name of the Corporation is Casa Systems, Inc. The original Certificate of Incorporation of the Corporation was filed with the Secretary of State of the State of Delaware on February 28, 2003.
2. This Certificate of Amendment of Amended and Restated Certificate of Incorporation was duly adopted by the Board of Directors and stockholders of the Corporation in accordance with the applicable provisions of Sections 141, 228 and 242 of the General Corporation Law of the State of Delaware.
3. The Amended and Restated Certificate of Incorporation, as amended, is hereby further amended by deleting clauses (iv) and (v) of Section 5E of Article FOURTH in their entirety and by substituting in lieu thereof the following:
"and (iv) Reserved Employee Shares (as defined in paragraph 6 hereof)."
4. The Amended and Restated Certificate of Incorporation, as amended, is hereby further amended by deleting the number "214,000" contained in Section 6(a) of Article FOURTH and by substituting in lieu thereof the number "935,871".
5. The Amended and Restated Certificate of Incorporation, as amended, is hereby further amended by inserting the following language at the end of the sentence constituting Section 6(a) of Article FOURTH:
"or such other aggregate number of shares as may be approved from time to time by the Board of Directors of the Corporation, including both Series C Designees (as defined in that certain Stockholders' Voting Agreement, dated April 26, 2010, by and among the Corporation and certain of its stockholders, as amended and/or restated from time to time)."

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State of Delaware
Secretary of State
Division of Corporations
Delivered 11:38 AM 11/01/2011
FILED 10:58 AM 11/01/2011
SRV 111153688 - 3630717 FILE

IN WITNESS WHEREOF, the Corporation has caused this Certificate of Amendment to be signed by its President this 27th day of October, 2011.

CASA SYSTEMS, INC.

By: /s/ Jerry Guo

Jerry Guo
President

CERTIFICATE OF AMENDMENT
OF
AMENDED AND RESTATED CERTIFICATE OF INCORPORATION
OF
CASA SYSTEMS, INC.

Casa Systems, Inc. (hereinafter, the "Corporation"), a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware, does hereby certify as follows:

1. The name of the Corporation is Casa Systems, Inc. The original Certificate of Incorporation of the Corporation was filed with the Secretary of State of the State of Delaware on February 28, 2003.
2. This Certificate of Amendment of Amended and Restated Certificate of Incorporation was duly adopted by the Board of Directors and stockholders of the Corporation in accordance with the applicable provisions of Sections 141, 228 and 242 of the General Corporation Law of the State of Delaware.
3. The Amended and Restated Certificate of Incorporation, as amended, is hereby further amended by deleting the second sentence of the first paragraph of Article FOURTH in its entirety and by substituting in lieu thereof the following:
"The total number of shares of Common Stock which the Corporation is authorized to issue is 20,000,000, and the par value of each of the shares of Common Stock is one tenth of one cent (\$.001)."

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the Corporation has caused this Certificate of Amendment to be signed by its President this 16th day of November, 2012.

CASA SYSTEMS, INC.

By: /s/ Jerry Guo

Jerry Guo
President

BY-LAWS
OF
CASA SYSTEMS, INC.

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BY-LAWS

OF

CASA SYSTEMS, INC.

ARTICLE I

STOCKHOLDERS

1.1 Place of Meetings. All meetings of stockholders shall be held at such place as may be designated from time to time by the Board of Directors, the Chairman of the Board or the President or, if not so designated, at the principal office of the corporation. The Board of Directors may, in its sole discretion, determine that a meeting shall not be held at any place, but may instead be held solely by means of remote communication in a manner consistent with the General Corporation Law of the State of Delaware.

1.2 Annual Meeting. Unless directors are elected by consent in lieu of an annual meeting, the annual meeting of stockholders for the election of directors and for the transaction of such other business as may properly be brought before the meeting shall be held on a date and at a time designated by the Board of Directors, the Chairman of the Board or the President (which date shall not be a legal holiday in the place where the meeting is to be held). If no annual meeting is held in accordance with the foregoing provisions, a special meeting may be held in lieu of the annual meeting, and any action taken at that special meeting shall have the same effect as if it had been taken at the annual meeting, and in such case all references in these By-laws to the annual meeting of the stockholders shall be deemed to refer to such special meeting.

1.3 Special Meetings. Special meetings of stockholders for any purpose or purposes may be called at any time by the Board of Directors, the Chairman of the Board or the President, but such special meetings may not be called by any other person or persons. Business transacted at any special meeting of stockholders shall be limited to matters relating to the purpose or purposes stated in the notice of meeting.

1.4 Notice of Meetings. Except as otherwise provided by law, notice of each meeting of stockholders, whether annual or special, shall be given not less than 10 nor more than 60 days before the date of the meeting to each stockholder entitled to vote at such meeting. Without limiting the manner by which notice otherwise may be given to stockholders, any notice shall be effective if given by a form of electronic transmission consented to (in a manner consistent with the General Corporation Law of the State of Delaware) by the stockholder to whom the notice is given. The notices of all meetings shall state the place, if any, date and time of the meeting and the means of remote communications, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at such meeting. The notice of a special meeting shall

state, in addition, the purpose or purposes for which the meeting is called. If notice is given by mail, such notice shall be deemed given when deposited in the United States mail, postage prepaid, directed to the stockholder at such stockholder's address as it appears on the records of the corporation. If notice is given by electronic transmission, such notice shall be deemed given at the time specified in Section 232 of the General Corporation Law of the State of Delaware.

1.5 Voting List. The Secretary shall prepare, at least 10 days before every meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting, arranged in alphabetical order, and showing the address of each stockholder and the number of shares registered in the name of each stockholder. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting for a period of at least 10 days prior to the meeting: (i) on a reasonably accessible electronic network, provided that the information required to gain access to such list is provided with the notice of the meeting, or (ii) during ordinary business hours, at the principal place of business of the corporation. If the meeting is to be held at a place, then the list shall be produced and kept at the time and place of the meeting during the whole time thereof, and may be inspected by any stockholder who is present. If the meeting is to be held solely by means of remote communication, then the list shall also be open to the examination of any stockholder during the whole time of the meeting on a reasonably accessible electronic network, and the information required to access such list shall be provided with the notice of the meeting.

1.6 Quorum. Except as otherwise provided by law, the Certificate of Incorporation or these By-laws, the holders of a majority of the shares of the capital stock of the corporation issued and outstanding and entitled to vote at the meeting, present in person, present by means of remote communication in a manner, if any, authorized by the Board of Directors in its sole discretion or represented by proxy, shall constitute a quorum for the transaction of business. A quorum, once established at a meeting, shall not be broken by the withdrawal of enough votes to leave less than a quorum.

1.7 Adjournments. Any meeting of stockholders may be adjourned from time to time to any other time and to any other place at which a meeting of stockholders may be held under these By-laws by the stockholders present or represented at the meeting and entitled to vote, although less than a quorum, or, if no stockholder is present, by any officer entitled to preside at or to act as secretary of such meeting. It shall not be necessary to notify any stockholder of any adjournment of less than 30 days if the time and place, if any, of the adjourned meeting, and the means of remote communication, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at such adjourned meeting, are announced at the meeting at which adjournment is taken, unless after the adjournment a new record date is fixed for the adjourned meeting. At the adjourned meeting, the corporation may transact any business which might have been transacted at the original meeting.

1.8 Voting and Proxies. Each stockholder shall have one vote for each share of stock entitled to vote held of record by such stockholder and a proportionate vote for each fractional share so held, unless otherwise provided by law or the Certificate of Incorporation. Each stockholder of record entitled to vote at a meeting of stockholders, or to express consent or dissent to corporate action without a meeting, may vote or express such consent or dissent in person (including by means of remote communications, if any, by which stockholders may be deemed to be present in person and vote at such meeting) or may authorize another person or persons to vote or act for such stockholder by a proxy executed or transmitted in a manner permitted by the General Corporation Law of the State of Delaware by the stockholder or such stockholder's authorized agent and delivered (including by electronic transmission) to the Secretary of the corporation. No such proxy shall be voted or acted upon after three years from the date of its execution, unless the proxy expressly provides for a longer period.

1.9 Action at Meeting. When a quorum is present at any meeting, any matter other than the election of directors to be voted upon by the stockholders at such meeting shall be decided by the vote of the holders of shares of stock having a majority of the votes cast by the holders of all of the shares of stock present or represented and voting on such matter (or if there are two or more classes of stock entitled to vote as separate classes, then in the case of each such class, the holders of a majority of the stock of that class present or represented and voting on such matter), except when a different vote is required by law, the Certificate of Incorporation or these By-Laws. When a quorum is present at any meeting, any election by stockholders of directors shall be determined by a plurality of the votes cast on the election.

1.10 Conduct of Meetings.

(a) Chairman of Meeting. Meetings of stockholders shall be presided over by the Chairman of the Board, if any, or in the Chairman's absence by the Vice Chairman of the Board, if any, or in the Vice Chairman's absence by the President, or in the President's absence by a Vice President, or in the absence of all of the foregoing persons by a chairman designated by the Board of Directors, or in the absence of such designation by a chairman chosen by vote of the stockholders at the meeting. The Secretary shall act as secretary of the meeting, but in the Secretary's absence the chairman of the meeting may appoint any person to act as secretary of the meeting.

(b) Rules, Regulations and Procedures. The Board of Directors of the corporation may adopt by resolution such rules, regulations and procedures for the conduct of any meeting of stockholders of the corporation as it shall deem appropriate including, without limitation, such guidelines and procedures as it may deem appropriate regarding the participation by means of remote communication of stockholders and proxyholders not physically present at a meeting. Except to the extent inconsistent with such rules, regulations and procedures as adopted by the Board of Directors, the chairman of any meeting of stockholders shall have the right and authority to prescribe such rules, regulations and procedures and to do all such acts as,

in the judgment of such chairman, are appropriate for the proper conduct of the meeting. Such rules, regulations or procedures, whether adopted by the Board of Directors or prescribed by the chairman of the meeting, may include, without limitation, the following: (i) the establishment of an agenda or order of business for the meeting; (ii) rules and procedures for maintaining order at the meeting and the safety of those present; (iii) limitations on attendance at or participation in the meeting to stockholders of record of the corporation, their duly authorized and constituted proxies or such other persons as shall be determined; (iv) restrictions on entry to the meeting after the time fixed for the commencement thereof; and (v) limitations on the time allotted to questions or comments by participants. Unless and to the extent determined by the Board of Directors or the chairman of the meeting, meetings of stockholders shall not be required to be held in accordance with the rules of parliamentary procedure.

1.11 Action without Meeting.

(a) Taking of Action by Consent. Any action required or permitted to be taken at any annual or special meeting of stockholders of the corporation may be taken without a meeting, without prior notice and without a vote, if a consent in writing, setting forth the action so taken, is signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote on such action were present and voted. Except as otherwise provided by the Certificate of Incorporation, stockholders may act by written consent to elect directors; provided, however, that, if such consent is less than unanimous, such action by written consent may be in lieu of holding an annual meeting only if all of the directorships to which directors could be elected at an annual meeting held at the effective time of such action are vacant and are filled by such action.

(b) Electronic Transmission of Consents. A telegram, cablegram or other electronic transmission consenting to an action to be taken and transmitted by a stockholder or proxyholder, or by a person or persons authorized to act for a stockholder or proxyholder, shall be deemed to be written, signed and dated for the purposes of this section, provided that any such telegram, cablegram or other electronic transmission sets forth or is delivered with information from which the corporation can determine (A) that the telegram, cablegram or other electronic transmission was transmitted by the stockholder or proxyholder or by a person or persons authorized to act for the stockholder or proxyholder and (B) the date on which such stockholder or proxyholder or authorized person or persons transmitted such telegram, cablegram or electronic transmission. The date on which such telegram, cablegram or electronic transmission is transmitted shall be deemed to be the date on which such consent was signed. No consent given by telegram, cablegram or other electronic transmission shall be deemed to have been delivered until such consent is reproduced in paper form and until such paper form shall be delivered to the corporation by delivery to its registered office in the State of Delaware, its principal place of business or an officer or agent of the corporation having custody of the book in which proceedings of meetings of stockholders are recorded. Delivery made to a corporation's

registered office shall be made by hand or by certified or registered mail, return receipt requested. Notwithstanding the foregoing limitations on delivery, consents given by telegram, cablegram or other electronic transmission may be otherwise delivered to the principal place of business of the corporation or to an officer or agent of the corporation having custody of the book in which proceedings of meetings of stockholders are recorded if, to the extent and in the manner provided by resolution of the Board of Directors. Any copy, facsimile or other reliable reproduction of a consent in writing may be substituted or used in lieu of the original writing for any and all purposes for which the original writing could be used, provided that such copy, facsimile or other reproduction shall be a complete reproduction of the entire original writing.

(c) Notice of Taking of Corporate Action. Prompt notice of the taking of corporate action without a meeting by less than unanimous written consent shall be given to those stockholders who have not consented in writing and who, if the action had been taken at a meeting, would have been entitled to notice of the meeting if the record date for such meeting had been the date that written consents signed by a sufficient number of holders to take the action were delivered to the corporation.

ARTICLE II

DIRECTORS

2.1 General Powers. The business and affairs of the corporation shall be managed by or under the direction of a Board of Directors, who may exercise all of the powers of the corporation except as otherwise provided by law, the Certificate of Incorporation or these By-laws.

2.2 Number; Election and Qualification. The number of directors which shall constitute the whole Board of Directors shall be determined from time to time by resolution of the stockholders or the Board of Directors, but in no event shall be less than one. The number of directors may be decreased at any time and from time to time either by the stockholders or by a majority of the directors then in office, but only to eliminate vacancies existing by reason of the death, resignation, removal or expiration of the term of one or more directors. The directors shall be elected at the annual meeting of stockholders by such stockholders as have the right to vote on such election. Directors need not be stockholders of the corporation.

2.3 Enlargement of the Board. The number of directors may be increased at any time and from time to time by the stockholders or by a majority of the directors then in office.

2.4 Tenure. Each director shall hold office until the next annual meeting and until a successor is elected and qualified, or until such director's earlier death, resignation or removal.

2.5 Vacancies. Unless and until filled by the stockholders, any vacancy in the Board of Directors, however occurring, including a vacancy resulting from an enlargement of the Board, may be filled by vote of a majority of the directors then in office, although less than a quorum, or by a sole remaining director. A director elected to fill a vacancy shall be elected for the unexpired term of such director's predecessor in office, and a director chosen to fill a position resulting from an increase in the number of directors shall hold office until the next annual meeting of stockholders and until a successor is elected and qualified, or until such director's earlier death, resignation or removal.

2.6 Resignation. Any director may resign by delivering a resignation in writing or by electronic transmission to the corporation at its principal office or to the Chairman of the Board, the President or the Secretary. Such resignation shall be effective upon receipt unless it is specified to be effective at some later time or upon the happening of some later event.

2.7 Regular Meetings. Regular meetings of the Board of Directors may be held without notice at such time and place as shall be determined from time to time by the Board of Directors; provided that any director who is absent when such a determination is made shall be given notice of the determination. A regular meeting of the Board of Directors may be held without notice immediately after and at the same place as the annual meeting of stockholders.

2.8 Special Meetings. Special meetings of the Board of Directors may be held at any time and place designated in a call by the Chairman of the Board, the President, two or more directors, or by one director in the event that there is only a single director in office.

2.9 Notice of Special Meetings. Notice of any special meeting of directors shall be given to each director by the Secretary or by the officer or one of the directors calling the meeting. Notice shall be duly given to each director (i) by giving notice to such director in person or by telephone at least 24 hours in advance of the meeting, (ii) by sending a telegram, telecopy or electronic mail, or delivering written notice by hand, to such director's last known business, home or electronic mail address at least 48 hours in advance of the meeting, or (iii) by sending written notice, via first-class mail or reputable overnight courier, to such director's last known business or home address at least 72 hours in advance of the meeting. A notice or waiver of notice of a meeting of the Board of Directors need not specify the purposes of the meeting.

2.10 Meetings by Conference Communications Equipment. Directors may participate in meetings of the Board of Directors or any committee thereof by means of conference telephone or other communications equipment by means of which all persons participating in the meeting can hear each other, and participation by such means shall constitute presence in person at such meeting.

2.11 Quorum. A majority of the directors at any time in office shall constitute a quorum for the transaction of business. In the event one or more of the directors shall be disqualified to vote at any meeting, then the required quorum shall be reduced by one for each

such director so disqualified. In no case, however, shall less than one-third of the number of directors fixed pursuant to Section 2.2 of these By-laws constitute a quorum. In the absence of a quorum at any such meeting, a majority of the directors present may adjourn the meeting from time to time without further notice other than announcement at the meeting, until a quorum shall be present.

2.12 Action at Meeting. At any meeting of the Board of Directors at which a quorum is present, the vote of a majority of those present shall be sufficient to take any action, unless a different vote is specified by law, the Certificate of Incorporation or these By-laws.

2.13 Action by Consent. Any action required or permitted to be taken at any meeting of the Board of Directors or of any committee thereof may be taken without a meeting, if all members of the Board or committee, as the case may be, consent to the action in writing or by electronic transmission, and the written consents or electronic transmissions are filed with the minutes of proceedings of the Board or committee.

2.14 Removal. Except as otherwise provided by the General Corporation Law of the State of Delaware, any one or more or all of the directors may be removed, with or without cause, by the holders of a majority of the shares then entitled to vote at an election of directors, except that the directors elected by the holders of a particular class or series of stock may be removed without cause only by vote of the holders of a majority of the outstanding shares of such class or series.

2.15 Committees. The Board of Directors may designate one or more committees, each committee to consist of one or more of the directors of the corporation. The Board may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee. In the absence or disqualification of a member of a committee, the member or members of the committee present at any meeting and not disqualified from voting, whether or not such member or members constitute a quorum, may unanimously appoint another member of the Board of Directors to act at the meeting in the place of any such absent or disqualified member. Any such committee, to the extent provided in the resolution of the Board of Directors and subject to the provisions of law, shall have and may exercise all the powers and authority of the Board of Directors in the management of the business and affairs of the corporation and may authorize the seal of the corporation to be affixed to all papers which may require it. Each such committee shall keep minutes and make such reports as the Board of Directors may from time to time request. Except as the Board of Directors may otherwise determine, any committee may make rules for the conduct of its business, but unless otherwise provided by the directors or in such rules, its business shall be conducted as nearly as possible in the same manner as is provided in these By-laws for the Board of Directors.

2.16 Compensation of Directors. Directors may be paid such compensation for their services and such reimbursement for expenses of attendance at meetings as the Board of

Directors may from time to time determine. No such payment shall preclude any director from serving the corporation or any of its parent or subsidiary corporations in any other capacity and receiving compensation for such service.

ARTICLE III

OFFICERS

3.1 **Titles**. The officers of the corporation shall consist of a President, a Secretary, a Treasurer and such other officers with such other titles as the Board of Directors may determine, including a Chairman of the Board, a Vice Chairman of the Board, and one or more Vice Presidents, Assistant Treasurers, and Assistant Secretaries. The Board of Directors may appoint such other officers as it may deem appropriate.

3.2 **Election**. The President, Treasurer and Secretary shall be elected annually by the Board of Directors at its first meeting following the annual meeting of stockholders. Other officers may be appointed by the Board of Directors at such meeting or at any other meeting.

3.3 **Qualification**. No officer need be a stockholder. Any two or more offices may be held by the same person.

3.4 **Tenure**. Except as otherwise provided by law, by the Certificate of Incorporation or by these By-laws, each officer shall hold office until such officer's successor is elected and qualified, unless a different term is specified in the resolution electing or appointing such officer, or until such officer's earlier death, resignation or removal.

3.5 **Resignation and Removal**. Any officer may resign by delivering a written resignation to the corporation at its principal office or to the Chief Executive Officer or the Secretary. Such resignation shall be effective upon receipt unless it is specified to be effective at some later time or upon the happening of some later event.

Any officer may be removed at any time, with or without cause, by vote of a majority of the entire number of directors then in office.

Except as the Board of Directors may otherwise determine, no officer who resigns or is removed shall have any right to any compensation as an officer for any period following such officer's resignation or removal, or any right to damages on account of such removal, whether such officer's compensation be by the month or by the year or otherwise, unless such compensation is expressly provided in a duly authorized written agreement with the corporation.

3.6 **Vacancies**. The Board of Directors may fill any vacancy occurring in any office for any reason and may, in its discretion, leave unfilled for such period as it may determine any

offices other than those of President, Treasurer and Secretary. Each such successor shall hold office for the unexpired term of such officer's predecessor and until a successor is elected and qualified, or until such officer's earlier death, resignation or removal.

3.7 Chairman of the Board. The Board of Directors may appoint from its members a Chairman of the Board. If the Board of Directors appoints a Chairman of the Board, such Chairman shall perform such duties and possess such powers as are assigned by the Board of Directors and, if the Chairman of the Board is also designated as the corporation's Chief Executive Officer, shall have the powers and duties of the Chief Executive Officer prescribed in Section 3.8 of these By-laws. Unless otherwise provided by the Board of Directors, the Chairman of the Board shall preside at all meetings of the Board of Directors and stockholders.

3.8 President; Chief Executive Officer. Unless the Board of Directors has designated the Chairman of the Board or another person as the corporation's Chief Executive Officer, the President shall be the Chief Executive Officer of the corporation. The Chief Executive Officer shall have general charge and supervision of the business of the Corporation subject to the direction of the Board of Directors. The President shall perform such other duties and shall have such other powers as the Board of Directors and the Chief Executive Officer (if the Chairman of the Board or another person is serving in such position) may from time to time prescribe.

3.9 Vice Presidents. Any Vice President shall perform such duties and possess such powers as the Board of Directors or the Chief Executive Officer may from time to time prescribe. In the event of the absence, inability or refusal to act of the Chief Executive Officer or the President (if the President is not the Chief Executive Officer), the Vice President (or if there shall be more than one, the Vice Presidents in the order determined by the Board of Directors) shall perform the duties of the Chief Executive Officer and when so performing shall have all the powers of and be subject to all the restrictions upon the Chief Executive Officer. The Board of Directors may assign to any Vice President the title of Executive Vice President, Senior Vice President or any other title selected by the Board of Directors.

3.10 Secretary and Assistant Secretaries. The Secretary shall perform such duties and shall have such powers as the Board of Directors or the Chief Executive Officer may from time to time prescribe. In addition, the Secretary shall perform such duties and have such powers as are incident to the office of the secretary, including without limitation the duty and power to give notices of all meetings of stockholders and special meetings of the Board of Directors, to attend all meetings of stockholders and the Board of Directors and keep a record of the proceedings, to maintain a stock ledger and prepare lists of stockholders and their addresses as required, to be custodian of corporate records and the corporate seal and to affix and attest to the same on documents.

Any Assistant Secretary shall perform such duties and possess such powers as the Board of Directors, the Chief Executive Officer or the Secretary may from time to time prescribe. In the event of the absence, inability or refusal to act of the Secretary, the Assistant Secretary, (or if there shall be more than one, the Assistant Secretaries in the order determined by the Board of Directors) shall perform the duties and exercise the powers of the Secretary.

In the absence of the Secretary or any Assistant Secretary at any meeting of stockholders or directors, the chairman of the meeting shall designate a temporary secretary to keep a record of the meeting.

3.11 Treasurer and Assistant Treasurers. The Treasurer shall perform such duties and shall have such powers as may from time to time be assigned by the Board of Directors or the Chief Executive Officer. In addition, the Treasurer shall perform such duties and have such powers as are incident to the office of treasurer, including without limitation the duty and power to keep and be responsible for all funds and securities of the corporation, to deposit funds of the corporation in depositories selected in accordance with these By-laws, to disburse such funds as ordered by the Board of Directors, to make proper accounts of such funds, and to render as required by the Board of Directors statements of all such transactions and of the financial condition of the corporation.

The Assistant Treasurers shall perform such duties and possess such powers as the Board of Directors, the Chief Executive Officer or the Treasurer may from time to time prescribe. In the event of the absence, inability or refusal to act of the Treasurer, the Assistant Treasurer, (or if there shall be more than one, the Assistant Treasurers in the order determined by the Board of Directors) shall perform the duties and exercise the powers of the Treasurer.

3.12 Salaries. Officers of the corporation shall be entitled to such salaries, compensation or reimbursement as shall be fixed or allowed from time to time by the Board of Directors.

ARTICLE IV

CAPITAL STOCK

4.1 Issuance of Stock. Unless otherwise voted by the stockholders and subject to the provisions of the Certificate of Incorporation, the whole or any part of any unissued balance of the authorized capital stock of the corporation or the whole or any part of any shares of the authorized capital stock of the corporation held in the corporation's treasury may be issued, sold, transferred or otherwise disposed of by vote of the Board of Directors in such manner, for such lawful consideration and on such terms as the Board of Directors may determine.

4.2 Certificates of Stock. Every holder of stock of the corporation shall be entitled to have a certificate, in such form as may be prescribed by law and by the Board of Directors, certifying the number and class of shares owned by such holder in the corporation. Each such certificate shall be signed by, or in the name of the corporation by, the Chairman or Vice-Chairman,

if any, of the Board of Directors, or the President or a Vice President, and the Treasurer or an Assistant Treasurer, or the Secretary or an Assistant Secretary of the corporation. Any or all of the signatures on the certificate may be a facsimile.

Each certificate for shares of stock which are subject to any restriction on transfer pursuant to the Certificate of incorporation, these By-laws, applicable securities laws or any agreement among any number of stockholders or among such holders and the corporation shall have conspicuously noted on the face or back of the certificate either the full text of the restriction or a statement of the existence of such restriction.

If the corporation shall be authorized to issue more than one class of stock or more than one series of any class, the powers, designations, preferences and relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights shall be set forth in full or summarized on the face or back of each certificate representing shares of such class or series of stock, provided that in lieu of the foregoing requirements there may be set forth on the face or back of each certificate representing shares of such class or series of stock a statement that the corporation will furnish without charge to each stockholder who so requests a copy of the full text of the powers, designations, preferences and relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights.

4.3 Transfers. Except as otherwise established by rules and regulations adopted by the Board of Directors, and subject to applicable law, shares of stock may be transferred on the books of the corporation by the surrender to the corporation or its transfer agent of the certificate representing such shares properly endorsed or accompanied by a written assignment or power of attorney properly executed, and with such proof of authority or the authenticity of signature as the corporation or its transfer agent may reasonably require. Except as may be otherwise required by law, by the Certificate of Incorporation or by these By-laws, the corporation shall be entitled to treat the record holder of stock as shown on its books as the owner of such stock for all purposes, including the payment of dividends and the right to vote with respect to such stock, regardless of any transfer, pledge or other disposition of such stock until the shares have been transferred on the books of the corporation in accordance with the requirements of these By-laws.

4.4 Lost, Stolen or Destroyed Certificates. The corporation may issue a new certificate of stock in place of any previously issued certificate alleged to have been lost, stolen, or destroyed, upon such terms and conditions as the Board of Directors may prescribe, including the presentation of reasonable evidence of such loss, theft or destruction and the giving of such indemnity as the Board of Directors may require for the protection of the corporation or any transfer agent or registrar.

4.5 Record Date. The Board of Directors may fix in advance a date as a record date for the determination of the stockholders entitled to notice of or to vote at any meeting of stockholders or to express consent (or dissent) to corporate action without a meeting, or entitled to receive payment of any dividend or other distribution or allotment of any rights in respect of any change, conversion or exchange of stock, or for the purpose of any other lawful action. Such record date shall not be more than 60 nor less than 10 days before the date of such meeting, nor more than 10 days after the date of adoption of a record date for a consent without a meeting, nor more than 60 days prior to any other action to which such record date relates.

If no record date is fixed, the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day before the day on which notice is given, or, if notice is waived, at the close of business on the day before the day on which the meeting is held. If no record date is fixed, the record date for determining stockholders entitled to express consent to corporate action without a meeting, when no prior action by the Board of Directors is necessary, shall be the day on which the first consent is properly delivered to the corporation. If no record date is fixed, the record date for determining stockholders for any other purpose shall be at the close of business on the day on which the Board of Directors adopts the resolution relating to such purpose.

A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the Board of Directors may fix a new record date for the adjourned meeting.

ARTICLE V

GENERAL PROVISIONS

5.1 Fiscal Year. Except as from time to time otherwise designated by the Board of Directors, the fiscal year of the corporation shall begin on the first day of January of each year and end on the last day of December in each year.

5.2 Corporate Seal. The corporate seal shall be in such form as shall be approved by the Board of Directors.

5.3 Waiver of Notice. Whenever notice is required to be given by law, by the Certificate of Incorporation or by these By-laws, a written waiver, signed by the person entitled to notice, or a waiver by electronic transmission by the person entitled to notice, whether before, at or after the time stated in such notice, shall be deemed equivalent to notice. Attendance of a person at a meeting shall constitute a waiver of notice of such meeting, except when the person attends a meeting for the express purpose of objecting at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened.

5.4 Voting of Securities. Except as the Board of Directors may otherwise designate, the President or the Treasurer may waive notice of, and act as, or appoint any person or persons to act as, proxy or attorney-in-fact for this corporation (with or without power of substitution) at, any meeting of stockholders or shareholders of any other corporation or organization, the securities of which may be held by this corporation.

5.5 Evidence of Authority. A certificate by the Secretary, or an Assistant Secretary, or a temporary Secretary, as to any action taken by the stockholders, directors, a committee or any officer or representative of the corporation shall as to all persons who rely on the certificate in good faith be conclusive evidence of such action.

5.6 Certificate of Incorporation. All references in these By-laws to the Certificate of Incorporation shall be deemed to refer to the Certificate of Incorporation of the corporation, as amended and in effect from time to time.

5.7 Transactions with Interested Parties. No contract or transaction between the corporation and one or more of the directors or officers, or between the corporation and any other corporation, partnership, association, or other organization in which one or more of the directors or officers are directors or officers, or have a financial interest, shall be void or voidable solely for this reason, or solely because the director or officer is present at or participates in the meeting of the Board of Directors or a committee of the Board of Directors at which the contract or transaction is authorized or solely because any such director's or officer's votes are counted for such purpose, if:

(a) The material facts as to the director's or officer's relationship or interest and as to the contract or transaction are disclosed or are known to the Board of Directors or the committee, and the Board or committee in good faith authorizes the contract or transaction by the affirmative votes of a majority of the disinterested directors, even though the disinterested directors be less than a quorum;

(b) The material facts as to the director's or officer's relationship or interest and as to the contract or transaction are disclosed or are known to the stockholders entitled to vote thereon, and the contract or transaction is specifically approved in good faith by vote of the stockholders; or

(c) The contract or transaction is fair as to the corporation as of the time it is authorized, approved or ratified, by the Board of Directors, a committee of the Board of Directors, or the stockholders.

Common or interested directors may be counted in determining the presence of a quorum at a meeting of the Board of Directors or of a committee which authorizes the contract or transaction.

5.8 Severability. Any determination that any provision of these By-laws is for any reason inapplicable, illegal or ineffective shall not affect or invalidate any other provision of these By-laws.

5.9 Pronouns. All pronouns used in these By-laws shall be deemed to refer to the masculine, feminine or neuter, singular or plural, as the identity of the person or persons may require.

ARTICLE VI

AMENDMENTS

6.1 By the Board of Directors. These By-laws may be altered, amended or repealed or new by-laws may be adopted by the affirmative vote of a majority of the directors present at any regular or special meeting of the Board of Directors at which a quorum is present.

6.2 By the Stockholders. These By-laws may be altered, amended or repealed or new by-laws may be adopted by the affirmative vote of the holders of a majority of the shares of the capital stock of the corporation issued and outstanding and entitled to vote at any regular meeting of stockholders, or at any special meeting of stockholders, provided notice of such alteration, amendment, repeal or adoption of new by-laws shall have been stated in the notice of such special meeting.

INDEMNIFICATION AGREEMENT

THIS INDEMNIFICATION AGREEMENT (this "Agreement") is made and entered into as of [DATE], between Casa Systems, Inc., a Delaware corporation (the "Company"), and [NAME] ("Indemnitee").

WITNESSETH THAT:

WHEREAS, highly competent persons have become more reluctant to serve corporations as directors or officers or in other capacities unless they are provided with adequate protection through insurance or adequate indemnification against inordinate risks of claims and actions against them arising out of their service to and activities on behalf of the corporation;

WHEREAS, the Board of Directors of the Company (the "Board") has determined that, in order to attract and retain qualified individuals, the Company will attempt to maintain on an ongoing basis, at its sole expense, liability insurance to protect persons serving the Company and its subsidiaries from certain liabilities. Although the furnishing of such insurance has been a customary and widespread practice among United States-based corporations and other business enterprises, the Company believes that, given current market conditions and trends, such insurance may be available to it in the future only at higher premiums and with more exclusions. At the same time, directors, officers, and other persons in service to corporations or business enterprises are being increasingly subjected to expensive and time-consuming litigation relating to, among other things, matters that traditionally would have been brought only against the Company or business enterprise itself. Indemnitee may also be entitled to indemnification pursuant to the General Corporation Law of the State of Delaware ("DGCL") or the Company's certificate of incorporation (as amended and restated from time to time) (the "Certificate of Incorporation"). The Certificate of Incorporation and the DGCL expressly provide that the indemnification provisions set forth therein are not exclusive, and thereby contemplate that contracts may be entered into between the Company and members of the Board, officers and other persons with respect to indemnification;

WHEREAS, the uncertainties relating to such insurance and to indemnification have increased the difficulty of attracting and retaining such persons;

WHEREAS, the Board has determined that the increased difficulty in attracting and retaining such persons is detrimental to the best interests of the Company's stockholders and that the Company should act to assure such persons that there will be increased certainty of such protection in the future;

WHEREAS, it is reasonable, prudent and necessary for the Company contractually to obligate itself to indemnify, and to advance expenses on behalf of, such persons to the fullest extent permitted by applicable law so that they will serve or continue to serve the Company free from undue concern that they will not be so indemnified;

WHEREAS, this Agreement is a supplement to and in furtherance of the Certificate of Incorporation and any resolutions adopted pursuant thereto, and shall not be deemed a substitute

therefor, nor to diminish or abrogate any rights of Indemnitee thereunder; [and]

WHEREAS, Indemnitee does not regard the protection available under the Company's Certificate of Incorporation and insurance as adequate in the present circumstances, and may not be willing to serve as an officer or director without adequate protection, and the Company desires Indemnitee to serve in such capacity. Indemnitee is willing to serve, continue to serve and to take on additional service for or on behalf of the Company on the condition that he be so indemnified[]; and

WHEREAS, Indemnitee has certain rights to indemnification and/or insurance provided by Summit Partners, L.P. and its affiliates (collectively, "Summit"), which Indemnitee and Summit intend to be secondary to the primary obligation of the Company to indemnify Indemnitee as provided herein, with the Company's acknowledgment and agreement to the foregoing being a material condition to Indemnitee's willingness to serve on the Board].

NOW, THEREFORE, in consideration of Indemnitee's agreement to serve as a director after the date hereof, the parties hereto agree as follows:

1. **INDEMNITY OF INDEMNITEE**. The Company hereby agrees to hold harmless and indemnify Indemnitee to the fullest extent permitted by law, as such may be amended from time to time. In furtherance of the foregoing indemnification, and without limiting the generality thereof:

(a) **Proceedings Other Than Proceedings by or in the Right of the Company**. Indemnitee shall be entitled to the rights of indemnification provided in this Section 1(a) if, by reason of Indemnitee's Corporate Status (as hereinafter defined), Indemnitee is, or is threatened to be made, a party to or participant in any Proceeding (as hereinafter defined) other than a Proceeding by or in the right of the Company. Pursuant to this Section 1(a), Indemnitee shall be indemnified against all Expenses (as hereinafter defined), judgments, penalties, fines and amounts paid in settlement actually and reasonably incurred by Indemnitee, or on Indemnitee's behalf, in connection with such Proceeding or any claim, issue or matter therein, if Indemnitee acted in good faith and in a manner Indemnitee reasonably believed to be in or not opposed to the best interests of the Company, and with respect to any criminal Proceeding, had no reasonable cause to believe Indemnitee's conduct was unlawful.

(b) **Proceedings by or in the Right of the Company**. Indemnitee shall be entitled to the rights of indemnification provided in this Section 1(b) if, by reason of Indemnitee's Corporate Status, Indemnitee is, or is threatened to be made, a party to or participant in any Proceeding brought by or in the right of the Company. Pursuant to this Section 1(b), Indemnitee shall be indemnified against all Expenses actually and reasonably incurred by Indemnitee, or on Indemnitee's behalf, in connection with such Proceeding if Indemnitee acted in good faith and in a manner Indemnitee reasonably believed to be in or not opposed to the best interests of the Company; provided, however, if applicable law so provides, no indemnification against such Expenses shall be made in respect of any claim, issue or matter in such Proceeding as to which Indemnitee shall have been adjudged to be liable to the Company unless and to the extent that the Court of Chancery of the State of Delaware shall determine that such indemnification may be made.

(c) **Indemnification for Expenses of a Party Who is Wholly or Partly Successful.** Notwithstanding any other provision of this Agreement, to the extent that Indemnitee is, by reason of Indemnitee's Corporate Status, a party to and is successful, on the merits or otherwise, in any Proceeding, he shall be indemnified to the maximum extent permitted by law, as such may be amended from time to time, against all Expenses actually and reasonably incurred by Indemnitee or on Indemnitee's behalf in connection therewith. If Indemnitee is not wholly successful in such Proceeding but is successful, on the merits or otherwise, as to one or more but less than all claims, issues or matters in such Proceeding, the Company shall indemnify Indemnitee against all Expenses actually and reasonably incurred by Indemnitee or on Indemnitee's behalf in connection with each successfully resolved claim, issue or matter. For purposes of this Section 1 and without limitation, the termination of any claim, issue or matter in such a Proceeding by dismissal, with or without prejudice, shall be deemed to be a successful result as to such claim, issue or matter.

2. Additional Indemnity. In addition to, and without regard to any limitations on, the indemnification provided for in Section 1 of this Agreement, the Company shall and hereby does indemnify and hold harmless Indemnitee against all Expenses, judgments, penalties, fines and amounts paid in settlement actually and reasonably incurred by Indemnitee or on Indemnitee's behalf if, by reason of Indemnitee's Corporate Status, he is, or is threatened to be made, a party to or participant in any Proceeding (including a Proceeding by or in the right of the Company), including, without limitation, all liability arising out of the negligence or active or passive wrongdoing of Indemnitee. The only limitation that shall exist upon the Company's obligations pursuant to this Agreement shall be that the Company shall not be obligated to make any payment to Indemnitee that is finally determined (under the procedures, and subject to the presumptions, set forth in Sections 6 and 7 hereof) to be unlawful.

3. CONTRIBUTION.

(a) Whether or not the indemnification provided in Sections 1 and 2 hereof is available, in respect of any threatened, pending or completed action, suit or proceeding in which the Company is jointly liable with Indemnitee (or would be if joined in such action, suit or proceeding), the Company shall pay, in the first instance, the entire amount of any judgment or settlement of such action, suit or proceeding without requiring Indemnitee to contribute to such payment and the Company hereby waives and relinquishes any right of contribution it may have against Indemnitee. The Company shall not enter into any settlement of any action, suit or proceeding in which the Company is jointly liable with Indemnitee (or would be if joined in such action, suit or proceeding) unless such settlement provides for a full and final release of all claims asserted against Indemnitee.

(b) Without diminishing or impairing the obligations of the Company set forth in the preceding subparagraph, if, for any reason, Indemnitee shall elect or be required to pay all or any portion of any judgment or settlement in any threatened, pending or completed action, suit or proceeding in which the Company is jointly liable with Indemnitee (or would be if joined in such action, suit or proceeding), the Company shall contribute to the amount of Expenses, judgments, fines and amounts paid in settlement actually and reasonably incurred and paid or payable by Indemnitee in proportion to the relative benefits received by the Company and all officers, directors or employees of the Company, other than Indemnitee, who are jointly

liable with Indemnitee (or would be if joined in such action, suit or proceeding), on the one hand, and Indemnitee, on the other hand, from the transaction from which such action, suit or proceeding arose; provided, however, that the proportion determined on the basis of relative benefits may, to the extent necessary to conform to law, be further adjusted by reference to the relative fault of the Company and all officers, directors or employees of the Company other than Indemnitee who are jointly liable with Indemnitee (or would be if joined in such action, suit or proceeding), on the one hand, and Indemnitee, on the other hand, in connection with the events that resulted in such Expenses, judgments, fines or settlement amounts, as well as any other equitable considerations that the Law may require to be considered. The relative fault of the Company and all officers, directors or employees of the Company, other than Indemnitee, who are jointly liable with Indemnitee (or would be if joined in such action, suit or proceeding), on the one hand, and Indemnitee, on the other hand, shall be determined by reference to, among other things, the degree to which their actions were motivated by intent to gain personal profit or advantage, the degree to which their liability is primary or secondary and the degree to which their conduct is active or passive.

(c) The Company hereby agrees to fully indemnify and hold Indemnitee harmless from any claims of contribution that may be brought by officers, directors or employees of the Company, other than Indemnitee, who may be jointly liable with Indemnitee.

(d) To the fullest extent permissible under applicable law, if the indemnification provided for in this Agreement is unavailable to Indemnitee for any reason whatsoever, the Company, in lieu of indemnifying Indemnitee, shall contribute to the amount incurred by Indemnitee, whether for judgments, fines, penalties, excise taxes, amounts paid or to be paid in settlement and/or for Expenses, in connection with any claim relating to an indemnifiable event under this Agreement, in such proportion as is deemed fair and reasonable in light of all of the circumstances of such Proceeding in order to reflect (i) the relative benefits received by the Company and Indemnitee as a result of the event(s) and/or transaction(s) giving cause to such Proceeding; and/or (ii) the relative fault of the Company (and its directors, officers, employees and agents) and Indemnitee in connection with such event(s) and/or transaction(s).

4. INDEMNIFICATION FOR EXPENSES OF A WITNESS. Notwithstanding any other provision of this Agreement, to the extent that Indemnitee is, by reason of Indemnitee's Corporate Status, a witness, or is made (or asked to) respond to discovery requests, in any Proceeding to which Indemnitee is not a party, Indemnitee shall be indemnified against all Expenses actually and reasonably incurred by Indemnitee or on Indemnitee's behalf in connection therewith.

5. ADVANCEMENT OF EXPENSES. Notwithstanding any other provision of this Agreement, the Company shall advance all Expenses incurred by or on behalf of Indemnitee in connection with any Proceeding by reason of Indemnitee's Corporate Status within thirty (30) days after the receipt by the Company of a statement or statements from Indemnitee requesting such advance or advances from time to time, whether prior to or after final disposition of such Proceeding. Such statement or statements shall reasonably evidence the Expenses incurred by Indemnitee and shall include or be preceded or accompanied by a written undertaking by or on behalf of Indemnitee to repay any Expenses advanced if it shall ultimately be determined that

Indemnitee is not entitled to be indemnified against such Expenses. Any advances and undertakings to repay pursuant to this Section 5 shall be unsecured and interest free.

6. PROCEDURES AND PRESUMPTIONS FOR DETERMINATION OF ENTITLEMENT TO INDEMNIFICATION. It is the intent of this Agreement to secure for Indemnitee rights of indemnity that are as favorable as may be permitted under applicable law, including without limitation, the DGCL and public policy of the State of Delaware. Accordingly, the parties agree that the following procedures and presumptions shall apply in the event of any question as to whether Indemnitee is entitled to indemnification under this Agreement:

(a) To obtain indemnification under this Agreement, Indemnitee shall submit to the Company a written request, including therein or therewith such documentation and information as is reasonably available to Indemnitee and is reasonably necessary to determine whether and to what extent Indemnitee is entitled to indemnification. The Secretary of the Company shall, promptly upon receipt of such a request for indemnification, advise the Board in writing that Indemnitee has requested indemnification. Notwithstanding the foregoing, any failure of Indemnitee to provide such a request to the Company, or to provide such a request in a timely fashion, shall not relieve the Company of any liability that it may have to Indemnitee unless, and to the extent that, such failure actually and materially prejudices the interests of the Company.

(b) Upon written request by Indemnitee for indemnification pursuant to the first sentence of Section 6(a) hereof, a determination, if required by applicable law, with respect to Indemnitee's entitlement thereto shall be made in the specific case by one of the following three methods, which shall be at the election of Indemnitee by: (1) a majority vote of the Disinterested Directors (as hereinafter defined), even though less than a quorum, or by a committee of Disinterested Directors designated by a majority vote of the Disinterested Directors, even though less than a quorum; (2) Independent Counsel (as hereinafter defined) in a written opinion to the Board, a copy of which shall be delivered to Indemnitee; or (3) the stockholders of the Company.

(c) If the determination of entitlement to indemnification is to be made by Independent Counsel pursuant to Section 6(b) hereof, the Independent Counsel shall be selected as provided in this Section 6(c). The Independent Counsel shall be selected by the Board and written notice of such selection shall be provided to Indemnitee. Indemnitee may, within 10 days after such written notice of selection shall have been given, deliver to the Company a written objection to such selection; provided, however, that such objection may be asserted only on the ground that the Independent Counsel so selected does not meet the requirements of "Independent Counsel" as defined in Section 13 of this Agreement, and the objection shall set forth with particularity the factual basis of such assertion. Absent a proper and timely objection, the person so selected by the Board shall act as Independent Counsel. If a written objection is made and substantiated, the Independent Counsel selected may not serve as Independent Counsel unless and until such objection is withdrawn or a court of competent jurisdiction has determined that such objection is without merit. If, within twenty (20) days after submission by Indemnitee of a written request for indemnification pursuant to Section 6(a) hereof, no Independent Counsel shall have been selected and not objected to, either the Company or Indemnitee may petition the Court of Chancery of the State of Delaware or other court of

competent jurisdiction for resolution of any objection that shall have been made by Indemnitee to the Company's selection of Independent Counsel and/or for the appointment as Independent Counsel of a person selected by the court or by such other person as the court shall designate, and the person with respect to whom all objections are so resolved or the person so appointed shall act as Independent Counsel under Section 6(b) hereof. The Company shall pay any and all reasonable fees and expenses of Independent Counsel incurred by such Independent Counsel in connection with acting pursuant to Section 6(b) hereof, and the Company shall pay all reasonable fees and expenses incident to the procedures of this Section 6(c), regardless of the manner in which such Independent Counsel was selected or appointed.

(d) In making a determination with respect to entitlement to indemnification hereunder, the person or persons or entity making such determination shall presume that Indemnitee is entitled to indemnification under this Agreement. Anyone seeking to overcome this presumption shall have the burden of proof and the burden of persuasion by clear and convincing evidence. Neither the failure of the Company (including by its directors or Independent Counsel) to have made a determination prior to the commencement of any action pursuant to this Agreement that indemnification is proper in the circumstances because Indemnitee has met the applicable standard of conduct, nor an actual determination by the Company (including by its directors or Independent Counsel) that Indemnitee has not met such applicable standard of conduct, shall be a defense to the action or create a presumption that Indemnitee has not met the applicable standard of conduct.

(e) Indemnitee shall be deemed to have acted in good faith if Indemnitee's action is based on the records or books of account of the Enterprise (as hereinafter defined), including financial statements, or on information supplied to Indemnitee by the officers of the Enterprise in the course of their duties, or on the advice of legal counsel for the Enterprise or on information or records given or reports made to the Enterprise by an independent certified public accountant or by an appraiser or other expert selected with reasonable care by the Enterprise. In addition, the knowledge and/or actions, or failure to act, of any director, officer, agent or employee of the Enterprise shall not be imputed to Indemnitee for purposes of determining the right to indemnification under this Agreement. Whether or not the foregoing provisions of this Section 6(e) are satisfied, it shall in any event be presumed that Indemnitee has at all times acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the Company. Anyone seeking to overcome this presumption shall have the burden of proof and the burden of persuasion by clear and convincing evidence.

(f) If the person, persons or entity empowered or selected under Section 6 to determine whether Indemnitee is entitled to indemnification shall not have made a determination within sixty (60) days after receipt by the Company of the request therefor, the requisite determination of entitlement to indemnification shall be deemed to have been made and Indemnitee shall be entitled to such indemnification absent (i) a misstatement by Indemnitee of a material fact, or an omission of a material fact necessary to make Indemnitee's statement not materially misleading, in connection with the request for indemnification, or (ii) a prohibition of such indemnification under applicable law; provided, however, that such 60-day period may be extended for a reasonable time, not to exceed an additional thirty (30) days, if the person, persons or entity making such determination with respect to entitlement to indemnification in good faith requires such additional time to obtain or evaluate documentation and/or information

relating thereto; and provided, further, that the foregoing provisions of this Section 6(f) shall not apply if the determination of entitlement to indemnification is to be made by the stockholders pursuant to Section 6(b) of this Agreement and if (A) within fifteen (15) days after receipt by the Company of the request for such determination, the Board or the Disinterested Directors, if appropriate, resolve to submit such determination to the stockholders for their consideration at an annual meeting thereof to be held within seventy-five (75) days after such receipt and such determination is made thereat, or (B) a special meeting of stockholders is called within fifteen (15) days after such receipt for the purpose of making such determination, such meeting is held for such purpose within sixty (60) days after having been so called and such determination is made thereat.

(g) Indemnitee shall cooperate with the person, persons or entity making such determination with respect to Indemnitee's entitlement to indemnification, including providing to such person, persons or entity upon reasonable advance request any documentation or information that is not privileged or otherwise protected from disclosure and that is reasonably available to Indemnitee and reasonably necessary to such determination. Any Independent Counsel, member of the Board or stockholder of the Company shall act reasonably and in good faith in making a determination regarding Indemnitee's entitlement to indemnification under this Agreement. Any costs or expenses (including attorneys' fees and disbursements) incurred by Indemnitee in so cooperating with the person, persons or entity making such determination shall be borne by the Company (irrespective of the determination as to Indemnitee's entitlement to indemnification) and the Company hereby indemnifies and agrees to hold Indemnitee harmless therefrom.

(h) The Company acknowledges that a settlement or other disposition short of final judgment may be successful if it permits a party to avoid expense, delay, distraction, disruption and uncertainty. In the event that any action, claim or proceeding to which Indemnitee is a party is resolved in any manner other than by adverse judgment against Indemnitee (including, without limitation, settlement of such action, claim or proceeding with or without payment of money or other consideration) it shall be presumed that Indemnitee has been successful on the merits or otherwise in such action, suit or proceeding. Anyone seeking to overcome this presumption shall have the burden of proof and the burden of persuasion by clear and convincing evidence.

(i) The termination of any Proceeding or of any claim, issue or matter therein, by judgment, order, settlement or conviction, or upon a plea of nolo contendere or its equivalent, shall not (except as otherwise expressly provided in this Agreement) of itself adversely affect the right of Indemnitee to indemnification or create a presumption that Indemnitee did not act in good faith and in a manner that he reasonably believed to be in or not opposed to the best interests of the Company or, with respect to any criminal Proceeding, that Indemnitee had reasonable cause to believe that Indemnitee's conduct was unlawful.

7. REMEDIES OF INDEMNITEE.

(a) In the event that (i) a determination is made pursuant to Section 6 of this Agreement that Indemnitee is not entitled to indemnification under this Agreement, (ii) advancement of Expenses is not timely made pursuant to Section 5 of this Agreement, (iii) no

determination of entitlement to indemnification is made pursuant to Section 6(b) of this Agreement within ninety (90) days after receipt by the Company of the request for indemnification, (iv) payment of indemnification is not made pursuant to this Agreement within ten (10) days after receipt by the Company of a written request therefor, (v) payment of indemnification is not made within ten (10) days after a determination has been made that Indemnitee is entitled to indemnification or such determination is deemed to have been made pursuant to Section 6 of this Agreement, or (vi) in the event the Company or any other person takes or threatens to take any action to declare this Agreement void or unenforceable, or institutes any litigation or other action or Proceeding designed to deny, or to recover from, Indemnitee the benefits provided or intended to be provided to Indemnitee hereunder, Indemnitee shall be entitled to an adjudication in an appropriate court of the State of Delaware, or in any other court of competent jurisdiction, for an adjudication of Indemnitee's entitlement to such indemnification or to otherwise enforce the Company's obligations under this Agreement. Indemnitee shall commence such proceeding seeking an adjudication within 180 days following the date on which Indemnitee first has the right to commence such proceeding pursuant to this Section 7(a). The Company shall not oppose Indemnitee's right to seek any such adjudication.

(b) In the event that a determination shall have been made pursuant to Section 6(b) of this Agreement that Indemnitee is not entitled to indemnification, any judicial proceeding commenced pursuant to this Section 7 shall be conducted in all respects as a de novo trial on the merits, and Indemnitee shall not be prejudiced by reason of the adverse determination under Section 6(b).

(c) If a determination shall have been made pursuant to Section 6(b) of this Agreement that Indemnitee is entitled to indemnification, the Company shall be bound by such determination in any judicial proceeding commenced pursuant to this Section 7, absent (i) a misstatement by Indemnitee of a material fact, or an omission of a material fact necessary to make Indemnitee's misstatement not materially misleading in connection with the application for indemnification, or (ii) a prohibition of such indemnification under applicable law.

(d) In the event that Indemnitee, pursuant to this Section 7, seeks a judicial adjudication of Indemnitee's rights under, or to recover damages for breach of, this Agreement, or to recover under any directors' and officers' liability insurance policies maintained by the Company, the Company shall pay on Indemnitee's behalf, in advance, any and all expenses (of the types described in the definition of Expenses in Section 13 of this Agreement) actually and reasonably incurred by Indemnitee in such judicial adjudication, regardless of whether Indemnitee ultimately is determined to be entitled to such indemnification, advancement of expenses or insurance recovery.

(e) The Company shall be precluded from asserting in any judicial proceeding commenced pursuant to this Section 7 that the procedures and presumptions of this Agreement are not valid, binding and enforceable and shall stipulate in any such court that the Company is bound by all the provisions of this Agreement. The Company shall indemnify Indemnitee against any and all Expenses and, if requested by Indemnitee, shall (within ten (10) days after receipt by the Company of a written request therefor) advance, to the extent not prohibited by law, such Expenses to Indemnitee, which are incurred by Indemnitee in connection with any action brought by Indemnitee for indemnification or advance of Expenses from the

Company under this Agreement or under any directors' and officers' liability insurance policies maintained by the Company, regardless of whether Indemnitee ultimately is determined to be entitled to such indemnification, advancement of Expenses or insurance recovery, as the case may be.

(f) Notwithstanding anything in this Agreement to the contrary, no determination as to entitlement to indemnification under this Agreement shall be required to be made prior to the final disposition of the Proceeding.

8. NON-EXCLUSIVITY; SURVIVAL OF RIGHTS; INSURANCE; PRIMACY OF INDEMNIFICATION; SUBROGATION.

(a) The rights of indemnification and the right to receive advancement of Expenses as provided by this Agreement shall not be deemed exclusive of any other rights to which Indemnitee may at any time be entitled under applicable law, the Certificate of Incorporation, the Bylaws, any agreement, a vote of stockholders, a resolution of directors or otherwise. No amendment, alteration or repeal of this Agreement or of any provision hereof shall limit or restrict any right of Indemnitee under this Agreement in respect of any action taken or omitted by such Indemnitee in Indemnitee's Corporate Status prior to such amendment, alteration or repeal. To the extent that a change in the DGCL, whether by statute or judicial decision, permits greater indemnification or advancement than would be afforded currently under the Certificate of Incorporation, the Bylaws and this Agreement, it is the intent of the parties hereto that Indemnitee shall enjoy by this Agreement the greater benefits so afforded by such change. No right or remedy herein conferred is intended to be exclusive of any other right or remedy, and every other right and remedy shall be cumulative and in addition to every other right and remedy given hereunder or now or hereafter existing at law or in equity or otherwise. The assertion or employment of any right or remedy hereunder, or otherwise, shall not prevent the concurrent assertion or employment of any other right or remedy.

(b) To the extent that the Company maintains an insurance policy or policies providing liability insurance for directors, officers, employees, or agents or fiduciaries of the Company or of any other corporation, partnership, joint venture, trust, employee benefit plan or other enterprise that such person serves at the request of the Company, Indemnitee shall be covered by such policy or policies in accordance with its or their terms to the maximum extent of the coverage available for any director, officer, employee, agent or fiduciary under such policy or policies. If, at the time of the receipt of a notice of a claim pursuant to the terms hereof, the Company has director and officer liability insurance in effect, the Company shall give prompt notice of the commencement of such proceeding to the insurers in accordance with the procedures set forth in the respective policies. The Company shall thereafter take all necessary or desirable action to cause such insurers to pay, on behalf of Indemnitee, all amounts payable as a result of such proceeding in accordance with the terms of such policies.

(c) The Company hereby acknowledges that Indemnitee [may have/has] certain rights to indemnification, advancement of expenses and/or insurance provided by [a corporate entity engaged in the venture capital investment business/Summit, including its affiliates] (collectively[with any of such entity's affiliates], the "Fund Indemnitors"). The Company hereby agrees (i) that it is the indemnitor of first resort (i.e., its obligations to

Indemnitee are primary and any obligations of the Fund Indemnitors to advance expenses or to provide indemnification for the same expenses or liabilities incurred by Indemnitee are secondary); (ii) that it shall be required to advance the full amount of Expenses incurred by Indemnitee and be liable for the full amount of all Expenses, judgments, penalties, fines and amounts paid in settlement to the extent legally permitted and as required by the terms of this Agreement and the Certificate of Incorporation or Bylaws of the Company (or any other agreement between the Company and Indemnitee), without regard to any rights Indemnitee may have against the Fund Indemnitors; and (iii) that it irrevocably waives, relinquishes and releases the Fund Indemnitors from any and all claims against the Fund Indemnitors for contribution, subrogation or any other recovery of any kind in respect thereof. The Company further agrees that no advancement or payment by the Fund Indemnitors on behalf of Indemnitee with respect to any claim for which Indemnitee has sought indemnification from the Company shall affect the foregoing and the Fund Indemnitors shall have a right to contribution and/or be subrogated to the extent of such advancement or payment to all of the rights of recovery of Indemnitee against the Company. The Company and Indemnitee agree that the Fund Indemnitors are express third party beneficiaries of the terms of this Section 8(c).

(d) Except as provided in paragraph (c) above, in the event of any payment under this Agreement, the Company shall be subrogated to the extent of such payment to all of the rights of recovery of Indemnitee (other than against the Fund Indemnitors), who shall execute all papers required and take all action necessary to secure such rights, including execution of such documents as are necessary to enable the Company to bring suit to enforce such rights.

(e) Except as provided in paragraph (c) above, the Company shall not be liable under this Agreement to make any payment of amounts otherwise indemnifiable hereunder if and to the extent that Indemnitee has otherwise actually received such payment under any insurance policy, contract, agreement or otherwise.

(f) Except as provided in paragraph (c) above, the Company's obligation to indemnify or advance Expenses hereunder to Indemnitee who is or was serving at the request of the Company as a director, officer, employee or agent of any other corporation, partnership, joint venture, trust, employee benefit plan or other enterprise shall be reduced by any amount Indemnitee has actually received as indemnification or advancement of expenses from or on behalf of or with respect to such other corporation, partnership, joint venture, trust, employee benefit plan or other enterprise.

9. EXCEPTION TO RIGHT OF INDEMNIFICATION. Notwithstanding any provision in this Agreement, the Company shall not be obligated under this Agreement to indemnify Indemnitee in connection with any claim made against Indemnitee:

(a) for which payment has actually been made to or on behalf of Indemnitee under any insurance policy or other indemnity provision, except with respect to any excess beyond the amount paid under any insurance policy or other indemnity provision, provided, that the foregoing shall not affect the rights of Indemnitee or the Fund Indemnitors set forth in Section 8(c) above; or

(b) for an accounting of profits made from the purchase and sale (or sale and purchase) by Indemnitee of securities of the Company within the meaning of Section 16(b) of the Securities Exchange Act of 1934, as amended, or similar provisions of state statutory law or common law; or

(c) in connection with any Proceeding (or any part of any Proceeding) initiated by Indemnitee, including, without limitation, any Proceeding (or any part of any Proceeding) initiated by Indemnitee against the Company or its directors, officers, employees or other indemnitees (but excluding any Proceeding brought to enforce Indemnitee's rights under this Agreement, the Certificate of Incorporation, the Company's Bylaws or any Company insurance policy), unless (i) the Board of the Company authorized the Proceeding (or any part of any Proceeding) prior to its initiation or (ii) the Company provides the indemnification, in its sole discretion, pursuant to the powers vested in the Company under applicable law.

10. DURATION OF AGREEMENT. All agreements and obligations of the Company contained herein shall continue during the period Indemnitee is an officer or director of the Company (or is or was serving at the request of the Company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise) and shall survive the termination of such period, and shall be applicable to any Proceeding (or any proceeding commenced under Section 7 hereof) to which Indemnitee is or becomes subject by reason of Indemnitee's Corporate Status, whether or not he is acting or serving in any such capacity at the time any liability or expense is incurred for which indemnification can be provided under this Agreement. This Agreement shall be binding upon and inure to the benefit of and be enforceable by the parties hereto and their respective successors (including any transferee of all or substantially all of the business, stock and/or assets of the Company and any direct or indirect successor by purchase, merger, consolidation or otherwise by operation of law), assigns, spouses, heirs, executors and personal and legal representatives.

11. SECURITY. To the extent requested by Indemnitee and approved by the Board, the Company may at any time and from time to time provide security to Indemnitee for the Company's obligations hereunder through an irrevocable bank line of credit, funded trust or other collateral. Any such security, once provided to Indemnitee, may not be revoked or released without the prior written consent of Indemnitee.

12. ENFORCEMENT.

(a) The Company expressly confirms and agrees that it has entered into this Agreement and assumes the obligations imposed on it hereby in order to induce Indemnitee to serve as an officer or director of the Company, and the Company acknowledges that Indemnitee is relying upon this Agreement in serving as an officer or director of the Company.

(b) This Agreement, together with the Certificate of Incorporation, constitutes the entire agreement between the parties hereto with respect to the subject matter hereof and supersedes all prior agreements and understandings, oral, written and implied, between the parties hereto with respect to the subject matter hereof.

13. **DEFINITIONS.** For purposes of this Agreement:

(a) “Corporate Status” describes the status of a person who is or was a director, officer, employee, agent or fiduciary of the Company or of any other corporation, partnership, joint venture, trust, employee benefit plan or other enterprise that such person is or was serving at the express written request of the Company.

(b) “Disinterested Director” means a director of the Company who is not and was not a party to the Proceeding in respect of which indemnification is sought by Indemnitee.

(c) “Enterprise” shall mean the Company and any other corporation, partnership, joint venture, trust, employee benefit plan or other enterprise that Indemnitee is or was serving at the express written request of the Company as a director, officer, employee, agent or fiduciary.

(d) “Expenses” shall include all reasonable attorneys’ fees, retainers, court costs, transcript costs, fees of experts, witness fees, travel expenses, duplicating costs, printing and binding costs, telephone charges, postage, delivery service fees and all other disbursements or expenses of the types customarily incurred in connection with prosecuting, defending, preparing to prosecute or defend, investigating, participating, or being or preparing to be a witness in a Proceeding, or responding to, or objecting to, a request to provide discovery in any Proceeding. Expenses also shall include Expenses incurred in connection with any appeal resulting from any Proceeding, including without limitation the premium, security for, and other costs relating to any cost bond, surety bond, or other appeal bond or its equivalent and, for purposes of Section 7(e) only, Expenses reasonably incurred by Indemnitee in connection with the interpretation, enforcement or defense of Indemnitee’s rights under this Agreement by litigation or otherwise. Expenses, however, shall not include amounts paid in settlement by Indemnitee or the amount of judgments or fines against Indemnitee.

(e) “Independent Counsel” means a law firm, or a member of a law firm that is experienced in matters of corporation law and neither presently is, nor in the past five years has been, retained to represent: (i) the Company or Indemnitee in any matter material to either such party (other than with respect to matters concerning Indemnitee under this Agreement, or of other indemnitees under similar indemnification agreements), or (ii) any other party to the Proceeding giving rise to a claim for indemnification hereunder. Notwithstanding the foregoing, the term “Independent Counsel” shall not include any person who, under the applicable standards of professional conduct then prevailing, would have a conflict of interest in representing either the Company or Indemnitee in an action to determine Indemnitee’s rights under this Agreement. The Company agrees to pay the reasonable fees of the Independent Counsel referred to above and to fully indemnify such counsel against any and all Expenses, claims, liabilities and damages arising out of or relating to this Agreement or its engagement pursuant hereto.

(f) “Proceeding” includes any threatened, pending or completed action, suit, arbitration, alternate dispute resolution mechanism, investigation, inquiry, administrative hearing or any other actual, threatened or completed proceeding, whether brought

by or in the right of the Company or otherwise and whether civil, criminal, administrative or investigative, in which Indemnitee was, is or will be involved as a party or otherwise, by reason of the fact that Indemnitee is or was an officer or director of the Company, by reason of any action taken by Indemnitee or of any inaction on Indemnitee's part while acting as an officer or director of the Company, or by reason of the fact that he is or was serving at the request of the Company as a director, officer, employee, agent or fiduciary of another corporation, partnership, joint venture, trust or other Enterprise; in each case whether or not he is acting or serving in any such capacity at the time any liability or expense is incurred for which indemnification can be provided under this Agreement; including one pending on or before the date of this Agreement, but excluding one initiated by an Indemnitee pursuant to Section 7 of this Agreement to enforce Indemnitee's rights under this Agreement.

14. **SEVERABILITY.** The invalidity or unenforceability of any provision hereof shall in no way affect the validity or enforceability of any other provision. Without limiting the generality of the foregoing, this Agreement is intended to confer upon Indemnitee indemnification rights to the fullest extent permitted by applicable laws. In the event any provision hereof conflicts with any applicable law, such provision shall be deemed modified, consistent with the aforementioned intent, to the extent necessary to resolve such conflict.

15. **MODIFICATION AND WAIVER.** No supplement, modification, termination or amendment of this Agreement shall be binding unless executed in writing by both of the parties hereto. No waiver of any of the provisions of this Agreement shall be deemed or shall constitute a waiver of any other provisions hereof (whether or not similar) nor shall such waiver constitute a continuing waiver.

16. **NOTICE BY INDEMNITEE.** Indemnitee agrees promptly to notify the Company in writing upon being served with or otherwise receiving any summons, citation, subpoena, complaint, indictment, information or other document relating to any Proceeding or matter that may be subject to indemnification covered hereunder. The failure to so notify the Company shall not relieve the Company of any obligation that it may have to Indemnitee under this Agreement or otherwise unless and only to the extent that such failure or delay materially prejudices the Company.

17. **NOTICES.** All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given: (a) upon personal delivery to the party to be notified, (b) when sent by confirmed electronic mail or facsimile if sent during normal business hours of the recipient, and if not so confirmed, then on the next business day, (c) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) one (1) day after deposit with a nationally recognized overnight courier, specifying next day delivery, with written verification of receipt. All communications shall be sent:

(a) To Indemnitee at the address set forth below Indemnitee signature hereto.

(b) To the Company at:

Casa Systems, Inc.
100 Old River Road, Suite 100
Andover, MA 01810
Attention: Chief Executive Officer

with a copy (which shall not constitute notice) to:

Wilmer Cutler Pickering Hale and Dorr LLP
1100 Winter Street
Waltham, MA 02451
Attention: Michael D. Bain

or to such other address as may have been furnished to Indemnitee by the Company or to the Company by Indemnitee, as the case may be.

18. **COUNTERPARTS.** This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same Agreement. This Agreement may also be executed and delivered by facsimile signature and in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

19. **HEADINGS.** The headings of the paragraphs of this Agreement are inserted for convenience only and shall not be deemed to constitute part of this Agreement or to affect the construction thereof.

20. **GOVERNING LAW AND CONSENT TO JURISDICTION.** This Agreement, the performance of this Agreement and any and all matters arising directly or indirectly herefrom or therefrom, and the legal relations among the parties shall be governed by, and construed and enforced in accordance with, the laws of the State of Delaware, without regard to its conflict of laws rules. The Company and Indemnitee hereby irrevocably and unconditionally (i) agree that any action or proceeding arising out of or in connection with this Agreement shall be brought only in the Chancery Court of the State of Delaware (the "Delaware Court"), and not in any other state or federal court in the United States of America or any court in any other country; (ii) consent to submit to the exclusive jurisdiction of the Delaware Court for purposes of any action or proceeding arising out of or in connection with this Agreement; (iii) waive any objection to the laying of venue of any such action or proceeding in the Delaware Court; and (iv) waive, and agree not to plead or to make, any claim that any such action or proceeding brought in the Delaware Court has been brought in an improper or inconvenient forum.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on and as of the day and year first above written.

COMPANY:

CASA SYSTEMS, INC.

By: _____

Name: Jerry Guo

Title: President and CEO

INDEMNITEE:

Name:

Address:

[Signature Page to Indemnification Agreement]

CASA SYSTEMS, INC.

2003 STOCK INCENTIVE PLAN1. Purpose

The purpose of this 2003 Stock Incentive Plan (the "Plan") of Casa Systems, Inc., a Delaware corporation (the "Company"), is to advance the interests of the Company's stockholders by enhancing the Company's ability to attract, retain and motivate persons who make (or are expected to make) important contributions to the Company by providing such persons with equity ownership opportunities and performance-based incentives and thereby better aligning the interests of such persons with those of the Company's stockholders. Except where the context otherwise requires, the term "Company" shall include any of the Company's present or future parent or subsidiary corporations as defined in Sections 424(e) or (f) of the Internal Revenue Code of 1986, as amended, and any regulations promulgated thereunder (the "Code") and any other business venture (including, without limitation, joint venture or limited liability company) in which the Company has a controlling interest, as determined by the Board of Directors of the Company (the "Board").

2. Eligibility

All of the Company's employees, officers, directors, consultants and advisors are eligible to be granted options, restricted stock awards, or other stock-based awards (each, an "Award") under the Plan. Each person who has been granted an Award under the Plan shall be deemed a "Participant".

3. Administration and Delegation

(a) Administration by Board of Directors. The Plan will be administered by the Board. The Board shall have authority to grant Awards and to adopt, amend and repeal such administrative rules, guidelines and practices relating to the Plan as it shall deem advisable. The Board may correct any defect, supply any omission or reconcile any inconsistency in the Plan or any Award in the manner and to the extent it shall deem expedient to carry the Plan into effect and it shall be the sole and final judge of such expediency. All decisions by the Board shall be made in the Board's sole discretion and shall be final and binding on all persons having or claiming any interest in the Plan or in any Award. No director or person acting pursuant to the authority delegated by the Board shall be liable for any action or determination relating to or under the Plan made in good faith.

(b) Appointment of Committees. To the extent permitted by applicable law, the Board may delegate any or all of its powers under the Plan to one or more committees or subcommittees of the Board (a "Committee"). All references in the Plan to the "Board" shall mean the Board or a Committee of the Board or the executive officers referred to in Section 3(c) to the extent that the Board's powers or authority under the Plan have been delegated to such Committee or executive officers.

(c) Delegation to Executive Officers. To the extent permitted by applicable law, the Board may delegate to one or more executive officers of the Company the power to grant

Awards to employees or officers of the Company or any of its present or future subsidiary corporations and to exercise such other powers under the Plan as the Board may determine, provided that the Board shall fix the terms of the Awards to be granted by such executive officers (including the exercise price of such Awards, which may include a formula by which the exercise price will be determined) and the maximum number of shares subject to Awards that the executive officers may grant; provided further, however, that no executive officer shall be authorized to grant Awards to any "executive officer" of the Company (as defined by Rule 3b-7 under the Securities Exchange Act of 1934, as amended (the "Exchange Act")) or to any "officer" of the Company (as defined by Rule 16a-1 under the Exchange Act).

4. Stock Available for Awards. Subject to adjustment under Section 8, Awards may be made under the Plan for up to 1,900,000 shares of common stock, \$.001 par value per share, of the Company (the "Common Stock"). If any Award expires or is terminated, surrendered or canceled without having been fully exercised or is forfeited in whole or in part (including as the result of shares of Common Stock subject to such Award being repurchased by the Company at the original issuance price pursuant to a contractual repurchase right) or results in any Common Stock not being issued, the unused Common Stock covered by such Award shall again be available for the grant of Awards under the Plan, subject, however, in the case of Incentive Stock Options (as hereinafter defined), to any limitations under the Code. Shares issued under the Plan may consist in whole or in part of authorized but unissued shares or treasury shares. At no time while there is any Option (as defined below) outstanding and held by a Participant who was a resident of the State of California on the date of grant of such Option, shall the total number of shares of Common Stock issuable upon exercise of all outstanding options and the total number of shares provided for under any stock bonus or similar plan of the Company exceed the applicable percentage as calculated in accordance with the conditions and exclusions of Section 260.140.45 of the California Code of Regulations, based on the shares of the Company which are outstanding at the time the calculation is made.

5. Stock Options

(a) General. The Board may grant options to purchase Common Stock (each, an "Option") and determine the number of shares of Common Stock to be covered by each Option, the exercise price of each Option and the conditions and limitations applicable to the exercise of each Option, including conditions relating to applicable federal or state securities laws, as it considers necessary or advisable. An Option which is not intended to be an Incentive Stock Option (as hereinafter defined) shall be designated a "Nonstatutory Stock Option".

(b) Incentive Stock Options. An Option that the Board intends to be an "incentive stock option" as defined in Section 422 of the Code (an "Incentive Stock Option") shall only be granted to employees of the Company and shall be subject to and shall be construed consistently with the requirements of Section 422 of the Code. The Company shall have no liability to a Participant, or any other party, if an Option (or any part thereof) which is intended to be an Incentive Stock Option is not an Incentive Stock Option.

(c) Exercise Price. The Board shall establish the exercise price at the time each Option is granted and specify it in the applicable option agreement.

(d) Duration of Options. Each Option shall be exercisable at such times and subject to such terms and conditions as the Board may specify in the applicable option agreement.

(e) Exercise of Option. Options may be exercised by delivery to the Company of a written notice of exercise signed by the proper person or by any other form of notice (including electronic notice) approved by the Board together with payment in full as specified in Section 5(f) for the number of shares for which the Option is exercised.

(f) Payment Upon Exercise. Common Stock purchased upon the exercise of an Option granted under the Plan shall be paid for as follows:

(1) in cash or by check, payable to the order of the Company;

(2) except as the Board may, in its sole discretion, otherwise provide in an option agreement, by (i) delivery of an irrevocable and unconditional undertaking by a creditworthy broker to deliver promptly to the Company sufficient funds to pay the exercise price and any required tax withholding or (ii) delivery by the Participant to the Company of a copy of irrevocable and unconditional instructions to a creditworthy broker to deliver promptly to the Company cash or a check sufficient to pay the exercise price and any required tax withholding;

(3) when the Common Stock is registered under the Securities Exchange Act of 1934 (the "Exchange Act"), by delivery of shares of Common Stock owned by the Participant valued at their fair market value as determined by (or in a manner approved by) the Board in good faith ("Fair Market Value"), provided (i) such method of payment is then permitted under applicable law and (ii) such Common Stock, if acquired directly from the Company, was owned by the Participant at least six months prior to such delivery;

(4) to the extent permitted by the Board, in its sole discretion by (i) delivery of a promissory note of the Participant to the Company on terms determined by the Board, or (ii) payment of such other lawful consideration as the Board may determine; or

(5) by any combination of the above permitted forms of payment.

(g) Substitute Options. In connection with a merger or consolidation of an entity with the Company or the acquisition by the Company of property or stock of an entity, the Board may grant Options in substitution for any options or other stock or stock-based awards granted by such entity or an affiliate thereof. Substitute Options may be granted on such terms as the Board deems appropriate in the circumstances, notwithstanding any limitations on Options contained in the other sections of this Section 5 or in Section 2.

6. Restricted Stock

(a) Grants. The Board may grant Awards entitling recipients to acquire shares of Common Stock, subject to the right of the Company to repurchase all or part of such shares at their issue price or other stated or formula price (or to require forfeiture of such shares if issued at no cost) from the recipient in the event that conditions specified by the Board in the applicable Award are not satisfied prior to the end of the applicable restriction period or periods established by the Board for such Award (each, a "Restricted Stock Award").

(b) Terms and Conditions. The Board shall determine the terms and conditions of any such Restricted Stock Award, including the conditions for repurchase (or forfeiture) and the issue price, if any.

(c) Stock Certificates. Any stock certificates issued in respect of a Restricted Stock Award shall be registered in the name of the Participant and, unless otherwise determined by the Board, deposited by the Participant, together with a stock power endorsed in blank, with the Company (or its designee). At the expiration of the applicable restriction periods, the Company (or such designee) shall deliver the certificates no longer subject to such restrictions to the Participant or if the Participant has died, to the beneficiary designated, in a manner determined by the Board, by a Participant to receive amounts due or exercise rights of the Participant in the event of the Participant's death (the "Designated Beneficiary"). In the absence of an effective designation by a Participant, Designated Beneficiary shall mean the Participant's estate.

7. Other Stock-Based Awards

The Board shall have the right to grant other Awards based upon the Common Stock having such terms and conditions as the Board may determine, including the grant of shares based upon certain conditions, the grant of securities convertible into Common Stock and the grant of stock appreciation rights.

8. Adjustments for Changes in Common Stock and Certain Other Events

(a) Changes in Capitalization. In the event of any stock split, reverse stock split, stock dividend, recapitalization, combination of shares, reclassification of shares, spin-off or other similar change in capitalization or event, or any distribution to holders of Common Stock other than a normal cash dividend, (i) the number and class of securities available under this Plan, (ii) the number and class of securities and exercise price per share subject to each outstanding Option, (iii) the repurchase price per share subject to each outstanding Restricted Stock Award, and (iv) the terms of each other outstanding Award shall be appropriately adjusted by the Company (or substituted Awards may be made, if applicable) to the extent the Board shall determine, in good faith, that such an adjustment (or substitution) is necessary and appropriate. If this Section 8(a) applies and Section 8(c) also applies to any event, Section 8(c) shall be applicable to such event, and this Section 8(a) shall not be applicable.

(b) Liquidation or Dissolution. In the event of a proposed liquidation or dissolution of the Company, the Board shall upon written notice to the Participants provide that all then unexercised Options will (i) become exercisable in full as of a specified time at least 10 business days prior to the effective date of such liquidation or dissolution and (ii) terminate effective upon such liquidation or dissolution, except to the extent exercised before such effective date. The Board may specify the effect of a liquidation or dissolution on any Restricted Stock Award or other Award granted under the Plan at the time of the grant of such Award.

(c) Reorganization Events

(1) Definition. A “Reorganization Event” shall mean: (a) any merger or consolidation of the Company with or into another entity as a result of which all of the Common Stock of the Company is converted into or exchanged for the right to receive cash, securities or other property or (b) any exchange of all of the Common Stock of the Company for cash, securities or other property pursuant to a share exchange transaction.

(2) Consequences of a Reorganization Event on Options. Upon the occurrence of a Reorganization Event, or the execution by the Company of any agreement with respect to a Reorganization Event, the Board shall provide that all outstanding Options shall be assumed, or equivalent options shall be substituted, by the acquiring or succeeding corporation (or an affiliate thereof). For purposes hereof, an Option shall be considered to be assumed if, following consummation of the Reorganization Event, the Option confers the right to purchase, for each share of Common Stock subject to the Option immediately prior to the consummation of the Reorganization Event, the consideration (whether cash, securities or other property) received as a result of the Reorganization Event by holders of Common Stock for each share of Common Stock held immediately prior to the consummation of the Reorganization Event (and if holders were offered a choice of consideration, the type of consideration chosen by the holders of a majority of the outstanding shares of Common Stock); provided, however, that if the consideration received as a result of the Reorganization Event is not solely common stock of the acquiring or succeeding corporation (or an affiliate thereof), the Company may, with the consent of the acquiring or succeeding corporation, provide for the consideration to be received upon the exercise of Options to consist solely of common stock of the acquiring or succeeding corporation (or an affiliate thereof) equivalent in fair market value to the per share consideration received by holders of outstanding shares of Common Stock as a result of the Reorganization Event.

Notwithstanding the foregoing, if the acquiring or succeeding corporation (or an affiliate thereof) does not agree to assume, or substitute for, such Options, then the Board shall, upon written notice to the Participants, provide that all then unexercised Options will become exercisable in full as of a specified time prior to the Reorganization Event and will terminate immediately prior to the consummation of such Reorganization Event, except to the extent exercised by the Participants before the consummation of such Reorganization Event; provided, however, that in the event of a Reorganization Event under the terms of which holders of Common Stock will receive upon consummation thereof a cash payment for each share of Common Stock surrendered pursuant to such Reorganization Event (the “Acquisition Price”), then the Board may instead provide that all outstanding Options shall terminate upon consummation of such Reorganization Event and that each Participant shall receive, in exchange therefor, a cash payment equal to the amount (if any) by which (A) the Acquisition Price multiplied by the number of shares of Common Stock subject to such outstanding Options (whether or not then exercisable), exceeds (B) the aggregate exercise price of such Options. To the extent all or any portion of an Option becomes exercisable solely as a result of the first sentence of this paragraph, upon exercise of such Option the Participant shall receive shares subject to a right of repurchase by the Company or its successor at the Option exercise price. Such repurchase right (1) shall lapse at the same rate as the Option would have become exercisable under its terms and (2) shall not apply to any shares subject to the Option that were exercisable under its terms without regard to the first sentence of this paragraph.

If any Option provides that it may be exercised for shares of Common Stock which remain subject to a repurchase right in favor of the Company, upon the occurrence of a Reorganization Event, any shares of restricted stock received upon exercise of such Option shall be treated in accordance with Section 8(c)(3) as if they were a Restricted Stock Award.

(3) **Consequences of a Reorganization Event on Restricted Stock Awards.** Upon the occurrence of a Reorganization Event, the repurchase and other rights of the Company under each outstanding Restricted Stock Award shall inure to the benefit of the Company's successor and shall apply to the cash, securities or other property which the Common Stock was converted into or exchanged for pursuant to such Reorganization Event in the same manner and to the same extent as they applied to the Common Stock subject to such Restricted Stock Award.

(4) **Consequences of a Reorganization Event on Other Awards.** The Board shall specify the effect of a Reorganization Event on any other Award granted under the Plan at the time of the grant of such Award.

9. General Provisions Applicable to Awards

(a) **Transferability of Awards.** Except as the Board may otherwise determine or provide in an Award, Awards shall not be sold, assigned, transferred, pledged or otherwise encumbered by the person to whom they are granted, either voluntarily or by operation of law, except by will or the laws of descent and distribution, and, during the life of the Participant, shall be exercisable only by the Participant. References to a Participant, to the extent relevant in the context, shall include references to authorized transferees.

(b) **Documentation.** Each Award shall be evidenced in such form (written, electronic or otherwise) as the Board shall determine. Each Award may contain terms and conditions in addition to those set forth in the Plan.

(c) **Board Discretion.** Except as otherwise provided by the Plan, each Award may be made alone or in addition or in relation to any other Award. The terms of each Award need not be identical, and the Board need not treat Participants uniformly.

(d) **Termination of Status.** The Board shall determine the effect on an Award of the disability, death, retirement, authorized leave of absence or other change in the employment or other status of a Participant and the extent to which, and the period during which, the Participant, the Participant's legal representative, conservator, guardian or Designated Beneficiary may exercise rights under the Award.

(e) **Withholding.** Each Participant shall pay to the Company, or make provision satisfactory to the Board for payment of, any taxes required by law to be withheld in connection with Awards to such Participant no later than the date of the event creating the tax liability. Except as the Board may otherwise provide in an Award, when the Common Stock is registered under the Exchange Act, Participants may satisfy such tax obligations in whole or in part by delivery of shares of Common Stock, including shares retained from the Award creating the tax

obligation, valued at their Fair Market Value; provided, however, that the total tax withholding where stock is being used to satisfy such tax obligations cannot exceed the Company's minimum statutory withholding obligations (based on minimum statutory withholding rates for federal and state tax purposes, including payroll taxes, that are applicable to such supplemental taxable income). Company may, to the extent permitted by law, deduct any such tax obligations from any payment of any kind otherwise due to a Participant.

(f) Amendment of Award. The Board may amend, modify or terminate any outstanding Award, including but not limited to, substituting therefor another Award of the same or a different type, changing the date of exercise or realization, and converting an Incentive Stock Option to a Nonstatutory Stock Option, provided that the Participant's consent to such action shall be required unless the Board determines that the action, taking into account any related action, would not materially and adversely affect the Participant.

(g) Conditions on Delivery of Stock. The Company will not be obligated to deliver any shares of Common Stock pursuant to the Plan or to remove restrictions from shares previously delivered under the Plan until (i) all conditions of the Award have been met or removed to the satisfaction of the Company, (ii) in the opinion of the Company's counsel, all other legal matters in connection with the issuance and delivery of such shares have been satisfied, including any applicable securities laws and any applicable stock exchange or stock market rules and regulations, and (iii) the Participant has executed and delivered to the Company such representations or agreements as the Company may consider appropriate to satisfy the requirements of any applicable laws, rules or regulations.

(h) Acceleration. The Board may at any time provide that any Award shall become immediately exercisable in full or in part, free of some or all restrictions or conditions, or otherwise realizable in full or in part, as the case may be.

10. Miscellaneous

(a) No Right To Employment or Other Status. No person shall have any claim or right to be granted an Award, and the grant of an Award shall not be construed as giving a Participant the right to continued employment or any other relationship with the Company. The Company expressly reserves the right at any time to dismiss or otherwise terminate its relationship with a Participant free from any liability or claim under the Plan, except as expressly provided in the applicable Award.

(b) No Rights As Stockholder. Subject to the provisions of the applicable Award, no Participant or Designated Beneficiary shall have any rights as a stockholder with respect to any shares of Common Stock to be distributed with respect to an Award until becoming the record holder of such shares. Notwithstanding the foregoing, in the event the Company effects a split of the Common Stock by means of a stock dividend and the exercise price of and the number of shares subject to such Option are adjusted as of the date of the distribution of the dividend (rather than as of the record date for such dividend), then an optionee who exercises an Option between the record date and the distribution date for such stock dividend shall be entitled to receive, on the distribution date, the stock dividend with respect to the shares of Common Stock acquired upon such Option exercise, notwithstanding the fact that such shares were not outstanding as of the close of business on the record date for such stock dividend.

(c) Effective Date and Term of Plan. The Plan shall become effective on the date on which it is adopted by the Board. No Awards shall be granted under the Plan after the completion of ten years from the earlier of (i) the date on which the Plan was adopted by the Board or (ii) the date the Plan was approved by the Company's stockholders, but Awards previously granted may extend beyond that date.

(d) Amendment of Plan. The Board may amend, suspend or terminate the Plan or any portion thereof at any time.

(e) Authorization of Sub-Plans. The Board may from time to time establish one or more sub-plans under the Plan for purposes of satisfying applicable blue sky, securities or tax laws of various jurisdictions. The Board shall establish such sub-plans by adopting supplements to this Plan containing (i) such limitations on the Board's discretion under the Plan as the Board deems necessary or desirable or (ii) such additional terms and conditions not otherwise inconsistent with the Plan as the Board shall deem necessary or desirable. All supplements adopted by the Board shall be deemed to be part of the Plan, but each supplement shall apply only to Participants within the affected jurisdiction and the Company shall not be required to provide copies of any supplement to Participants in any jurisdiction which is not the subject of such supplement.

(f) Governing Law. The provisions of the Plan and all Awards made hereunder shall be governed by and interpreted in accordance with the laws of the State of Delaware, without regard to any applicable conflicts of law.

2003 STOCK INCENTIVE PLAN

CALIFORNIA SUPPLEMENT

Pursuant to Section 10(e) of the Plan, the Board has adopted this supplement for purposes of satisfying the requirements of Section 25102(o) of the California Corporations Code:

Any Awards granted under the Plan to a Participant who is a resident of the State of California on the date of grant (a "California Participant") shall be subject to the following additional limitations, terms and conditions:

1. Additional Limitations on Options.

(a) Minimum Vesting Rate. Except in the case of Options granted to California Participants who are officers, directors, consultants or advisors of the Company or its affiliates (which Options may become exercisable at whatever rate is determined by the Board), Options granted to California Participants shall become exercisable at a rate of no less than 20% per year over five years from the date of grant; provided, that, such Options may be subject to such reasonable forfeiture conditions as the Board may choose to impose and which are not inconsistent with Section 260.140.41 of the California Code of Regulations.

(b) Minimum Exercise Price. The exercise price of Options granted to California Participants may not be less than 85% of the Fair Market Value of the Common Stock on the date of grant in the case of a Nonstatutory Stock Option or less than 100% of the Fair Market Value of the Common Stock on the date of grant in the case of an Incentive Stock Option; provided, however, that if the California Participant is a person who owns stock possessing more than 10% of the total combined voting power of all classes of stock of the Company or its parent or subsidiary corporations, the exercise price shall be not less than 110% of the Fair Market Value of the Common Stock on the date of grant.

(c) Maximum Duration of Options. No Options granted to California Participants will be granted for a term in excess of 10 years.

(d) Minimum Exercise Period Following Termination. Unless a California Participant's employment is terminated for cause (as defined in any contract of employment between the Company and such Participant, or if none, in the instrument evidencing the grant of such Participant's Option), in the event of termination of employment of such Participant, he or she shall have the right to exercise an Option, to the extent that he or she was otherwise entitled to exercise such Option on the date employment terminated, as follows: (i) at least six months from the date of termination, if termination was caused by such Participant's death or "permanent and total disability" (within the meaning of Section 22(e)(3) of the Code) and (ii) at least 30 days from the date of termination, if termination was caused other than by such Participant's death or "permanent and total disability" (within the meaning of Section 22(e)(3) of the Code).

(e) Limitation on Repurchase Rights. If an Option granted to a California Participant gives the Company the right to repurchase shares of Common Stock issued pursuant to the Plan upon termination of employment of such Participant, the terms of such repurchase right must comply with Section 260.140.41(k) of the California Code of Regulations.

2. Additional Limitations for Restricted Stock Awards.

(a) Minimum Purchase Price. The purchase price for a Restricted Stock Award granted to a California Participant shall be not less than 85% of the Fair Market Value of the Common Stock at the time such Participant is granted the right to purchase shares under the Plan or at the time the purchase is consummated; provided, however, that if such Participant is a person who owns stock possessing more than 10% of the total combined voting power or value of all classes of stock of the Company or its parent or subsidiary corporations, the purchase price shall be not less than 100% of the Fair Market Value of the Common Stock at the time such Participant is granted the right to purchase shares under the Plan or at the time the purchase is consummated.

(b) Limitation of Repurchase Rights. If a Restricted Stock Award granted to a California Participant gives the Company the right to repurchase shares of Common Stock issued pursuant to the Plan upon termination of employment of such Participant, the terms of such repurchase right must comply with Section 260.140.42(h) of the California Code of Regulations.

3. Additional Limitations for Other Stock-Based Awards. The terms of all Awards granted to a California Participant under Section 7 of the Plan shall comply, to the extent applicable, with Section 260.140.41 or Section 260.140.42 of the California Code of Regulations.

4. Additional Requirement to Provide Information to California Participants. The Company shall provide to each California Participant and to each California Participant who acquires Common Stock pursuant to the Plan, not less frequently than annually, copies of annual financial statements (which need not be audited). The Company shall not be required to provide such statements to key employees whose duties in connection with the Company assure their access to equivalent information.

5. Additional Limitations on Timing of Awards. No Award granted to a California Participant shall become exercisable, vested or realizable, as applicable to such Award, unless the Plan has been approved by the Company's stockholders within 12 months before or after the date the Plan was adopted by the Board.

6. Additional Limitations Relating to Definition of Fair Market Value. For purposes of Section 1(b) and 2(a) of this supplement, "Fair Market Value" shall be determined in a manner not inconsistent with Section 260.140.50 of the California Code of Regulations.

7. Additional Restriction Regarding Recapitalizations, Stock Splits, Etc. For purposes of Section 8 of the Plan, in the event of a stock split, reverse stock split, stock dividend, recapitalization, combination, reclassification or other distribution of the Company's securities, the number of securities allocated to each California Participant must be adjusted proportionately and without the receipt by the Company of any consideration from any California participant.

CASA SYSTEMS, INC.

**Amendment No. 1 To
2003 Stock Incentive Plan**

The 2003 Stock Incentive Plan (the "Plan") of Casa Systems, Inc. (the "Company") is hereby amended, pursuant to Section 10(d) of the Plan, as follows:

1. Section 4 of the Plan be and hereby is amended by increasing the maximum number of awards of Common Stock of the Company which may be made thereunder from 1,900,000 to 3,120,000 shares pursuant to the terms and provisions of the Plan.

Adopted by the Board of Directors: April 26, 2004

Adopted by the Stockholders: April 26, 2004

CASA SYSTEMS, INC.

**Amendment No. 2 To
2003 Stock Incentive Plan**

The 2003 Stock Incentive Plan (the "Plan") of Casa Systems, Inc. (the "Company") is hereby amended, pursuant to Section 10(d) of the Plan, as follows:

2. Section 4 of the Plan be and hereby is amended by increasing the maximum number of awards of Common Stock of the Company which may be made thereunder from 3,120,000 to 3,250,000 shares pursuant to the terms and provisions of the Plan.

Adopted by the Board of Directors: July 1, 2005

Adopted by the Stockholders: July 1, 2005

CASA SYSTEMS, INC.

Incentive Stock Option Agreement
Granted Under 2003 Stock Incentive Plan1. Grant of Option.

This agreement evidences the grant by Casa Systems, Inc., a Delaware corporation (the "Company"), on _____, 200__ (the "Grant Date") to _____, an employee of the Company (the "Participant"), of an option to purchase, in whole or in part, on the terms provided herein and in the Company's 2003 Stock Incentive Plan (the "Plan"), a total of _____ shares (the "Shares") of common stock, \$.001 par value per share, of the Company ("Common Stock") at \$_____ per Share. Unless earlier terminated, this option shall expire on _____ (the "Final Exercise Date").

It is intended that the option evidenced by this agreement shall be an incentive stock option as defined in Section 422 of the Internal Revenue Code of 1986, as amended, and any regulations promulgated thereunder (the "Code"). Except as otherwise indicated by the context, the term "Participant", as used in this option, shall be deemed to include any person who acquires the right to exercise this option validly under its terms.

2. Vesting Schedule.

This option will become exercisable ("vest") as to 25% of the original number of Shares on the first anniversary of the Vesting Commencement Date (as defined below) and as to an additional 2.0833% of the original number of Shares at the end of each successive one-month period following the first anniversary of the Vesting Commencement Date until the fourth anniversary of the Vesting Commencement Date. For purposes of this Agreement, the "Vesting Commencement Date" shall mean _____, 200__.

The right of exercise shall be cumulative so that to the extent the option is not exercised in any period to the maximum extent permissible it shall continue to be exercisable, in whole or in part, with respect to all shares for which it is vested until the earlier of the Final Exercise Date or the termination of this option under Section 3 hereof or the Plan.

3. Exercise of Option.

(a) Form of Exercise. Each election to exercise this option shall be accompanied by a completed Notice of Stock Option Exercise in the form attached hereto as Exhibit A, signed by the Participant, and received by the Company at its principal office, accompanied by this agreement, and payment in full in the manner provided in the Plan. The Participant may purchase less than the number of shares covered hereby, provided that no partial exercise of this option may be for any fractional share or for fewer than ten whole shares.

(b) Continuous Relationship with the Company Required. Except as otherwise provided in this Section 3, this option may not be exercised unless the Participant, at the time he or she exercises this option, is, and has been at all times since the Grant Date, an employee, officer or director of, or consultant or advisor to, the Company or any parent or subsidiary of the Company as defined in Section 424(e) or (f) of the Code (an "Eligible Participant").

(c) Termination of Relationship with the Company. If the Participant ceases to be an Eligible Participant for any reason, then, except as provided in paragraphs (d) and (e) below, the right to exercise this option shall terminate three months after such cessation (but in no event after the Final Exercise Date), provided that this option shall be exercisable only to the extent that the Participant was entitled to exercise this option on the date of such cessation. Notwithstanding the foregoing, if the Participant, prior to the Final Exercise Date, violates the non-competition or confidentiality provisions of any employment contract, confidentiality and nondisclosure agreement or other agreement between the Participant and the Company, the right to exercise this option shall terminate immediately upon such violation.

(d) Exercise Period Upon Death or Disability. If the Participant dies or becomes disabled (within the meaning of Section 22(e)(3) of the Code) prior to the Final Exercise Date while he or she is an Eligible Participant and the Company has not terminated such relationship for “cause” as specified in paragraph (e) below, this option shall be exercisable, within the period of one year following the date of death or disability of the Participant, by the Participant (or in the case of death by an authorized transferee), provided that this option shall be exercisable only to the extent that this option was exercisable by the Participant on the date of his or her death or disability, and further provided that this option shall not be exercisable after the Final Exercise Date.

(e) Discharge for Cause. If the Participant, prior to the Final Exercise Date, is discharged by the Company for “cause” (as defined below), the right to exercise this option shall terminate immediately upon the effective date of such discharge. “Cause” shall mean willful misconduct by the Participant or willful failure by the Participant to perform his or her responsibilities to the Company (including, without limitation, breach by the Participant of any provision of any employment, consulting, advisory, nondisclosure, non-competition or other similar agreement between the Participant and the Company), as determined by the Company, which determination shall be conclusive. The Participant shall be considered to have been discharged for “Cause” if the Company determines, within 30 days after the Participant’s resignation, that discharge for cause was warranted.

4. Right of First Refusal and Restrictions on Transfer.

(a) If the Participant proposes to sell, assign, transfer, pledge, hypothecate or otherwise dispose of, by operation of law or otherwise (collectively, “transfer”) any Shares acquired upon exercise of this option, then the Participant shall first give written notice of the proposed transfer (the “Transfer Notice”) to the Company. The Transfer Notice shall name the proposed transferee and state the number of such Shares the Participant proposes to transfer (the “Offered Shares”), the price per share and all other material terms and conditions of the transfer.

(b) For 60 days following its receipt of such Transfer Notice, the Company shall have the option to purchase some or all of the Offered Shares at the price and upon the terms set forth in the Transfer Notice. In the event the Company elects to purchase any Offered Shares (the Offered Shares to be purchased by the Company hereunder are referred to as the “Purchased

Shares”), it shall give written notice of such election to the Participant within such 60-day period. Within 10 days after his receipt of such notice, the Participant shall tender to the Company at its principal offices the certificate or certificates representing the Purchased Shares, duly endorsed in blank by the Participant or with duly endorsed stock powers attached thereto, all in a form suitable for transfer of the Purchased Shares to the Company. Promptly following receipt of such certificate or certificates, the Company shall deliver or mail to the Participant a check in payment of the purchase price for the Purchased Shares; provided that if the terms of payment set forth in the Transfer Notice were other than cash against delivery, the Company may pay for the Purchased Shares on the same terms and conditions as were set forth in the Transfer Notice; and provided further that any delay in making such payment shall not invalidate the Company’s exercise of its option to purchase the Purchased Shares.

(c) If the Company does not elect to acquire all of the Offered Shares, the Participant may, within the 30-day period following the expiration of the option granted to the Company under subsection (b) above, transfer the Offered Shares (other than the Purchased Shares) to the proposed transferee, provided that such transfer shall not be on terms and conditions more favorable to the transferee than those contained in the Transfer Notice. Notwithstanding any of the above, all Offered Shares transferred to a third party pursuant to this Section 4 shall remain subject to the right of first refusal and transfer restrictions set forth in this Section 4 and such transferee shall, as a condition to such transfer, deliver to the Company a written instrument confirming that such transferee shall be bound by all of the terms and conditions of this Section 4.

(d) After the time at which the Purchased Shares are required to be delivered to the Company for transfer to the Company pursuant to subsection (b) above, the Company shall not pay any dividend to the Participant on account of such Purchased Shares or permit the Participant to exercise any of the privileges or rights of a stockholder with respect to such Purchased Shares, but shall, in so far as permitted by law, treat the Company as the owner of such Purchased Shares.

(e) The following transactions shall be exempt from the provisions of this Section 4:

(1) any transfer of Shares to or for the benefit of the Participant’s spouse or any of his or his spouse’s parents, children, siblings, nieces, nephews or grandchildren, or to a trust or similar entity for their benefit;

(2) any transfer pursuant to an effective registration statement filed by the Company under the Securities Act of 1933, as amended (the “Securities Act”); and

(3) any transfer made as part of the sale of all or substantially all of the shares of capital stock of the Company (including pursuant to a merger or consolidation);

provided, however, that in the case of a transfer pursuant to clause (1) above, such Shares shall remain subject to the right of first refusal and transfer restrictions set forth in this Section 4 and such transferee shall, as a condition to such transfer, deliver to the Company a written instrument confirming that such transferee shall be bound by all of the terms and conditions of this Section 4.

(f) The Company may assign its rights to purchase Offered Shares in any particular transaction under this Section 4 to one or more persons or entities.

(g) The provisions of this Section 4 shall terminate upon the earlier of the following events:

(1) the closing of the sale of shares of Common Stock in an underwritten public offering pursuant to an effective registration statement filed by the Company under the Securities Act; or

(2) the sale of all or substantially all of the outstanding shares of capital stock, assets or business of the Company, by merger, consolidation, sale of assets or otherwise (other than a merger or consolidation in which all or substantially all of the individuals and entities who were beneficial owners of the Common Stock immediately prior to such transaction beneficially own, directly or indirectly, more than 50% of the outstanding securities entitled to vote generally in the election of directors of the resulting, surviving or acquiring corporation in such transaction).

(h) The Participant shall not transfer any Shares, or any interest therein, to any person or entity that is a competitor of the Company, as determined by the Board of Directors of the Company in its sole discretion, unless such transfer is made in connection with the sale of all or substantially all of the capital stock, assets or business of the Company, by merger, consolidation, sale of assets or otherwise.

(i) The Company shall not be required (a) to transfer on its books any of the Shares which shall have been sold or transferred in violation of any of the provisions set forth in this Section 4, or (b) to treat as owner of such Shares or to pay dividends to any transferee to whom any such Shares shall have been so sold or transferred.

(j) The certificate representing Shares shall bear a legend substantially in the following form (in addition to, or in combination with, any legend required by applicable federal and state securities laws and agreements relating to the transfer of the Company securities):

“The shares represented by this certificate are subject to a right of first refusal in favor of the Company, as provided in a certain stock option agreement with the Company.”

5. Agreement in Connection with Public Offering.

The Participant agrees, in connection with the initial underwritten public offering of the Company’s securities pursuant to a registration statement under the Securities Act, (i) not to sell, make short sale of, loan, grant any options for the purchase of, or otherwise dispose of any shares of Common Stock held by the Participant (other than those shares included in the offering) without the prior written consent of the Company or the underwriters managing such initial underwritten public offering of the Company’s securities for a period of 180 days from the effective date of such registration statement, and (ii) to execute any agreement reflecting clause (i) above as may be requested by the Company or the managing underwriters at the time of such offering.

6. Withholding.

No Shares will be issued pursuant to the exercise of this option unless and until the Participant pays to the Company, or makes provision satisfactory to the Company for payment of, any federal, state or local withholding taxes required by law to be withheld in respect of this option.

7. Nontransferability of Option.

This option may not be sold, assigned, transferred, pledged or otherwise encumbered by the Participant, either voluntarily or by operation of law, except by will or the laws of descent and distribution, and, during the lifetime of the Participant, this option shall be exercisable only by the Participant.

8. Disqualifying Disposition.

If the Participant disposes of Shares acquired upon exercise of this option within two years from the Grant Date or one year after such Shares were acquired pursuant to exercise of this option, the Participant shall notify the Company in writing of such disposition.

9. Provisions of the Plan.

This option is subject to the provisions of the Plan, a copy of which is furnished to the Participant with this option.

IN WITNESS WHEREOF, the Company has caused this option to be executed under its corporate seal by its duly authorized officer. This option shall take effect as a sealed instrument.

CASA SYSTEMS, INC.

Dated: _____

By: _____
Name: _____
Title: _____

PARTICIPANT'S ACCEPTANCE

The undersigned hereby accepts the foregoing option and agrees to the terms and conditions thereof. The undersigned hereby acknowledges receipt of a copy of the Company's 2003 Stock Incentive Plan.

PARTICIPANT:

Address: _____

NOTICE OF STOCK OPTION EXERCISE

Date: _____¹

Casa Systems, Inc.
100 Old River Road, Suite 100
Andover, MA 01810

Attention: Treasurer

Dear Sir or Madam:

I am the holder of _____² Stock Option granted to me under the Casa Systems, Inc. (the "Company") 2003 Stock Incentive Plan on _____³ for the purchase of _____⁴ shares of Common Stock of the Company at a purchase price of \$_____⁵ per share.

I hereby exercise my option to purchase _____⁶ shares of Common Stock (the "Shares"), for which I have enclosed _____⁷ in the amount of _____⁸. Please register my stock certificate as follows:

Name(s): _____⁹

Address: _____

Tax I.D. #: _____¹⁰

- 1 Enter the date of exercise.
- 2 Enter either "an Incentive" or "a Nonstatutory".
- 3 Enter the date of grant.
- 4 Enter the total number of shares of Common Stock for which the option was granted.
- 5 Enter the option exercise price per share of Common Stock.
- 6 Enter the number of shares of Common Stock to be purchased upon exercise of all or part of the option.
- 7 Enter "cash", "personal check" or if permitted by the option or Plan, "stock certificates No. XXXX and XXXX".
- 8 Enter the dollar amount (price per share of Common Stock times the number of shares of Common Stock to be purchased), or the number of shares tendered. Fair market value of shares tendered, together with cash or check, must cover the purchase price of the shares issued upon exercise.
- 9 Enter name(s) to appear on stock certificate: (a) Your name only; (b) Your name and other name (i.e., John Doe and Jane Doe, Joint Tenants With Right of Survivorship); or (c) In the case of a Nonstatutory option only, a Child's name, with you as custodian (i.e., Jane Doe, Custodian for Tommy Doe).
Note: There may be income and/or gift tax consequences of registering shares in a Child's name.
- 10 Social Security Number of Holder(s).

I represent, warrant and covenant as follows:

10. I am purchasing the Shares for my own account for investment only, and not with a view to, or for sale in connection with, any distribution of the Shares in violation of the Securities Act of 1933 (the "Securities Act"), or any rule or regulation under the Securities Act.
11. I have had such opportunity as I have deemed adequate to obtain from representatives of the Company such information as is necessary to permit me to evaluate the merits and risks of my investment in the Company.
12. I have sufficient experience in business, financial and investment matters to be able to evaluate the risks involved in the purchase of the Shares and to make an informed investment decision with respect to such purchase.
13. I can afford a complete loss of the value of the Shares and am able to bear the economic risk of holding such Shares for an indefinite period.
14. I understand that (i) the Shares have not been registered under the Securities Act and are "restricted securities" within the meaning of Rule 144 under the Securities Act, (ii) the Shares cannot be sold, transferred or otherwise disposed of unless they are subsequently registered under the Securities Act or an exemption from registration is then available; (iii) in any event, the exemption from registration under Rule 144 will not be available for at least one year and even then will not be available unless a public market then exists for the Common Stock, adequate information concerning the Company is then available to the public, and other terms and conditions of Rule 144 are complied with; and (iv) there is now no registration statement on file with the Securities and Exchange Commission with respect to any stock of the Company and the Company has no obligation or current intention to register the Shares under the Securities Act.

Very truly yours,

(Signature)

CASA SYSTEMS, INC.

Nonstatutory Stock Option Agreement
Granted Under 2003 Stock Incentive Plan1. Grant of Option.

This agreement evidences the grant by Casa Systems, Inc., a Delaware corporation (the "Company"), on _____, 200__ (the "Grant Date") to _____, an employee, consultant or director of the Company (the "Participant"), of an option to purchase, in whole or in part, on the terms provided herein and in the Company's 2003 Stock Incentive Plan (the "Plan"), a total of _____ shares (the "Shares") of common stock, \$.001 par value per share, of the Company ("Common Stock") at \$_____ per Share. Unless earlier terminated, this option shall expire on _____ (the "Final Exercise Date").

It is intended that the option evidenced by this agreement shall not be an incentive stock option as defined in Section 422 of the Internal Revenue Code of 1986, as amended, and any regulations promulgated thereunder (the "Code"). Except as otherwise indicated by the context, the term "Participant", as used in this option, shall be deemed to include any person who acquires the right to exercise this option validly under its terms.

2. Vesting Schedule.

This option will become exercisable ("vest") as to 25% of the original number of Shares on the first anniversary of the Vesting Commencement Date (as defined below) and as to an additional 2.0833% of the original number of Shares at the end of each successive one-month period following the first anniversary of the Vesting Commencement Date until the fourth anniversary of the Vesting Commencement Date. For purposes of this Agreement, the "Vesting Commencement Date" shall mean _____, 200__.

The right of exercise shall be cumulative so that to the extent the option is not exercised in any period to the maximum extent permissible it shall continue to be exercisable, in whole or in part, with respect to all shares for which it is vested until the earlier of the Final Exercise Date or the termination of this option under Section 3 hereof or the Plan.

3. Exercise of Option.

(a) Form of Exercise. Each election to exercise this option shall be accompanied by a completed Notice of Stock Option Exercise in the form attached hereto as Exhibit A, signed by the Participant, and received by the Company at its principal office, accompanied by this agreement, and payment in full in the manner provided in the Plan. The Participant may purchase less than the number of shares covered hereby, provided that no partial exercise of this option may be for any fractional share or for fewer than ten whole shares.

(b) Continuous Relationship with the Company Required. Except as otherwise provided in this Section 3, this option may not be exercised unless the Participant, at the time he or she exercises this option, is, and has been at all times since the Grant Date, an employee, officer or director of, or consultant or advisor to, the Company or any parent or subsidiary of the Company as defined in Section 424(e) or (f) of the Code (an "Eligible Participant").

(c) Termination of Relationship with the Company. If the Participant ceases to be an Eligible Participant for any reason, then, except as provided in paragraphs (d) and (e) below, the right to exercise this option shall terminate three months after such cessation (but in no event after the Final Exercise Date), provided that this option shall be exercisable only to the extent that the Participant was entitled to exercise this option on the date of such cessation. Notwithstanding the foregoing, if the Participant, prior to the Final Exercise Date, violates the non-competition or confidentiality provisions of any employment contract, confidentiality and nondisclosure agreement or other agreement between the Participant and the Company, the right to exercise this option shall terminate immediately upon such violation.

(d) Exercise Period Upon Death or Disability. If the Participant dies or becomes disabled (within the meaning of Section 22(e)(3) of the Code) prior to the Final Exercise Date while he or she is an Eligible Participant and the Company has not terminated such relationship for “cause” as specified in paragraph (e) below, this option shall be exercisable, within the period of one year following the date of death or disability of the Participant, by the Participant (or in the case of death by an authorized transferee), provided that this option shall be exercisable only to the extent that this option was exercisable by the Participant on the date of his or her death or disability, and further provided that this option shall not be exercisable after the Final Exercise Date.

(e) Discharge for Cause. If the Participant, prior to the Final Exercise Date, is discharged by the Company for “cause” (as defined below), the right to exercise this option shall terminate immediately upon the effective date of such discharge. “Cause” shall mean willful misconduct by the Participant or willful failure by the Participant to perform his or her responsibilities to the Company (including, without limitation, breach by the Participant of any provision of any employment, consulting, advisory, nondisclosure, non-competition or other similar agreement between the Participant and the Company), as determined by the Company, which determination shall be conclusive. The Participant shall be considered to have been discharged for “Cause” if the Company determines, within 30 days after the Participant’s resignation, that discharge for cause was warranted.

4. Right of First Refusal and Restrictions on Transfer.

(a) If the Participant proposes to sell, assign, transfer, pledge, hypothecate or otherwise dispose of, by operation of law or otherwise (collectively, “transfer”) any Shares acquired upon exercise of this option, then the Participant shall first give written notice of the proposed transfer (the “Transfer Notice”) to the Company. The Transfer Notice shall name the proposed transferee and state the number of such Shares the Participant proposes to transfer (the “Offered Shares”), the price per share and all other material terms and conditions of the transfer.

(b) For 60 days following its receipt of such Transfer Notice, the Company shall have the option to purchase some or all of the Offered Shares at the price and upon the terms set forth in the Transfer Notice. In the event the Company elects to purchase any Offered Shares (the Offered Shares to be purchased by the Company hereunder are referred to as the “Purchased

Shares”), it shall give written notice of such election to the Participant within such 60-day period. Within 10 days after his receipt of such notice, the Participant shall tender to the Company at its principal offices the certificate or certificates representing the Purchased Shares, duly endorsed in blank by the Participant or with duly endorsed stock powers attached thereto, all in a form suitable for transfer of the Purchased Shares to the Company. Promptly following receipt of such certificate or certificates, the Company shall deliver or mail to the Participant a check in payment of the purchase price for the Purchased Shares; provided that if the terms of payment set forth in the Transfer Notice were other than cash against delivery, the Company may pay for the Purchased Shares on the same terms and conditions as were set forth in the Transfer Notice; and provided further that any delay in making such payment shall not invalidate the Company’s exercise of its option to purchase the Purchased Shares.

(c) If the Company does not elect to acquire all of the Offered Shares, the Participant may, within the 30-day period following the expiration of the option granted to the Company under subsection (b) above, transfer the Offered Shares (other than the Purchased Shares) to the proposed transferee, provided that such transfer shall not be on terms and conditions more favorable to the transferee than those contained in the Transfer Notice. Notwithstanding any of the above, all Offered Shares transferred to a third party pursuant to this Section 4 shall remain subject to the right of first refusal and transfer restrictions set forth in this Section 4 and such transferee shall, as a condition to such transfer, deliver to the Company a written instrument confirming that such transferee shall be bound by all of the terms and conditions of this Section 4.

(d) After the time at which the Purchased Shares are required to be delivered to the Company for transfer to the Company pursuant to subsection (b) above, the Company shall not pay any dividend to the Participant on account of such Purchased Shares or permit the Participant to exercise any of the privileges or rights of a stockholder with respect to such Purchased Shares, but shall, in so far as permitted by law, treat the Company as the owner of such Purchased Shares.

(e) The following transactions shall be exempt from the provisions of this Section 4:

(1) any transfer of Shares to or for the benefit of the Participant’s spouse or any of his or his spouse’s parents, children, siblings, nieces, nephews or grandchildren, or to a trust or similar entity for their benefit;

(2) any transfer pursuant to an effective registration statement filed by the Company under the Securities Act of 1933, as amended (the “Securities Act”); and

(3) any transfer made as part of the sale of all or substantially all of the shares of capital stock of the Company (including pursuant to a merger or consolidation);

provided, however, that in the case of a transfer pursuant to clause (1) above, such Shares shall remain subject to the right of first refusal and transfer restrictions set forth in this Section 4 and such transferee shall, as a condition to such transfer, deliver to the Company a written instrument confirming that such transferee shall be bound by all of the terms and conditions of this Section 4.

(f) The Company may assign its rights to purchase Offered Shares in any particular transaction under this Section 4 to one or more persons or entities.

(g) The provisions of this Section 4 shall terminate upon the earlier of the following events:

(1) the closing of the sale of shares of Common Stock in an underwritten public offering pursuant to an effective registration statement filed by the Company under the Securities Act; or

(2) the sale of all or substantially all of the outstanding shares of capital stock, assets or business of the Company, by merger, consolidation, sale of assets or otherwise (other than a merger or consolidation in which all or substantially all of the individuals and entities who were beneficial owners of the Common Stock immediately prior to such transaction beneficially own, directly or indirectly, more than 50% of the outstanding securities entitled to vote generally in the election of directors of the resulting, surviving or acquiring corporation in such transaction).

(h) The Participant shall not transfer any Shares, or any interest therein, to any person or entity that is a competitor of the Company, as determined by the Board of Directors of the Company in its sole discretion, unless such transfer is made in connection with the sale of all or substantially all of the capital stock, assets or business of the Company, by merger, consolidation, sale of assets or otherwise.

(i) The Company shall not be required (a) to transfer on its books any of the Shares which shall have been sold or transferred in violation of any of the provisions set forth in this Section 4, or (b) to treat as owner of such Shares or to pay dividends to any transferee to whom any such Shares shall have been so sold or transferred.

(j) The certificate representing Shares shall bear a legend substantially in the following form (in addition to, or in combination with, any legend required by applicable federal and state securities laws and agreements relating to the transfer of the Company securities):

“The shares represented by this certificate are subject to a right of first refusal in favor of the Company, as provided in a certain stock option agreement with the Company.”

5. Agreement in Connection with Public Offering.

The Participant agrees, in connection with the initial underwritten public offering of the Company’s securities pursuant to a registration statement under the Securities Act, (i) not to sell, make short sale of, loan, grant any options for the purchase of, or otherwise dispose of any shares of Common Stock held by the Participant (other than those shares included in the offering) without the prior written consent of the Company or the underwriters managing such initial underwritten public offering of the Company’s securities for a period of 180 days from the effective date of such registration statement, and (ii) to execute any agreement reflecting clause (i) above as may be requested by the Company or the managing underwriters at the time of such offering.

6. Withholding.

No Shares will be issued pursuant to the exercise of this option unless and until the Participant pays to the Company, or makes provision satisfactory to the Company for payment of, any federal, state or local withholding taxes required by law to be withheld in respect of this option.

7. Nontransferability of Option.

This option may not be sold, assigned, transferred, pledged or otherwise encumbered by the Participant, either voluntarily or by operation of law, except by will or the laws of descent and distribution, and, during the lifetime of the Participant, this option shall be exercisable only by the Participant.

8. Provisions of the Plan.

This option is subject to the provisions of the Plan, a copy of which is furnished to the Participant with this option.

IN WITNESS WHEREOF, the Company has caused this option to be executed under its corporate seal by its duly authorized officer. This option shall take effect as a sealed instrument.

CASA SYSTEMS, INC.

Dated: _____

By: _____

Name: _____

Title: _____

PARTICIPANT'S ACCEPTANCE

The undersigned hereby accepts the foregoing option and agrees to the terms and conditions thereof. The undersigned hereby acknowledges receipt of a copy of the Company's 2003 Stock Incentive Plan.

PARTICIPANT:

Address: _____

NOTICE OF STOCK OPTION EXERCISE

Date: _____¹

Casa Systems, Inc.
100 Old River Road, Suite 100
Andover, MA 01810

Attention: Treasurer

Dear Sir or Madam:

I am the holder of _____² Stock Option granted to me under the Casa Systems, Inc. (the "Company") 2003 Stock Incentive Plan on _____³ for the purchase of _____⁴ shares of Common Stock of the Company at a purchase price of \$ _____⁵ per share.

I hereby exercise my option to purchase _____⁶ shares of Common Stock (the "Shares"), for which I have enclosed _____⁷ in the amount of _____⁸. Please register my stock certificate as follows:

Name(s): _____⁹

Address: _____

Tax I.D. #: _____¹⁰

- 1 Enter the date of exercise.
- 2 Enter either "an Incentive" or "a Nonstatutory".
- 3 Enter the date of grant.
- 4 Enter the total number of shares of Common Stock for which the option was granted.
- 5 Enter the option exercise price per share of Common Stock.
- 6 Enter the number of shares of Common Stock to be purchased upon exercise of all or part of the option.
- 7 Enter "cash", "personal check" or if permitted by the option or Plan, "stock certificates No. XXXX and XXXX".
- 8 Enter the dollar amount (price per share of Common Stock times the number of shares of Common Stock to be purchased), or the number of shares tendered. Fair market value of shares tendered, together with cash or check, must cover the purchase price of the shares issued upon exercise.
- 9 Enter name(s) to appear on stock certificate: (a) Your name only; (b) Your name and other name (i.e., John Doe and Jane Doe, Joint Tenants With Right of Survivorship); or (c) In the case of a Nonstatutory option only, a Child's name, with you as custodian (i.e., Jane Doe, Custodian for Tommy Doe).
Note: There may be income and/or gift tax consequences of registering shares in a Child's name.
- 10 Social Security Number of Holder(s).

I represent, warrant and covenant as follows:

9. I am purchasing the Shares for my own account for investment only, and not with a view to, or for sale in connection with, any distribution of the Shares in violation of the Securities Act of 1933 (the "Securities Act"), or any rule or regulation under the Securities Act.
10. I have had such opportunity as I have deemed adequate to obtain from representatives of the Company such information as is necessary to permit me to evaluate the merits and risks of my investment in the Company.
11. I have sufficient experience in business, financial and investment matters to be able to evaluate the risks involved in the purchase of the Shares and to make an informed investment decision with respect to such purchase.
12. I can afford a complete loss of the value of the Shares and am able to bear the economic risk of holding such Shares for an indefinite period.
13. I understand that (i) the Shares have not been registered under the Securities Act and are "restricted securities" within the meaning of Rule 144 under the Securities Act, (ii) the Shares cannot be sold, transferred or otherwise disposed of unless they are subsequently registered under the Securities Act or an exemption from registration is then available; (iii) in any event, the exemption from registration under Rule 144 will not be available for at least one year and even then will not be available unless a public market then exists for the Common Stock, adequate information concerning the Company is then available to the public, and other terms and conditions of Rule 144 are complied with; and (iv) there is now no registration statement on file with the Securities and Exchange Commission with respect to any stock of the Company and the Company has no obligation or current intention to register the Shares under the Securities Act.

Very truly yours,

(Signature)

CASA SYSTEMS, INC.

Restricted Stock Agreement
Granted Under 2003 Stock Incentive Plan

AGREEMENT made this _____ day of _____, 200__, between Casa Systems, Inc., a Delaware corporation (the "Company"), and _____ (the "Participant").

For valuable consideration, receipt of which is acknowledged, the parties hereto agree as follows:

1. Purchase of Shares.

The Company shall issue and sell to the Participant, and the Participant shall purchase from the Company, subject to the terms and conditions set forth in this Agreement and in the Company's 2003 Stock Incentive Plan (the "Plan"), _____ shares (the "Shares") of common stock, \$.001 par value, of the Company ("Common Stock"), at a purchase price of \$____ per share. The aggregate purchase price for the Shares shall be paid by the Participant by check payable to the order of the Company or such other method as may be acceptable to the Company. Upon receipt by the Company of payment for the Shares, the Company shall issue to the Participant one or more certificates in the name of the Participant for that number of Shares purchased by the Participant. The Participant agrees that the Shares shall be subject to the purchase options set forth in Sections 2 and 5 of this Agreement and the restrictions on transfer set forth in Section 4 of this Agreement.

2. Purchase Option.

(a) In the event that the Participant ceases to be employed by the Company for any reason or no reason, with or without cause, prior to _____, 200__ [***date that is four years after the vesting commencement date***], the Company shall have the right and option (the "Purchase Option") to purchase from the Participant, for a sum of \$____ per share (the "Option Price"), some or all of the Unvested Shares (as defined below).

"Unvested Shares" means the total number of Shares multiplied by the Applicable Percentage at the time the Purchase Option becomes exercisable by the Company. The "Applicable Percentage" shall be (i) 100% during the 12-month period ending _____, 200__ [***date that is one year after vesting commencement date***], (ii) 75% less 2.0833% for each one month of employment completed by the Participant with the Company from and after _____, 200__ [***date that is one year after vesting commencement date***], and (iii) zero on or after _____, 200__ [***date that is four years after vesting commencement date***].

(b) For purposes of this Agreement, employment with the Company shall include employment with a parent or subsidiary of the Company and services to the Company as an advisor, consultant or member of the Board of Directors.

3. Exercise of Purchase Option and Closing.

(a) The Company may exercise the Purchase Option by delivering or mailing to the Participant (or his estate), within 60 days after the termination of the employment of the Participant with the Company, a written notice of exercise of the Purchase Option. Such notice shall specify the number of Shares to be purchased. If and to the extent the Purchase Option is not so exercised by the giving of such a notice within such 60-day period, the Purchase Option shall automatically expire and terminate effective upon the expiration of such 60-day period.

(b) Within 10 days after delivery to the Participant of the Company's notice of the exercise of the Purchase Option pursuant to subsection (a) above, the Participant (or his estate) shall, pursuant to the provisions of the Joint Escrow Instructions referred to in Section 7 below, tender to the Company at its principal offices the certificate or certificates representing the Shares which the Company has elected to purchase in accordance with the terms of this Agreement, duly endorsed in blank or with duly endorsed stock powers attached thereto, all in form suitable for the transfer of such Shares to the Company. Promptly following its receipt of such certificate or certificates, the Company shall pay to the Participant the aggregate Option Price for such Shares (provided that any delay in making such payment shall not invalidate the Company's exercise of the Purchase Option with respect to such Shares).

(c) After the time at which any Shares are required to be delivered to the Company for transfer to the Company pursuant to subsection (b) above, the Company shall not pay any dividend to the Participant on account of such Shares or permit the Participant to exercise any of the privileges or rights of a stockholder with respect to such Shares, but shall, in so far as permitted by law, treat the Company as the owner of such Shares.

(d) The Option Price may be payable, at the option of the Company, in cancellation of all or a portion of any outstanding indebtedness of the Participant to the Company or in cash (by check) or both.

(e) The Company shall not purchase any fraction of a Share upon exercise of the Purchase Option, and any fraction of a Share resulting from a computation made pursuant to Section 2 of this Agreement shall be rounded to the nearest whole Share (with any one-half Share being rounded upward).

(f) The Company may assign its Purchase Option to one or more persons or entities.

4. Restrictions on Transfer.

(a) The Participant shall not sell, assign, transfer, pledge, hypothecate or otherwise dispose of, by operation of law or otherwise (collectively "transfer") any Shares, or any interest therein, that are subject to the Purchase Option, except that the Participant may transfer such Shares (i) to or for the benefit of any spouse or any of his or his spouse's children, parents, uncles, aunts, siblings, grandchildren and any other relatives approved by the Board of Directors (collectively, "Approved Relatives") or to a trust or similar entity established solely for the benefit of the Participant and/or Approved Relatives, provided that such Shares shall remain subject to this Agreement (including without limitation the restrictions on transfer set forth in

this Section 4, the Purchase Option and the right of first refusal set forth in Section 5) and such permitted transferee shall, as a condition to such transfer, deliver to the Company a written instrument confirming that such transferee shall be bound by all of the terms and conditions of this Agreement or (ii) as part of the sale of all or substantially all of the shares of capital stock, assets or business of the Company, by merger, consolidation, sale of assets or otherwise, provided that, in accordance with the Plan, the securities or other property received by the Participant in connection with such transaction shall remain subject to this Agreement.

(b) The Participant shall not transfer any Shares, or any interest therein, that are no longer subject to the Purchase Option, except in accordance with Section 5 below.

(c) The Participant shall not transfer any Shares, or any interest therein, whether or not such Shares are subject to the Purchase Option, to any person or entity that is a competitor of the Company, as determined by the Board of Directors of the Company in its sole discretion, unless such transfer is made in connection with the sale of all or substantially all of the capital stock, assets or business of the Company, by merger, consolidation, sale of assets or otherwise.

5. Right of First Refusal.

(a) If the Participant proposes to transfer any Shares that are no longer subject to the Purchase Option (either because they are no longer Unvested Shares or because the Purchase Option expired unexercised), then the Participant shall first give written notice of the proposed transfer (the "Transfer Notice") to the Company. The Transfer Notice shall name the proposed transferee and state the number of such Shares the Participant proposes to transfer (the "Offered Shares"), the price per share and all other material terms and conditions of the transfer.

(b) For 60 days following its receipt of such Transfer Notice, the Company shall have the option to purchase some or all of the Offered Shares at the price and upon the terms set forth in the Transfer Notice. In the event the Company elects to purchase any Offered Shares (the Offered Shares to be purchased by the Company hereunder are referred to as the "Purchased Shares"), it shall give written notice of such election to the Participant within such 60-day period. Within 10 days his receipt of such notice, the Participant shall tender to the Company at its principal offices the certificate or certificates representing the Purchased Shares, duly endorsed in blank by the Participant or with duly endorsed stock powers attached thereto, all in form suitable for transfer of the Purchased Shares to the Company. Promptly following receipt of such certificate or certificates, the Company shall deliver or mail to the Participant a check in payment of the purchase price for the Purchased Shares; provided that if the terms of payment set forth in the Transfer Notice were other than cash against delivery, the Company may pay for the Purchased Shares on the same terms and conditions as were set forth in the Transfer Notice; and provided further that any delay in making such payment shall not invalidate the Company's exercise of its option to purchase the Purchased Shares.

(c) If the Company does not elect to acquire all of the Offered Shares, the Participant may, within the 30-day period following the expiration of the option granted to the Company under subsection (b) above, transfer the Offered Shares (other than the Purchased Shares) to the proposed transferee, provided that such transfer shall not be on terms and

conditions more favorable to the transferee than those contained in the Transfer Notice. Notwithstanding any of the above, all Offered Shares transferred to a third party pursuant to this Section 5 shall remain subject to this Agreement (including without limitation the restrictions on transfer set forth in Section 4 and the right of first refusal set forth in this Section 5) and such transferee shall, as a condition to such transfer, deliver to the Company a written instrument confirming that such transferee shall be bound by all of the terms and conditions of this Agreement.

(d) After the time at which the Purchased Shares are required to be delivered to the Company for transfer to the Company pursuant to subsection (b) above, the Company shall not pay any dividend to the Participant on account of such Purchased Shares or permit the Participant to exercise any of the privileges or rights of a stockholder with respect to such Purchased Shares, but shall, in so far as permitted by law, treat the Company as the owner of such Purchased Shares.

(e) The following transactions shall be exempt from the provisions of this Section 5:

(1) a transfer of Shares to or for the benefit of any Approved Relatives, or to a trust or similar entity established solely for the benefit of the Participant and/or Approved Relatives;

(2) any transfer pursuant to an effective registration statement filed by the Company under the Securities Act of 1933, as amended (the "Securities Act"); and

(3) the sale of all or substantially all of the shares of capital stock of the Company (including pursuant to a merger or consolidation);

(4) provided, however, that in the case of a transfer pursuant to clause (1) above, such Shares shall remain subject to this Agreement (including without limitation the restrictions on transfer set forth in Section 4 and the right of first refusal set forth in this Section 5) and such transferee shall, as a condition to such transfer, deliver to the Company a written instrument confirming that such transferee shall be bound by all of the terms and conditions of this Agreement.

(f) The Company may assign its rights to purchase Offered Shares in any particular transaction under this Section 5 to one or more persons or entities.

(g) The provisions of this Section 5 shall terminate upon the earlier of the following events:

(1) the closing of the sale of shares of Common Stock in an underwritten public offering pursuant to an effective registration statement filed by the Company under the Securities Act; or

(2) the sale of all or substantially all of the capital stock (other than the sale of capital stock to one or more venture capitalists or other institutional investors pursuant to an equity financing (including a debt financing that is convertible into equity) of the Company

approved by a majority of the Board of Directors of the Company), assets or business of the Company, by merger, consolidation, sale of assets or otherwise (other than a merger or consolidation in which all or substantially all of the individuals and entities who were beneficial owners of the Common Stock immediately prior to such transaction beneficially own, directly or indirectly, more than 50% of the outstanding securities entitled to vote generally in the election of directors of the resulting, surviving or acquiring corporation in such transaction).

(h) The Company shall not be required (i) to transfer on its books any of the Shares which shall have been sold or transferred in violation of any of the provisions set forth in this Agreement, or (ii) to treat as owner of such Shares or to pay dividends to any transferee to whom any such Shares shall have been so sold or transferred.

6. Agreement in Connection with Public Offering.

The Participant agrees, in connection with the initial underwritten public offering of the Company's securities pursuant to a registration statement under the Securities Act, (i) not to sell, make short sale of, loan, grant any options for the purchase of, or otherwise dispose of any shares of Common Stock held by the Participant (other than those shares included in the offering) without the prior written consent of the Company or the underwriters managing such initial underwritten public offering of the Company's securities for a period of 180 days from the effective date of such registration statement, and (ii) to execute any agreement reflecting clause (i) above as may be requested by the Company or the managing underwriters at the time of such offering.

7. Escrow.

The Participant shall, upon the execution of this Agreement, execute Joint Escrow Instructions in the form attached to this Agreement as Exhibit A. The Joint Escrow Instructions shall be delivered to the Secretary of the Company, as escrow agent thereunder. The Participant shall deliver to such escrow agent a stock assignment duly endorsed in blank, in the form attached to this Agreement as Exhibit B, and hereby instructs the Company to deliver to such escrow agent, on behalf of the Participant, the certificate(s) evidencing the Shares issued hereunder. Such materials shall be held by such escrow agent pursuant to the terms of such Joint Escrow Instructions.

8. Restrictive Legends.

All certificates representing Shares shall have affixed thereto legends in substantially the following form, in addition to any other legends that may be required under federal or state securities laws:

"The shares of stock represented by this certificate are subject to restrictions on transfer and an option to purchase set forth in a certain Restricted Stock Agreement between the corporation and the registered owner of these shares (or his predecessor in interest), and such Agreement is available for inspection without charge at the office of the Secretary of the corporation."

“The shares represented by this certificate have not been registered under the Securities Act of 1933, as amended, and may not be sold, transferred or otherwise disposed of in the absence of an effective registration statement under such Act or an opinion of counsel satisfactory to the corporation to the effect that such registration is not required.”

9. Provisions of the Plan.

(a) This Agreement is subject to the provisions of the Plan, a copy of which is furnished to the Participant with this Agreement.

(b) As provided in the Plan, upon the occurrence of a Reorganization Event (as defined in the Plan), the repurchase and other rights of the Company hereunder shall inure to the benefit of the Company's successor and shall apply to the cash, securities or other property which the Shares were converted into or exchanged for pursuant to such Reorganization Event in the same manner and to the same extent as they applied to the Shares under this Agreement. If, in connection with a Reorganization Event, a portion of the cash, securities and/or other property received upon the conversion or exchange of the Shares is to be placed into escrow to secure indemnification or similar obligations, the mix between the vested and unvested portion of such cash, securities and/or other property that is placed into escrow shall be the same as the mix between the vested and unvested portion of such cash, securities and/or other property that is not subject to escrow.

10. Investment Representations.

The Participant represents, warrants and covenants as follows:

(a) The Participant is purchasing the Shares for his own account for investment only, and not with a view to, or for sale in connection with, any distribution of the Shares in violation of the Securities Act, or any rule or regulation under the Securities Act.

(b) The Participant has had such opportunity as he has deemed adequate to obtain from representatives of the Company such information as is necessary to permit him to evaluate the merits and risks of his investment in the Company.

(c) The Participant has sufficient experience in business, financial and investment matters to be able to evaluate the risks involved in the purchase of the Shares and to make an informed investment decision with respect to such purchase.

(d) The Participant can afford a complete loss of the value of the Shares and is able to bear the economic risk of holding such Shares for an indefinite period.

(e) The Participant understands that (i) the Shares have not been registered under the Securities Act and are “restricted securities” within the meaning of Rule 144 under the Securities Act; (ii) the Shares cannot be sold, transferred or otherwise disposed of unless they are subsequently registered under the Securities Act or an exemption from registration is then available; (iii) in any event, the exemption from registration under Rule 144 will not be available

for at least one year and even then will not be available unless a public market then exists for the Common Stock, adequate information concerning the Company is then available to the public, and other terms and conditions of Rule 144 are complied with; and (iv) there is now no registration statement on file with the Securities and Exchange Commission with respect to any stock of the Company and the Company has no obligation or current intention to register the Shares under the Securities Act.

11. Withholding Taxes; Section 83(b) Election.

(a) The Participant acknowledges and agrees that the Company has the right to deduct from payments of any kind otherwise due to the Participant any federal, state or local taxes of any kind required by law to be withheld with respect to the purchase of the Shares by the Participant or the lapse of the Purchase Option.

(b) The Participant has reviewed with the Participant's own tax advisors the federal, state, local and foreign tax consequences of this investment and the transactions contemplated by this Agreement. The Participant is relying solely on such advisors and not on any statements or representations of the Company or any of its agents. The Participant understands that the Participant (and not the Company) shall be responsible for the Participant's own tax liability that may arise as a result of this investment or the transactions contemplated by this Agreement. The Participant understands that it may be beneficial in many circumstances to elect to be taxed at the time the Shares are purchased rather than when and as the Company's Purchase Option expires by filing an election under Section 83(b) of the Code with the I.R.S. within 30 days from the date of purchase.

THE PARTICIPANT ACKNOWLEDGES THAT IT IS THE PARTICIPANT'S SOLE RESPONSIBILITY AND NOT THE COMPANY'S TO FILE TIMELY THE ELECTION UNDER SECTION 83(b), EVEN IF THE PARTICIPANT REQUESTS THE COMPANY OR ITS REPRESENTATIVES TO MAKE THIS FILING ON THE PARTICIPANT'S BEHALF.

12. Miscellaneous.

(a) No Rights to Employment. The Participant acknowledges and agrees that the vesting of the Shares pursuant to Section 2 hereof is earned only by continuing service as an employee at the will of the Company (not through the act of being hired or purchasing shares hereunder). The Participant further acknowledges and agrees that the transactions contemplated hereunder and the vesting schedule set forth herein do not constitute an express or implied promise of continued engagement as an employee or consultant for the vesting period, for any period, or at all.

(b) Severability. The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement, and each other provision of this Agreement shall be severable and enforceable to the extent permitted by law.

(c) Waiver. Any provision for the benefit of the Company contained in this Agreement may be waived, either generally or in any particular instance, by the Board of Directors of the Company.

(d) Binding Effect. This Agreement shall be binding upon and inure to the benefit of the Company and the Participant and their respective heirs, executors, administrators, legal representatives, successors and assigns, subject to the restrictions on transfer set forth in Sections 4 and 5 of this Agreement.

(e) Notice. All notices required or permitted hereunder shall be in writing and deemed effectively given upon personal delivery or five days after deposit in the United States Post Office, by registered or certified mail, postage prepaid, if to the Participant, to the address set forth below or at the address shown on the records of the Company, and if to the Company, to the Company's principal executive offices, attention of the Corporate Secretary.

(f) Pronouns. Whenever the context may require, any pronouns used in this Agreement shall include the corresponding masculine, feminine or neuter forms, and the singular form of nouns and pronouns shall include the plural, and vice versa.

(g) Entire Agreement. This Agreement and the Plan constitute the entire agreement between the parties, and supersedes all prior agreements and understandings, relating to the subject matter of this Agreement.

(h) Amendment. This Agreement may be amended or modified only by a written instrument executed by both the Company and the Participant.

(i) Governing Law. This Agreement shall be construed, interpreted and enforced in accordance with the internal laws of the State of Delaware without regard to any applicable conflicts of laws.

(j) Participant's Acknowledgments. The Participant acknowledges that he or she: (i) has read this Agreement; (ii) has been represented in the preparation, negotiation, and execution of this Agreement by legal counsel of the Participant's own choice or has voluntarily declined to seek such counsel; (iii) understands the terms and consequences of this Agreement; (iv) is fully aware of the legal and binding effect of this Agreement; and (v) understands that the law firm of Hale and Dorr LLP, is acting as counsel to the Company in connection with the transactions contemplated by the Agreement, and is not acting as counsel for the Participant.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

CASA SYSTEMS, INC.

By: _____
Name: _____
Title: _____
Address: _____

Name of Participant
Address: _____

Exhibit A

CASA SYSTEMS, INC.

Joint Escrow Instructions

_____, 200__

Casa Systems, Inc.
100 Old River Road, Suite 100
Andover, MA 01810
Attention: Secretary

Dear Sir:

As Escrow Agent for Casa Systems, Inc., a Delaware corporation, and its successors in interest under the Restricted Stock Agreement (the "Agreement") of even date herewith, to which a copy of these Joint Escrow Instructions is attached (the "Company"), and the undersigned person ("Holder"), you are hereby authorized and directed to hold the documents delivered to you pursuant to the terms of the Agreement in accordance with the following instructions:

1. Appointment. Holder irrevocably authorizes the Company to deposit with you any certificates evidencing Shares (as defined in the Agreement) to be held by you hereunder and any additions and substitutions to said Shares. For purposes of these Joint Escrow Instructions, "Shares" shall be deemed to include any additional or substitute property. Holder does hereby irrevocably constitute and appoint you as his attorney-in-fact and agent for the term of this escrow to execute with respect to such Shares all documents necessary or appropriate to make such Shares negotiable and to complete any transaction herein contemplated. Subject to the provisions of this paragraph 1 and the terms of the Agreement, Holder shall exercise all rights and privileges of a stockholder of the Company while the Shares are held by you.

2. Closing of Purchase.

(a) Upon any purchase by the Company of the Shares pursuant to the Agreement, the Company shall give to Holder and you a written notice specifying the purchase price for the Shares, as determined pursuant to the Agreement, and the time for a closing hereunder (the "Closing") at the principal office of the Company. Holder and the Company hereby irrevocably authorize and direct you to close the transaction contemplated by such notice in accordance with the terms of said notice.

(b) At the Closing, you are directed (a) to date the stock assignment form or forms necessary for the transfer of the Shares, (b) to fill in on such form or forms the number of Shares being transferred, and (c) to deliver same, together with the certificate or certificates evidencing the Shares to be transferred, to the Company against the simultaneous delivery to you of the purchase price for the Shares being purchased pursuant to the Agreement.

3. Withdrawal. The Holder shall have the right to withdraw from this escrow any Shares as to which the Purchase Option (as defined in the Agreement) has terminated or expired.

4. Duties of Escrow Agent.

(a) Your duties hereunder may be altered, amended, modified or revoked only by a writing signed by all of the parties hereto.

(b) You shall be obligated only for the performance of such duties as are specifically set forth herein and may rely and shall be protected in relying or refraining from acting on any instrument reasonably believed by you to be genuine and to have been signed or presented by the proper party or parties. You shall not be personally liable for any act you may do or omit to do hereunder as Escrow Agent or as attorney-in-fact of Holder while acting in good faith and in the exercise of your own good judgment, and any act done or omitted by you pursuant to the advice of your own attorneys shall be conclusive evidence of such good faith.

(c) You are hereby expressly authorized to disregard any and all warnings given by any of the parties hereto or by any other person or Company, excepting only orders or process of courts of law, and are hereby expressly authorized to comply with and obey orders, judgments or decrees of any court. In case you obey or comply with any such order, judgment or decree of any court, you shall not be liable to any of the parties hereto or to any other person, firm or Company by reason of such compliance, notwithstanding any such order, judgment or decree being subsequently reversed, modified, annulled, set aside, vacated or found to have been entered without jurisdiction.

(d) You shall not be liable in any respect on account of the identity, authority or rights of the parties executing or delivering or purporting to execute or deliver the Agreement or any documents or papers deposited or called for hereunder.

(e) You shall be entitled to employ such legal counsel and other experts as you may deem necessary properly to advise you in connection with your obligations hereunder and may rely upon the advice of such counsel.

(f) Your rights and responsibilities as Escrow Agent hereunder shall terminate if (i) you cease to be Secretary of the Company or (ii) you resign by written notice to each party. In the event of a termination under clause (i), your successor as Secretary shall become Escrow Agent hereunder; in the event of a termination under clause (ii), the Company shall appoint a successor Escrow Agent hereunder.

(g) If you reasonably require other or further instruments in connection with these Joint Escrow Instructions or obligations in respect hereto, the necessary parties hereto shall join in furnishing such instruments.

(h) It is understood and agreed that should any dispute arise with respect to the delivery and/or ownership or right of possession of the securities held by you hereunder, you are

authorized and directed to retain in your possession without liability to anyone all or any part of said securities until such dispute shall have been settled either by mutual written agreement of the parties concerned or by a final order, decree or judgment of a court of competent jurisdiction after the time for appeal has expired and no appeal has been perfected, but you shall be under no duty whatsoever to institute or defend any such proceedings.

(i) These Joint Escrow Instructions set forth your sole duties with respect to any and all matters pertinent hereto and no implied duties or obligations shall be read into these Joint Escrow Instructions against you.

(j) The Company shall indemnify you and hold you harmless against any and all damages, losses, liabilities, costs, and expenses, including attorneys' fees and disbursements, for anything done or omitted to be done by you as Escrow Agent in connection with this Agreement or the performance of your duties hereunder, except such as shall result from your gross negligence or willful misconduct.

5. Notice. Any notice required or permitted hereunder shall be given in writing and shall be deemed effectively given upon personal delivery or upon deposit in the United States Post Office, by registered or certified mail with postage and fees prepaid, addressed to each of the other parties thereunto entitled at the following addresses, or at such other addresses as a party may designate by ten days' advance written notice to each of the other parties hereto.

| | |
|---------------|---|
| COMPANY: | Casa Systems, Inc. 100 Old River Road, Suite 100 Andover, MA 01810 |
| HOLDER: | Notices to Holder shall be sent to the address set forth below Holder's signature below. |
| ESCROW AGENT: | Casa Systems, Inc. 100 Old River Road, Suite 100 Andover, MA 01810 Attn: Secretary |

6. Miscellaneous.

(a) By signing these Joint Escrow Instructions, you become a party hereto only for the purpose of said Joint Escrow Instructions, and you do not become a party to the Agreement.

(b) This instrument shall be binding upon and inure to the benefit of the parties hereto and their respective successors and permitted assigns.

Very truly yours,

CASA SYSTEMS, INC.

By: _____
Name: _____
Title: _____

HOLDER:

(Signature)

Print Name

Address: _____

Date Signed: _____

ESCROW AGENT:

Jerry Guo
Secretary
Casa Systems, Inc.
100 Old River Road, Suite 100
Andover, MA 01810

Exhibit B

(STOCK ASSIGNMENT SEPARATE FROM CERTIFICATE)

FOR VALUE RECEIVED, I hereby sell, assign and transfer unto _____ (_____) shares of Common Stock, \$.001 par value per share, of Casa Systems, Inc. (the "Corporation") standing in my name on the books of said Corporation represented by Certificate(s) Number _____ herewith, and do hereby irrevocably constitute and appoint _____ attorney to transfer the said stock on the books of the within named Corporation with full power of substitution in the premises.

Dated: _____

IN PRESENCE OF

NOTICE: The signature(s) to this assignment must correspond with the name as written upon the face of the certificate, in every particular, without alteration, enlargement, or any change whatever and must be guaranteed by a commercial bank, trust company or member firm of the Boston, New York or Midwest Stock Exchange.

CASA SYSTEMS, INC.

2011 STOCK INCENTIVE PLAN1. Purpose

The purpose of this 2011 Stock Incentive Plan (the “**Plan**”) of Casa Systems, Inc., a Delaware corporation (the “**Company**”), is to advance the interests of the Company’s stockholders by enhancing the Company’s ability to attract, retain and motivate persons who are expected to make important contributions to the Company and by providing such persons with equity ownership opportunities and performance-based incentives that are intended to better align the interests of such persons with those of the Company’s stockholders. Except where the context otherwise requires, the term “**Company**” shall include any of the Company’s present or future parent or subsidiary corporations as defined in Sections 424(e) or (f) of the Internal Revenue Code of 1986, as amended, and any regulations thereunder (the “**Code**”) and any other business venture (including, without limitation, joint venture or limited liability company) in which the Company has a controlling interest, as determined by the Board of Directors of the Company (the “**Board**”); *provided, however*, that such other business ventures shall be limited to entities that, where required by Section 409A of the Code, are eligible issuers of service recipient stock (as defined in Treas. Reg. Section 1.409A-1(b)(5)(iii)(E), or applicable successor regulation).

2. Eligibility

All of the Company’s employees, officers and directors, as well as consultants and advisors to the Company (as such terms are defined and interpreted for purposes of Rule 701 under the Securities Act of 1933, as amended (the “**Securities Act**”) (or any successor rule)) are eligible to be granted Awards under the Plan. Each person who is granted an Award under the Plan is deemed a “**Participant**.” “**Award**” means Options (as defined in Section 5), SARs (as defined in Section 6), Restricted Stock (as defined in Section 7), Restricted Stock Units (as defined in Section 7) and Other Stock-Based Awards (as defined in Section 8).

3. Administration and Delegation

(a) Administration by Board of Directors. The Plan will be administered by the Board. The Board shall have authority to grant Awards and to adopt, amend and repeal such administrative rules, guidelines and practices relating to the Plan as it shall deem advisable. The Board may construe and interpret the terms of the Plan and any Award agreements entered into under the Plan. The Board may correct any defect, supply any omission or reconcile any inconsistency in the Plan or any Award in the manner and to the extent it shall deem expedient to carry the Plan into effect and it shall be the sole and final judge of such expediency. All decisions by the Board shall be made in the Board’s sole discretion and shall be final and binding on all persons having or claiming any interest in the Plan or in any Award.

(b) Appointment of Committees. To the extent permitted by applicable law, the Board may delegate any or all of its powers under the Plan to one or more committees or subcommittees of the Board (a “**Committee**”). All references in the Plan to the “**Board**” shall mean the Board or a Committee of the Board or the officers referred to in Section 3(c) to the extent that the Board’s powers or authority under the Plan have been delegated to such Committee or officers.

(c) Delegation to Officers. To the extent permitted by applicable law, the Board may delegate to one or more officers of the Company the power to grant Options and other Awards that constitute rights under Delaware law (subject to any limitations under the Plan) to employees or officers of the Company and to exercise such other powers under the Plan as the Board may determine, *provided* that the Board shall fix the terms of such Awards to be granted by such officers (including the exercise price of such Awards, which may include a formula by which the exercise price will be determined) and the maximum number of shares subject to such Awards that the officers may grant; *provided* further, however, that no officer shall be authorized to grant such Awards to any “executive officer” of the Company (as defined by Rule 3b-7 under the Securities Exchange Act of 1934, as amended (the “**Exchange Act**”)) or to any “officer” of the Company (as defined by Rule 16a-1 under the Exchange Act). The Board may not delegate authority under this Section 3(c) to grant Restricted Stock, unless Delaware law then permits such delegation.

4. Stock Available for Awards

(a) Number of Shares. Subject to adjustment under Section 9, Awards may be made under the Plan for up to a number of shares of common stock, \$0.001 par value per share, of the Company (the “**Common Stock**”), equal to the sum of (a) 298,371, plus (b) such additional number of shares of Common Stock as is equal to the sum of (x) the number of shares of Common Stock reserved for issuance under the Company’s 2003 Stock Incentive Plan, as amended (the “2003 Plan”) that remain available for issuance under the 2003 Plan as of the time immediately before termination of the 2003 Plan and (y) the number of shares of Common Stock subject to awards granted under the 2003 Plan which awards expire, terminate or are otherwise surrendered, canceled, forfeited or repurchased by the Company at their original issuance price pursuant to a contractual repurchase right (subject, however, in the case of Incentive Stock Options (as hereinafter defined) to any limitations of the Code); provided, however, that the maximum number of shares of Common Stock available for issuance under the Plan (including any shares becoming available by reason of clause (y)) shall be 935,871. Any or all of the Awards described in the preceding sentence may be in the form of Incentive Stock Options (as defined in Section 5(b)). If any Award expires or is terminated, surrendered or canceled without having been fully exercised, is forfeited in whole or in part (including as the result of shares of Common Stock subject to such Award being repurchased by the Company at the original issuance price pursuant to a contractual repurchase right), or results in any Common Stock not being issued, the unused Common Stock covered by such Award shall again be available for the grant of Awards under the Plan. Further, shares of Common Stock tendered to the Company by a Participant to exercise an Award shall be added to the number of shares of Common Stock available for the grant of Awards under the Plan. However, in the case of Incentive Stock Options, the two immediately preceding sentences shall be subject to any limitations under the Code. Shares issued under the Plan may consist in whole or in part of authorized but unissued shares or treasury shares.

(b) **Substitute Awards.** In connection with a merger or consolidation of an entity with the Company or the acquisition by the Company of property or stock of an entity, the Board may grant Awards in substitution for any options or other stock or stock-based awards granted by such entity or an affiliate thereof. Substitute Awards may be granted on such terms as the Board deems appropriate in the circumstances, notwithstanding any limitations on Awards contained in the Plan. Substitute Awards shall not count against the overall share limit set forth in Section 4(a), except as may be required by reason of Section 422 and related provisions of the Code.

5. Stock Options

(a) **General.** The Board may grant options to purchase Common Stock (each, an “**Option**”) and determine the number of shares of Common Stock to be covered by each Option, the exercise price of each Option and the conditions and limitations applicable to the exercise of each Option, including conditions relating to applicable federal or state securities laws, as it considers necessary or advisable.

(b) **Incentive Stock Options.** An Option that the Board intends to be an “incentive stock option” as defined in Section 422 of the Code (an “**Incentive Stock Option**”) shall only be granted to employees of Casa Systems, Inc., any of Casa Systems, Inc.’s present or future parent or subsidiary corporations as defined in Sections 424(e) or (f) of the Code, and any other entities the employees of which are eligible to receive Incentive Stock Options under the Code, and shall be subject to and shall be construed consistently with the requirements of Section 422 of the Code. An Option that is not intended to be an Incentive Stock Option shall be designated a “**Nonstatutory Stock Option.**” The Company shall have no liability to a Participant, or any other party, if an Option (or any part thereof) that is intended to be an Incentive Stock Option is not an Incentive Stock Option or if the Company converts an Incentive Stock Option to a Nonstatutory Stock Option.

(c) **Exercise Price.** The Board shall establish the exercise price of each Option and specify the exercise price in the applicable Option agreement. The exercise price shall be not less than 100% of the fair market value per share of Common Stock, as determined by (or in a manner approved by) the Board (“**Fair Market Value**”), on the date the Option is granted.

(d) **Duration of Options.** Each Option shall be exercisable at such times and subject to such terms and conditions as the Board may specify in the applicable option agreement; *provided, however*, that no Option will be granted with a term in excess of 10 years.

(e) **Exercise of Options.** Options may be exercised by delivery to the Company of a notice of exercise in a form of notice (which may be electronic) approved by the Company, together with payment in full (in a manner specified in Section 5(f)) of the exercise price for the number of shares for which the Option is exercised. Shares of Common Stock subject to the Option will be delivered by the Company as soon as practicable following exercise.

(f) **Payment Upon Exercise.** Common Stock purchased upon the exercise of an Option granted under the Plan shall be paid for as follows:

- (1) in cash or by check, payable to the order of the Company;

(2) when the Common Stock is registered under the Exchange Act, except as may otherwise be provided in the applicable Option agreement or approved by the Board, in its sole discretion, by (i) delivery of an irrevocable and unconditional undertaking by a creditworthy broker to deliver promptly to the Company sufficient funds to pay the exercise price and any required tax withholding or (ii) delivery by the Participant to the Company of a copy of irrevocable and unconditional instructions to a creditworthy broker to deliver promptly to the Company cash or a check sufficient to pay the exercise price and any required tax withholding;

(3) when the Common Stock is registered under the Exchange Act and to the extent provided for in the applicable Option agreement or approved by the Board, in its sole discretion, by delivery (either by actual delivery or attestation) of shares of Common Stock owned by the Participant valued at their Fair Market Value, *provided* (i) such method of payment is then permitted under applicable law, (ii) such Common Stock, if acquired directly from the Company, was owned by the Participant for such minimum period of time, if any, as may be established by the Board in its discretion and (iii) such Common Stock is not subject to any repurchase, forfeiture, unfulfilled vesting or other similar requirements;

(4) to the extent provided for in the applicable Option agreement or approved by the Board in its sole discretion, by delivery of a notice of “net exercise” to the Company, as a result of which the Participant would pay the exercise price for the portion of the Option being exercised by cancelling a portion of the Option for such number of shares as is equal to the exercise price divided by the excess of the Fair Market Value on the date of exercise over the Option exercise price per share.

(5) to the extent permitted by applicable law and provided for in the applicable Option agreement or approved by the Board, in its sole discretion, by (i) delivery of a promissory note of the Participant to the Company on terms determined by the Board, or (ii) payment of such other lawful consideration as the Board may determine; or

(6) by any combination of the above permitted forms of payment.

6. Stock Appreciation Rights

(a) General. The Board may grant Awards consisting of stock appreciation rights (“**SARs**”) entitling the holder, upon exercise, to receive an amount of Common Stock or cash or a combination thereof (such form to be determined by the Board) determined by reference to appreciation, from and after the date of grant, in the Fair Market Value of a share of Common Stock over the measurement price established pursuant to Section 6(b). The date as of which such appreciation is determined shall be the exercise date.

(b) Measurement Price. The Board shall establish the measurement price of each SAR and specify it in the applicable SAR agreement. The measurement price shall not be less than 100% of the Fair Market Value on the date the SAR is granted.

(c) Duration of SARs. Each SAR shall be exercisable at such times and subject to such terms and conditions as the Board may specify in the applicable SAR agreement; *provided, however*, that no SAR will be granted with a term in excess of 10 years.

(d) Exercise of SARs. SARs may be exercised by delivery to the Company of a notice of exercise in a form (which may be electronic) approved by the Company, together with any other documents required by the Board.

7. Restricted Stock; Restricted Stock Units

(a) General. The Board may grant Awards entitling recipients to acquire shares of Common Stock (“**Restricted Stock**”), subject to the right of the Company to repurchase all or part of such shares at their issue price or other stated or formula price (or to require forfeiture of such shares if issued at no cost) from the recipient in the event that conditions specified by the Board in the applicable Award are not satisfied prior to the end of the applicable restriction period or periods established by the Board for such Award. The Board may also grant Awards entitling the recipient to receive shares of Common Stock or cash to be delivered at the time such Award vests (“**Restricted Stock Units**”) (Restricted Stock and Restricted Stock Units are each referred to herein as a “**Restricted Stock Award**”).

(b) Terms and Conditions for All Restricted Stock Awards. The Board shall determine the terms and conditions of a Restricted Stock Award, including the conditions for vesting and repurchase (or forfeiture) and the issue price, if any.

(c) Additional Provisions Relating to Restricted Stock.

(1) Dividends. Unless otherwise provided in the applicable Award agreement, any dividends (whether paid in cash, stock or property) declared and paid by the Company with respect to shares of Restricted Stock (“**Accrued Dividends**”) shall be paid to the Participant only if and when such shares become free from the restrictions on transferability and forfeitability that apply to such shares. Each payment of Accrued Dividends will be made no later than the end of the calendar year in which the dividends are paid to stockholders of that class of stock or, if later, the 15th day of the third month following the lapsing of the restrictions on transferability and the forfeitability provisions applicable to the underlying shares of Restricted Stock.

(2) Stock Certificates. The Company may require that any stock certificates issued in respect of shares of Restricted Stock, as well as dividends or distributions paid on such Restricted Stock, shall be deposited in escrow by the Participant, together with a stock power endorsed in blank, with the Company (or its designee). At the expiration of the applicable restriction periods, the Company (or such designee) shall deliver the certificates no longer subject to such restrictions to the Participant or if the Participant has died, to his or her Designated Beneficiary. “**Designated Beneficiary**” means (i) the beneficiary designated, in a manner determined by the Board, by a Participant to receive amounts due or exercise rights of the Participant in the event of the Participant’s death or (ii) in the absence of an effective designation by a Participant, “**Designated Beneficiary**” the Participant’s estate.

(d) Additional Provisions Relating to Restricted Stock Units.

(1) Settlement. Upon the vesting of and/or lapsing of any other restrictions (i.e., settlement) with respect to each Restricted Stock Unit, the Participant shall be entitled to receive from the Company one share of Common Stock or (if so provided in the applicable

Award agreement) an amount of cash equal to the Fair Market Value of one share of Common Stock. The Board may, in its discretion, provide that settlement of Restricted Stock Units shall be deferred, on a mandatory basis or at the election of the Participant in a manner that complies with Section 409A of the Code.

(2) Voting Rights. A Participant shall have no voting rights with respect to any Restricted Stock Units.

(3) Dividend Equivalents. The Award agreement for Restricted Stock Units may provide Participants with the right to receive an amount equal to any dividends or other distributions declared and paid on an equal number of outstanding shares of Common Stock ("**Dividend Equivalents**"). Dividend Equivalents may be paid currently or credited to an account for the Participants, may be settled in cash and/or shares of Common Stock and may be subject to the same restrictions on transfer and forfeitability as the Restricted Stock Units with respect to which paid, in each case to the extent provided in the applicable Award agreement.

8. Other Stock-Based Awards

(a) General. Other Awards of shares of Common Stock, and other Awards that are valued in whole or in part by reference to, or are otherwise based on, shares of Common Stock or other property, may be granted hereunder to Participants ("**Other Stock-Based Awards**"). Such Other Stock-Based Awards shall also be available as a form of payment in the settlement of other Awards granted under the Plan or as payment in lieu of compensation to which a Participant is otherwise entitled. Other Stock-Based Awards may be paid in shares of Common Stock or cash, as the Board shall determine.

(b) Terms and Conditions. Subject to the provisions of the Plan, the Board shall determine the terms and conditions of each Other Stock-Based Award, including any purchase price applicable thereto.

9. Adjustments for Changes in Common Stock and Certain Other Events

(a) Changes in Capitalization. In the event of any stock split, reverse stock split, stock dividend, recapitalization, combination of shares, reclassification of shares, spin-off or other similar change in capitalization or event, or any dividend or distribution to holders of Common Stock other than an ordinary cash dividend, (i) the number and class of securities available under the Plan, (ii) the number and class of securities and exercise price per share of each outstanding Option, (iii) the share and per-share provisions and the measurement price of each outstanding SAR, (iv) the number of shares subject to and the repurchase price per share subject to each outstanding Restricted Stock Award and (v) the share and per-share-related provisions and the purchase price, if any, of each outstanding Other Stock-Based Award, shall be equitably adjusted by the Company (or substituted Awards may be made, if applicable) in the manner determined by the Board. Without limiting the generality of the foregoing, in the event the Company effects a split of the Common Stock by means of a stock dividend and the exercise price of and the number of shares subject to an outstanding Option are adjusted as of the date of the distribution of the dividend (rather than as of the record date for such dividend), then an optionee who exercises an Option between the record date and the distribution date for such

stock dividend shall be entitled to receive, on the distribution date, the stock dividend with respect to the shares of Common Stock acquired upon such Option exercise, notwithstanding the fact that such shares were not outstanding as of the close of business on the record date for such stock dividend.

(b) Reorganization Events.

(1) Definition. A “**Reorganization Event**” shall mean: (a) any merger or consolidation of the Company with or into another entity as a result of which all of the Common Stock of the Company is converted into or exchanged for the right to receive cash, securities or other property or is cancelled, (b) any transfer or disposition of all of the Common Stock of the Company for cash, securities or other property pursuant to a share exchange or other transaction or (c) any liquidation or dissolution of the Company.

(2) Consequences of a Reorganization Event on Awards Other than Restricted Stock.

(i) In connection with a Reorganization Event, the Board may take any one or more of the following actions as to all or any (or any portion of) outstanding Awards other than Restricted Stock on such terms as the Board determines (except to the extent specifically provided otherwise in an applicable Award agreement or another agreement between the Company and the Participant): (i) provide that such Awards shall be assumed, or substantially equivalent Awards shall be substituted, by the acquiring or succeeding corporation (or an affiliate thereof), (ii) upon written notice to a Participant, provide that all of the Participant’s unexercised Awards will terminate immediately prior to the consummation of such Reorganization Event unless exercised by the Participant (to the extent then exercisable) within a specified period following the date of such notice, (iii) provide that outstanding Awards shall become exercisable, realizable, or deliverable, or restrictions applicable to an Award shall lapse, in whole or in part prior to or upon such Reorganization Event, (iv) in the event of a Reorganization Event under the terms of which holders of Common Stock will receive upon consummation thereof a cash payment for each share surrendered in the Reorganization Event (the “**Acquisition Price**”), make or provide for a cash payment to Participants with respect to each Award held by a Participant equal to (A) the number of shares of Common Stock subject to the vested portion of the Award (after giving effect to any acceleration of vesting that occurs upon or immediately prior to such Reorganization Event) multiplied by (B) the excess, if any, of (I) the Acquisition Price over (II) the exercise, measurement or purchase price of such Award and any applicable tax withholdings, in exchange for the termination of such Award, (v) provide that, in connection with a liquidation or dissolution of the Company, Awards shall convert into the right to receive liquidation proceeds (if applicable, net of the exercise, measurement or purchase price thereof and any applicable tax withholdings) and (vi) any combination of the foregoing. In taking any of the actions permitted under this Section 9(b)(2), the Board shall not be obligated by the Plan to treat all Awards, all Awards held by a Participant, or all Awards of the same type, identically.

(ii) Notwithstanding the terms of Section 9(b)(2)(A), in the case of outstanding Restricted Stock Units that are subject to Section 409A of the Code: (i) if the applicable Restricted Stock Unit agreement provides that the Restricted Stock Units shall be settled upon a “change in control event” within the meaning of Treasury Regulation Section 1.409A-3(i)(5)(i), and the Reorganization Event constitutes such a “change in control event”, then no assumption or substitution shall be permitted pursuant to Section 9(b)(2)(A)(i) and the Restricted Stock Units shall instead be settled in accordance with the terms of the applicable Restricted Stock Unit agreement; and (ii) the Board may only undertake the actions set forth in clauses (iii), (iv) or (v) of Section 9(b)(2)(A) if the Reorganization Event constitutes a “change in control event” as defined under Treasury Regulation Section 1.409A-3(i)(5)(i) and such action is permitted or required by Section 409A of the Code; if the Reorganization Event is not a “change in control event” as so defined or such action is not permitted or required by Section 409A of the Code, and the acquiring or succeeding corporation does not assume or substitute the Restricted Stock Units pursuant to clause (i) of Section 9(b)(2)(A), then the unvested Restricted Stock Units shall terminate immediately prior to the consummation of the Reorganization Event without any payment in exchange therefor.

(iii) For purposes of Section 9(b)(2)(A)(i), an Award (other than Restricted Stock) shall be considered assumed if, following consummation of the Reorganization Event, such Award confers the right to purchase or receive pursuant to the terms of such Award, for each share of Common Stock subject to the Award immediately prior to the consummation of the Reorganization Event, the consideration (whether cash, securities or other property) received as a result of the Reorganization Event by holders of Common Stock for each share of Common Stock held immediately prior to the consummation of the Reorganization Event (and if holders were offered a choice of consideration, the type of consideration chosen by the holders of a majority of the outstanding shares of Common Stock); *provided, however*, that if the consideration received as a result of the Reorganization Event is not solely common stock of the acquiring or succeeding corporation (or an affiliate thereof), the Company may, with the consent of the acquiring or succeeding corporation, provide for the consideration to be received upon the exercise or settlement of the Award to consist solely of such number of shares of common stock of the acquiring or succeeding corporation (or an affiliate thereof) that the Board determined to be equivalent in value (as of the date of such determination or another date specified by the Board) to the per share consideration received by holders of outstanding shares of Common Stock as a result of the Reorganization Event.

(3) Consequences of a Reorganization Event on Restricted Stock. Upon the occurrence of a Reorganization Event other than a liquidation or dissolution of the Company, the repurchase and other rights of the Company with respect to outstanding Restricted Stock shall inure to the benefit of the Company’s successor and shall, unless the Board determines otherwise, apply to the cash, securities or other property which the Common Stock was converted into or exchanged for pursuant to such Reorganization Event in the same manner and to the same extent as they applied to such Restricted Stock; *provided, however*, that the Board may provide for termination or deemed satisfaction of such repurchase or other rights under the instrument evidencing any Restricted Stock or any other agreement between a Participant and the Company, either initially or by amendment. Upon the occurrence of a Reorganization Event involving the liquidation or dissolution of the Company, except to the extent specifically provided to the contrary in the instrument evidencing any Restricted Stock or any other agreement between a Participant and the Company, all restrictions and conditions on all Restricted Stock then outstanding shall automatically be deemed terminated or satisfied.

10. General Provisions Applicable to Awards

(a) Transferability of Awards. Awards (or any interest in an Award, including, prior to exercise, any interest in shares of Common Stock issuable upon exercise of an Option or SAR) shall not be sold, assigned, transferred (including by establishing any short position, put equivalent position (as defined in Rule 16a-1 issued under the Exchange Act) or call equivalent position (as defined in Rule 16a-1 issued under the Exchange Act)), pledged, hypothecated or otherwise encumbered by the person to whom they are granted, either voluntarily or by operation of law, and, during the life of the Participant, shall be exercisable only by the Participant; except that Awards may be transferred to family members (as defined in Rule 701(c)(3) under the Securities Act) through gifts or (other than Incentive Stock Options) domestic relations orders or to an executor or guardian upon the death or disability of the Participant. The Company shall not be required to recognize any such permitted transfer until such time as such permitted transferee shall deliver to the Company a written instrument, as a condition to such transfer, in form and substance satisfactory to the Company confirming that such transferee shall be bound by all of the terms and conditions of the Award. References to a Participant, to the extent relevant in the context, shall include references to authorized transferees. For the avoidance of doubt, nothing contained in this Section 10(a) shall be deemed to restrict a transfer to the Company.

(b) Documentation. Each Award shall be evidenced in such form (written, electronic or otherwise) as the Board shall determine. Each Award may contain terms and conditions in addition to those set forth in the Plan.

(c) Board Discretion. Except as otherwise provided by the Plan, each Award may be made alone or in addition or in relation to any other Award. The terms of each Award need not be identical, and the Board need not treat Participants uniformly.

(d) Termination of Status. The Board shall determine the effect on an Award of the disability, death, termination or other cessation of employment, authorized leave of absence or other change in the employment or other status of a Participant and the extent to which, and the period during which, the Participant, or the Participant's legal representative, conservator, guardian or Designated Beneficiary, may exercise rights under the Award.

(e) Withholding. The Participant must satisfy all applicable federal, state, and local or other income and employment tax withholding obligations before the Company will deliver stock certificates or otherwise recognize ownership of Common Stock under an Award. The Company may decide to satisfy the withholding obligations through additional withholding on salary or wages. If the Company elects not to or cannot withhold from other compensation, the Participant must pay the Company the full amount, if any, required for withholding or have a broker tender to the Company cash equal to the withholding obligations. Payment of withholding obligations is due before the Company will issue any shares on exercise, vesting or release from forfeiture of an Award or at the same time as payment of the exercise or purchase price unless the Company determines otherwise. If provided for in an Award or approved by the Board in its sole discretion, a Participant may satisfy such tax obligations in whole or in part by delivery (either by actual delivery or attestation) of shares of Common Stock, including shares retained from the Award creating the tax obligation, valued at their Fair Market Value; *provided, however*, except as otherwise provided by the Board, that the total tax withholding where stock is

being used to satisfy such tax obligations cannot exceed the Company's minimum statutory withholding obligations (based on minimum statutory withholding rates for federal and state tax purposes, including payroll taxes, that are applicable to such supplemental taxable income). Shares used to satisfy tax withholding requirements cannot be subject to any repurchase, forfeiture, unfulfilled vesting or other similar requirements.

(f) Amendment of Award.

(1) The Board may amend, modify or terminate any outstanding Award, including but not limited to, substituting therefor another Award of the same or a different type, changing the date of exercise or realization, and converting an Incentive Stock Option to a Nonstatutory Stock Option. The Participant's consent to such action shall be required unless (i) the Board determines that the action, taking into account any related action, does not materially and adversely affect the Participant's rights under the Plan or (ii) the change is permitted under Section 9.

(2) The Board may, without stockholder approval, amend any outstanding Award granted under the Plan to provide an exercise price per share that is lower than the then-current exercise price per share of such outstanding Award. The Board may also, without stockholder approval, cancel any outstanding award (whether or not granted under the Plan) and grant in substitution therefor new Awards under the Plan covering the same or a different number of shares of Common Stock and having an exercise price per share lower than the then-current exercise price per share of the cancelled award.

(g) Conditions on Delivery of Stock. The Company will not be obligated to deliver any shares of Common Stock pursuant to the Plan or to remove restrictions from shares previously issued or delivered under the Plan until (i) all conditions of the Award have been met or removed to the satisfaction of the Company, (ii) in the opinion of the Company's counsel, all other legal matters in connection with the issuance and delivery of such shares have been satisfied, including any applicable securities laws and regulations and any applicable stock exchange or stock market rules and regulations, and (iii) the Participant has executed and delivered to the Company such representations or agreements as the Company may consider appropriate to satisfy the requirements of any applicable laws, rules or regulations.

(h) Acceleration. The Board may at any time provide that any Award shall become immediately exercisable in whole or in part, free of some or all restrictions or conditions, or otherwise realizable in whole or in part, as the case may be.

11. Miscellaneous

(a) No Right To Employment or Other Status. No person shall have any claim or right to be granted an Award by virtue of the adoption of the Plan, and the grant of an Award shall not be construed as giving a Participant the right to continued employment or any other relationship with the Company. The Company expressly reserves the right at any time to dismiss or otherwise terminate its relationship with a Participant free from any liability or claim under the Plan, except as expressly provided in the applicable Award.

(b) No Rights As Stockholder. Subject to the provisions of the applicable Award, no Participant or Designated Beneficiary shall have any rights as a stockholder with respect to any shares of Common Stock to be distributed with respect to an Award until becoming the record holder of such shares.

(c) Effective Date and Term of Plan. The Plan shall become effective on the date on which it is adopted by the Board. No Awards shall be granted under the Plan after the expiration of 10 years from the earlier of (i) the date on which the Plan was adopted by the Board or (ii) the date the Plan was approved by the Company's stockholders, but Awards previously granted may extend beyond that date.

(d) Amendment of Plan. The Board may amend, suspend or terminate the Plan or any portion thereof at any time; *provided that* if at any time the approval of the Company's stockholders is required as to any modification or amendment under Section 422 of the Code or any successor provision with respect to Incentive Stock Options, the Board may not effect such modification or amendment without such approval. Unless otherwise specified in the amendment, any amendment to the Plan adopted in accordance with this Section 11(d) shall apply to, and be binding on the holders of, all Awards outstanding under the Plan at the time the amendment is adopted, provided the Board determines that such amendment, taking into account any related action, does not materially and adversely affect the rights of Participants under the Plan.

(e) Authorization of Sub-Plans (including Grants to non-U.S. Employees). The Board may from time to time establish one or more sub-plans under the Plan for purposes of satisfying applicable securities, tax or other laws of various jurisdictions. The Board shall establish such sub-plans by adopting supplements to the Plan containing (i) such limitations on the Board's discretion under the Plan as the Board deems necessary or desirable or (ii) such additional terms and conditions not otherwise inconsistent with the Plan as the Board shall deem necessary or desirable. All supplements adopted by the Board shall be deemed to be part of the Plan, but each supplement shall apply only to Participants within the affected jurisdiction and the Company shall not be required to provide copies of any supplement to Participants in any jurisdiction which is not the subject of such supplement.

(f) Compliance with 409A of the Code. Except as provided in individual Award agreements initially or by amendment, if and to the extent (i) any portion of any payment, compensation or other benefit provided to a Participant pursuant to the Plan in connection with his or her employment termination constitutes "nonqualified deferred compensation" within the meaning of Section 409A of the Code and (ii) the Participant is a specified employee as defined in Section 409A(a)(2)(B)(i) of the Code, in each case as determined by the Company in accordance with its procedures, by which determinations the Participant (through accepting the Award) agrees that he or she is bound, such portion of the payment, compensation or other benefit shall not be paid before the day that is six months plus one day after the date of "separation from service" (as determined under Section 409A of the Code) (the "**New Payment Date**"), except as Section 409A of the Code may then permit. The aggregate of any payments that otherwise would have been paid to the Participant during the period between the date of separation from service and the New Payment Date shall be paid to the Participant in a lump sum on such New Payment Date, and any remaining payments will be paid on their original schedule.

The Company makes no representations or warranty and shall have no liability to the Participant or any other person if any provisions of or payments, compensation or other benefits under the Plan are determined to constitute nonqualified deferred compensation subject to Section 409A of the Code but do not to satisfy the conditions of that section.

(g) Limitations on Liability. Notwithstanding any other provisions of the Plan, no individual acting as a director, officer, other employee, or agent of the Company will be liable to any Participant, former Participant, spouse, beneficiary, or any other person for any claim, loss, liability, or expense incurred in connection with the Plan, nor will such individual be personally liable with respect to the Plan because of any contract or other instrument he or she executes in his or her capacity as a director, officer, other employee, or agent of the Company. The Company will indemnify and hold harmless each director, officer, other employee, or agent of the Company to whom any duty or power relating to the administration or interpretation of the Plan has been or will be delegated, against any cost or expense (including attorneys' fees) or liability (including any sum paid in settlement of a claim with the Board's approval) arising out of any act or omission to act concerning the Plan unless arising out of such person's own fraud or bad faith.

(h) Governing Law. The provisions of the Plan and all Awards made hereunder shall be governed by and interpreted in accordance with the laws of the State of Delaware, excluding choice-of-law principles of the law of such state that would require the application of the laws of a jurisdiction other than the State of Delaware.

CASA SYSTEMS, INC.
2011 STOCK INCENTIVE PLAN

CALIFORNIA SUPPLEMENT

Pursuant to Section 11(e) of the Plan, the Board has adopted this supplement for purposes of satisfying the requirements of Section 25102(o) of the California Law:

Any Awards granted under the Plan to a Participant who is a resident of the State of California on the date of grant (a "**California Participant**") shall be subject to the following additional limitations, terms and conditions:

1. Additional Limitations on Options.

(a) Maximum Duration of Options. No Options granted to California Participants shall have a term in excess of 10 years measured from the Option grant date.

(b) Minimum Exercise Period Following Termination. Unless a California Participant's employment is terminated for cause (as defined by applicable law, the terms of the Plan or option grant or a contract of employment), in the event of termination of employment of such Participant, such Participant shall have the right to exercise an Option, to the extent that such Participant is entitled to exercise such Option on the date employment terminated, until the earlier of: (i) at least six months from the date of termination, if termination was caused by such Participant's death or disability, (ii) at least 30 days from the date of termination, if termination was caused other than by such Participant's death or disability and (iii) the Option expiration date.

2. Additional Limitations for Other Stock-Based Awards. The terms of all Awards granted to a California Participant under Section 8 of the Plan shall comply, to the extent applicable, with Sections 260.140.42, 260.140.45 and 260.140.46 of the California Code of Regulations.

3. Additional Limitations on Timing of Awards. No Award granted to a California Participant shall become exercisable, vested or realizable, as applicable to such Award, unless the Plan has been approved by the holders of a majority of the Company's outstanding voting securities by the later of (i) within 12 months before or after the date the Plan was adopted by the Board, or (ii) prior to or within 12 months of the granting of any Award to a California Participant.

4. Additional Restriction Regarding Recapitalizations, Stock Splits, Etc. For purposes of Section 9 of the Plan, in the event of a stock split, reverse stock split, stock dividend, recapitalization, combination, reclassification or other distribution of the Company's securities underlying the Award without the receipt of consideration by the Company, the number of securities purchasable, and in the case of Options, the exercise price of such Options, must be proportionately adjusted.

5. Additional Limitations on Transferability of Awards. Notwithstanding the provisions of Section 10(a) of the Plan, an Award granted to a California Participant may not be transferred to an executor or guardian upon the disability of the Participant.

Amendment No. 1 To 2011 Stock Incentive Plan

The 2011 Stock Incentive Plan (the "Plan") of Casa Systems, Inc. (the "Company") is hereby amended, pursuant to Section 11(d) of the Plan, as follows:

1. Section 4(a) of the Plan be and hereby is amended by deleting the first sentence thereof and replacing it with the following:

"Subject to adjustment under Section 9, Awards may be made under the Plan for up to a number of shares of common stock, \$0.001 par value per share, of the Company (the "**Common Stock**"), equal to the sum of (a) 698,371, plus (b) such additional number of shares of Common Stock as is equal to the sum of (x) the number of shares of Common Stock reserved for issuance under the Company's 2003 Stock Incentive Plan, as amended (the "2003 Plan") that remain available for issuance under the 2003 Plan as of the time immediately before termination of the 2003 Plan and (y) the number of shares of Common Stock subject to awards granted under the 2003 Plan which awards expire, terminate or are otherwise surrendered, canceled, forfeited or repurchased by the Company at their original issuance price pursuant to a contractual repurchase right (subject, however, in the case of Incentive Stock Options (as hereinafter defined) to any limitations of the Code); provided, however, that the maximum number of shares of Common Stock available for issuance under the Plan (including any shares becoming available by reason of clause (y)) shall be 1,335,871." ¹

Adopted by the Board of Directors: May 25, 2011

Adopted by the Stockholders: May 25, 2011

¹ Subsequent to the amendment of the Plan referred to above, the Company effected a two-for-one split of the Common Stock. As a result of the split, the number of shares of Common Stock reserved for Awards under clause (a) above has been adjusted to 1,396,742, and the maximum number of shares of Common Stock available for issuance under the Plan has been adjusted to 2,671,742.

Amendment No. 2 To 2011 Stock Incentive Plan

The 2011 Stock Incentive Plan (the "Plan") of Casa Systems, Inc. (the "Company") is hereby amended, pursuant to Section 11(d) of the Plan, as follows:

2. Section 4(a) of the Plan be and hereby is amended by deleting the first sentence thereof and replacing it with the following:

"Subject to adjustment under Section 9, Awards may be made under the Plan for up to a number of shares of common stock, \$0.001 par value per share, of the Company (the "**Common Stock**"), equal to the sum of (a) 2,396,742, plus (b) such additional number of shares of Common Stock as is equal to the sum of (x) the number of shares of Common Stock reserved for issuance under the Company's 2003 Stock Incentive Plan, as amended (the "2003 Plan") that remain available for issuance under the 2003 Plan as of the time immediately before termination of the 2003 Plan and (y) the number of shares of Common Stock subject to awards granted under the 2003 Plan which awards expire, terminate or are otherwise surrendered, canceled, forfeited or repurchased by the Company at their original issuance price pursuant to a contractual repurchase right (subject, however, in the case of Incentive Stock Options (as hereinafter defined) to any limitations of the Code); provided, however, that the maximum number of shares of Common Stock available for issuance under the Plan (including any shares becoming available by reason of clause (y)) shall be 3,671,742."

Adopted by the Board of Directors: June 11, 2014

Adopted by the Stockholders: June 11, 2014

Amendment No. 3 To 2011 Stock Incentive Plan

The 2011 Stock Incentive Plan (the "Plan") of Casa Systems, Inc. (the "Company") is hereby amended, pursuant to Section 11(d) of the Plan, as follows:

3. Section 4(a) of the Plan be and hereby is amended by deleting the first sentence thereof and replacing it with the following:

"Subject to adjustment under Section 9, Awards may be made under the Plan for up to a number of shares of common stock, \$0.001 par value per share, of the Company (the "**Common Stock**"), equal to the sum of (a) 3,396,742, plus (b) such additional number of shares of Common Stock as is equal to the sum of (x) the number of shares of Common Stock reserved for issuance under the Company's 2003 Stock Incentive Plan, as amended (the "2003 Plan") that remain available for issuance under the 2003 Plan as of the time immediately before termination of the 2003 Plan and (y) the number of shares of Common Stock subject to awards granted under the 2003 Plan which awards expire, terminate or are otherwise surrendered, canceled, forfeited or repurchased by the Company at their original issuance price pursuant to a contractual repurchase right (subject, however, in the case of Incentive Stock Options (as hereinafter defined) to any limitations of the Code); provided, however, that the maximum number of shares of Common Stock available for issuance under the Plan (including any shares becoming available by reason of clause (y)) shall be 4,671,742."

Adopted by the Board of Directors: June 29, 2015

Adopted by the Stockholders: June 29, 2015

CASA SYSTEMS, INC.

Incentive Stock Option Agreement
Granted Under 2011 Stock Incentive Plan1. Grant of Option.

This agreement evidences the grant by Casa Systems, Inc., a Delaware corporation (the "Company"), on _____, 201__ (the "Grant Date") to _____, an employee of the Company (the "Participant"), of an option to purchase, in whole or in part, on the terms provided herein and in the Company's 2011 Stock Incentive Plan (the "Plan"), a total of _____ shares (the "Shares") of common stock, \$0.001 par value per share, of the Company ("Common Stock") at \$____ per Share. Unless earlier terminated, this option shall expire at 5:00 p.m., Eastern time, on _____ (the "Final Exercise Date").

It is intended that the option evidenced by this agreement shall be an incentive stock option as defined in Section 422 of the Internal Revenue Code of 1986, as amended, and any regulations promulgated thereunder (the "Code"). Except as otherwise indicated by the context, the term "Participant", as used in this option, shall be deemed to include any person who acquires the right to exercise this option validly under its terms.

2. Vesting Schedule.

This option will become exercisable ("vest") as to 25% of the original number of Shares on the first anniversary of the Vesting Commencement Date (as defined below) and as to an additional 2.0833% of the original number of Shares at the end of each successive month following the first anniversary of the Vesting Commencement Date until the fourth anniversary of the Vesting Commencement Date. For purposes of this Agreement, "Vesting Commencement Date" shall mean _____.

The right of exercise shall be cumulative so that to the extent the option is not exercised in any period to the maximum extent permissible it shall continue to be exercisable, in whole or in part, with respect to all Shares for which it is vested until the earlier of the Final Exercise Date or the termination of this option under Section 3 hereof or the Plan.

3. Exercise of Option.

(a) Form of Exercise. Each election to exercise this option shall be accompanied by a completed Notice of Stock Option Exercise in the form attached hereto as Exhibit A, signed by the Participant, and received by the Company at its principal office, accompanied by this agreement, and payment in full in the manner provided in the Plan. The Participant may purchase less than the number of shares covered hereby, provided that no partial exercise of this option may be for any fractional share or for fewer than ten whole shares.

(b) Continuous Relationship with the Company Required. Except as otherwise provided in this Section 3, this option may not be exercised unless the Participant, at the time he or she exercises this option, is, and has been at all times since the Grant Date, an employee or officer of, or consultant or advisor to, the Company or any parent or subsidiary of the Company as defined in Section 424(e) or (f) of the Code (an "Eligible Participant").

(c) Termination of Relationship with the Company. If the Participant ceases to be an Eligible Participant for any reason, then, except as provided in paragraphs (d) and (e) below, the right to

exercise this option shall terminate three months after such cessation (but in no event after the Final Exercise Date), provided that this option shall be exercisable only to the extent that the Participant was entitled to exercise this option on the date of such cessation. Notwithstanding the foregoing, if the Participant, prior to the Final Exercise Date, violates the non-competition or confidentiality provisions of any employment contract, confidentiality and nondisclosure agreement or other agreement between the Participant and the Company, the right to exercise this option shall terminate immediately upon such violation.

(d) Exercise Period Upon Death or Disability. If the Participant dies or becomes disabled (within the meaning of Section 22(e)(3) of the Code) prior to the Final Exercise Date while he or she is an Eligible Participant and the Company has not terminated such relationship for “cause” as specified in paragraph (e) below, this option shall be exercisable, within the period of one year following the date of death or disability of the Participant, by the Participant (or in the case of death by an authorized transferee), provided that this option shall be exercisable only to the extent that this option was exercisable by the Participant on the date of his or her death or disability, and further provided that this option shall not be exercisable after the Final Exercise Date.

(e) Termination for Cause. If, prior to the Final Exercise Date, the Participant’s employment is terminated by the Company for Cause (as defined below), the right to exercise this option shall terminate immediately upon the effective date of such termination of employment. If, prior to the Final Exercise Date, the Participant is given notice by the Company of the termination of his or her employment by the Company for Cause, and the effective date of such employment termination is subsequent to the date of delivery of such notice, the right to exercise this option shall be suspended from the time of the delivery of such notice until the earlier of (i) such time as it is determined or otherwise agreed that the Participant’s employment shall not be terminated for Cause as provided in such notice or (ii) the effective date of such termination of employment (in which case the right to exercise this option shall, pursuant to the preceding sentence, terminate upon the effective date of such termination of employment). If the Participant is party to an employment or severance agreement with the Company that contains a definition of “cause” for termination of employment, “Cause” shall have the meaning ascribed to such term in such agreement. Otherwise, “Cause” shall mean willful misconduct by the Participant or willful failure by the Participant to perform his or her responsibilities to the Company (including, without limitation, breach by the Participant of any provision of any employment, consulting, advisory, nondisclosure, non-competition or other similar agreement between the Participant and the Company), as determined by the Company, which determination shall be conclusive. The Participant’s employment shall be considered to have been terminated for Cause if the Company determines, within 30 days after the Participant’s resignation, that termination for Cause was warranted.

4. Company Right of First Refusal.

(a) Notice of Proposed Transfer. If the Participant proposes to sell, assign, transfer, pledge, hypothecate or otherwise dispose of, by operation of law or otherwise (collectively, “transfer”) any Shares acquired upon exercise of this option, then the Participant shall first give written notice of the proposed transfer (the “Transfer Notice”) to the Company. The Transfer Notice shall name the proposed transferee and state the number of such Shares the Participant proposes to transfer (the “Offered Shares”), the price per share and all other material terms and conditions of the transfer.

(b) Company Right to Purchase. For 30 days following its receipt of such Transfer Notice, the Company shall have the option to purchase all or part of the Offered Shares at the price and upon the terms set forth in the Transfer Notice. In the event the Company elects to purchase all or part of the Offered Shares, it shall give written notice of such election to the Participant within such 30-day period. Within 10 days after his or her receipt of such notice, the Participant shall tender to the Company at its

principal offices the certificate or certificates representing the Offered Shares to be purchased by the Company, duly endorsed in blank by the Participant or with duly endorsed stock powers attached thereto, all in a form suitable for transfer of the Offered Shares to the Company. Promptly following receipt of such certificate or certificates, the Company shall deliver or mail to the Participant a check in payment of the purchase price for such Offered Shares; provided that if the terms of payment set forth in the Transfer Notice were other than cash against delivery, the Company may pay for the Offered Shares on the same terms and conditions as were set forth in the Transfer Notice; and provided further that any delay in making such payment shall not invalidate the Company's exercise of its option to purchase the Offered Shares.

(c) Shares Not Purchased By Company. If the Company does not elect to acquire all of the Offered Shares, the Participant may, within the 30-day period following the expiration of the option granted to the Company under subsection (b) above, transfer the Offered Shares which the Company has not elected to acquire to the proposed transferee, provided that such transfer shall not be on terms and conditions more favorable to the transferee than those contained in the Transfer Notice. Notwithstanding any of the above, all Offered Shares transferred pursuant to this Section 4 shall remain subject to the right of first refusal set forth in this Section 4 and such transferee shall, as a condition to such transfer, deliver to the Company a written instrument confirming that such transferee shall be bound by all of the terms and conditions of this Section 4.

(d) Consequences of Non-Delivery. After the time at which the Offered Shares are required to be delivered to the Company for transfer to the Company pursuant to subsection (b) above, the Company shall not pay any dividend to the Participant on account of such Offered Shares or permit the Participant to exercise any of the privileges or rights of a stockholder with respect to such Offered Shares, but shall, insofar as permitted by law, treat the Company as the owner of such Offered Shares.

(e) Exempt Transactions. The following transactions shall be exempt from the provisions of this Section 4:

(1) any transfer of Shares to or for the benefit of any spouse, child or grandchild of the Participant, or to a trust for their benefit;

(2) any transfer pursuant to an effective registration statement filed by the Company under the Securities Act of 1933, as amended (the "Securities Act"); and

(3) the sale of all or substantially all of the outstanding shares of capital stock of the Company (including pursuant to a merger or consolidation);

provided, however, that in the case of a transfer pursuant to clause (1) above, such Shares shall remain subject to the right of first refusal set forth in this Section 4.

(f) Assignment of Company Right. The Company may assign its rights to purchase Offered Shares in any particular transaction under this Section 4 to one or more persons or entities.

(g) Termination. The provisions of this Section 4 shall terminate upon the earlier of the following events:

(1) the closing of the sale of shares of Common Stock in an underwritten public offering pursuant to an effective registration statement filed by the Company under the Securities Act; or

(2) the sale of all or substantially all of the outstanding shares of capital stock, assets or business of the Company, by merger, consolidation, sale of assets or otherwise (other than a merger or consolidation in which all or substantially all of the individuals and entities who were beneficial owners of the Company's voting securities immediately prior to such transaction beneficially own, directly or indirectly, more than 75% (determined on an as-converted basis) of the outstanding securities entitled to vote generally in the election of directors of the resulting, surviving or acquiring corporation in such transaction).

(h) No Obligation to Recognize Invalid Transfer. The Company shall not be required (1) to transfer on its books any of the Shares which shall have been sold or transferred in violation of any of the provisions set forth in this Section 4, or (2) to treat as owner of such Shares or to pay dividends to any transferee to whom any such Shares shall have been so sold or transferred.

(i) Legends. The certificate representing Shares shall bear a legend substantially in the following form (in addition to, or in combination with, any legend required by applicable federal and state securities laws and agreements relating to the transfer of the Company securities):

“The shares represented by this certificate are subject to a right of first refusal in favor of the Company, as provided in a certain stock option agreement with the Company.”

5. Agreement in Connection with Initial Public Offering.

The Participant agrees, in connection with the initial underwritten public offering of the Common Stock pursuant to a registration statement under the Securities Act, (i) not to (a) offer, pledge, announce the intention to sell, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any other securities of the Company or (b) enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of shares of Common Stock or other securities of the Company, whether any transaction described in clause (a) or (b) is to be settled by delivery of securities, in cash or otherwise, during the period beginning on the date of the filing of such registration statement with the Securities and Exchange Commission and ending 180 days after the date of the final prospectus relating to the offering (plus up to an additional 34 days to the extent requested by the managing underwriters for such offering in order to address FINRA Rule 2711(f)(4) or NYSE Rule 472(f)(4) or any similar successor provision), and (ii) to execute any agreement reflecting clause (i) above as may be requested by the Company or the managing underwriters at the time of such offering. The Company may impose stop-transfer instructions with respect to the shares of Common Stock or other securities subject to the foregoing restriction until the end of the “lock-up” period.

6. Tax Matters.

(a) Withholding. No Shares will be issued pursuant to the exercise of this option unless and until the Participant pays to the Company, or makes provision satisfactory to the Company for payment of, any federal, state or local withholding taxes required by law to be withheld in respect of this option.

(b) Disqualifying Disposition. If the Participant disposes of Shares acquired upon exercise of this option within two years from the Grant Date or one year after such Shares were acquired pursuant to exercise of this option, the Participant shall notify the Company in writing of such disposition.

7. Transfer Restrictions.

(a) This option may not be sold, assigned, transferred, pledged or otherwise encumbered by the Participant, either voluntarily or by operation of law, except by will or the laws of descent and distribution, and, during the lifetime of the Participant, this option shall be exercisable only by the Participant.

(b) The Participant agrees that he or she will not transfer any Shares issued pursuant to the exercise of this option unless the transferee, as a condition to such transfer, delivers to the Company a written instrument confirming that such transferee shall be bound by all of the terms and conditions of Section 4 and Section 5; provided that such a written confirmation shall not be required with respect to (1) Section 4 after such provision has terminated in accordance with Section 4(g) or (2) Section 5 after the completion of the lock-up period in connection with the Company's initial underwritten public offering.

8. Provisions of the Plan.

This option is subject to the provisions of the Plan (including the provisions relating to amendments to the Plan), a copy of which is furnished to the Participant with this option.

IN WITNESS WHEREOF, the Company has caused this option to be executed under its corporate seal by its duly authorized officer. This option shall take effect as a sealed instrument.

CASA SYSTEMS, INC.

By: _____
Name: _____
Title: _____

PARTICIPANT'S ACCEPTANCE

The undersigned hereby accepts the foregoing option and agrees to the terms and conditions thereof. The undersigned hereby acknowledges receipt of a copy of the Company's 2011 Stock Incentive Plan.

PARTICIPANT:

Address: _____

NOTICE OF STOCK OPTION EXERCISE

Date: _____¹

Casa Systems, Inc.
100 Old River Road, Unit 100
Andover, MA 01810

Attention: Treasurer

Dear Sir or Madam:

I am the holder of _____² Stock Option granted to me under the Casa Systems, Inc. (the "Company") 2011 Stock Incentive Plan on _____³ for the purchase of _____⁴ shares of Common Stock of the Company at a purchase price of \$____⁵ per share.

I hereby exercise my option to purchase _____⁶ shares of Common Stock (the "Shares"), for which I have enclosed _____⁷ in the amount of _____⁸. Please register my stock certificate as follows:

Name(s): _____⁹

Address: _____¹⁰

I represent, warrant and covenant as follows:

1. I am purchasing the Shares for my own account for investment only, and not with a view to, or for sale in connection with, any distribution of the Shares in violation of the Securities Act of 1933 (the "Securities Act"), or any rule or regulation under the Securities Act.

- 1 Enter the date of exercise.
- 2 Enter either "an Incentive" or "a Nonstatutory".
- 3 Enter the date of grant.
- 4 Enter the total number of shares of Common Stock for which the option was granted.
- 5 Enter the option exercise price per share of Common Stock.
- 6 Enter the number of shares of Common Stock to be purchased upon exercise of all or part of the option.
- 7 Enter "cash", "personal check" or if permitted by the option or Plan, "stock certificates No. XXXX and XXXX".
- 8 Enter the dollar amount (price per share of Common Stock times the number of shares of Common Stock to be purchased), or the number of shares tendered. Fair market value of shares tendered, together with cash or check, must cover the purchase price of the shares issued upon exercise.
- 9 Enter name(s) to appear on stock certificate: (a) Your name only; (b) Your name and other name (i.e., John Doe and Jane Doe, Joint Tenants With Right of Survivorship); or (c) In the case of a Nonstatutory option only, a Child's name, with you as custodian (i.e., Jane Doe, Custodian for Tommy Doe).
Note: There may be income and/or gift tax consequences of registering shares in a Child's name.
- 10 Social Security Number of Holder(s).

2. I have had such opportunity as I have deemed adequate to obtain from representatives of the Company such information as is necessary to permit me to evaluate the merits and risks of my investment in the Company.
3. I have sufficient experience in business, financial and investment matters to be able to evaluate the risks involved in the purchase of the Shares and to make an informed investment decision with respect to such purchase.
4. I can afford a complete loss of the value of the Shares and am able to bear the economic risk of holding such Shares for an indefinite period.
5. I understand that (i) the Shares have not been registered under the Securities Act and are “restricted securities” within the meaning of Rule 144 under the Securities Act, (ii) the Shares cannot be sold, transferred or otherwise disposed of unless they are subsequently registered under the Securities Act or an exemption from registration is then available; (iii) in any event, the exemption from registration under Rule 144 will not be available for at least one year and even then will not be available unless a public market then exists for the Common Stock, adequate information concerning the Company is then available to the public, and other terms and conditions of Rule 144 are complied with; and (iv) there is now no registration statement on file with the Securities and Exchange Commission with respect to any stock of the Company and the Company has no obligation or current intention to register the Shares under the Securities Act.

Very truly yours,

(Signature)

CASA SYSTEMS, INC.

Nonstatutory Stock Option Agreement
Granted Under 2011 Stock Incentive Plan1. Grant of Option.

This agreement evidences the grant by Casa Systems, Inc., a Delaware corporation (the "Company"), on _____, 20__ (the "Grant Date") to _____, an employee, consultant or director of the Company (the "Participant"), of an option to purchase, in whole or in part, on the terms provided herein and in the Company's 2011 Stock Incentive Plan (the "Plan"), a total of _____ shares (the "Shares") of common stock, \$0.001 par value per share, of the Company ("Common Stock") at \$__ per Share. Unless earlier terminated, this option shall expire at 5:00 p.m., Eastern time, on _____ (the "Final Exercise Date").

It is intended that the option evidenced by this agreement shall not be an incentive stock option as defined in Section 422 of the Internal Revenue Code of 1986, as amended, and any regulations promulgated thereunder (the "Code"). Except as otherwise indicated by the context, the term "Participant", as used in this option, shall be deemed to include any person who acquires the right to exercise this option validly under its terms.

2. Vesting Schedule.

This option will become exercisable ("vest") as to 25% of the original number of Shares on the first anniversary of the Vesting Commencement Date (as defined below) and as to an additional 2.0833% of the original number of Shares at the end of each successive month following the first anniversary of the Vesting Commencement Date until the fourth anniversary of the Vesting Commencement Date. For purposes of this Agreement, "Vesting Commencement Date" shall mean _____.

The right of exercise shall be cumulative so that to the extent the option is not exercised in any period to the maximum extent permissible it shall continue to be exercisable, in whole or in part, with respect to all Shares for which it is vested until the earlier of the Final Exercise Date or the termination of this option under Section 3 hereof or the Plan.

3. Exercise of Option.

(a) Form of Exercise. Each election to exercise this option shall be accompanied by a completed Notice of Stock Option Exercise in the form attached hereto as Exhibit A, signed by the Participant, and received by the Company at its principal office, accompanied by this agreement, and payment in full in the manner provided in the Plan. The Participant may purchase less than the number of shares covered hereby, provided that no partial exercise of this option may be for any fractional share or for fewer than ten whole shares.

(b) Continuous Relationship with the Company Required. Except as otherwise provided in this Section 3, this option may not be exercised unless the Participant, at the time he or she exercises this option, is, and has been at all times since the Grant Date, an employee, officer or director of, or consultant or advisor to, the Company or any other entity the employees, officers, directors, consultants, or advisors of which are eligible to receive option grants under the Plan (an "Eligible Participant").

(c) Termination of Relationship with the Company. If the Participant ceases to be an Eligible Participant for any reason, then, except as provided in paragraphs (d) and (e) below, the right to exercise this option shall terminate three months after such cessation (but in no event after the Final Exercise Date), provided that this option shall be exercisable only to the extent that the Participant was entitled to exercise this option on the date of such cessation. Notwithstanding the foregoing, if the Participant, prior to the Final Exercise Date, violates the non-competition or confidentiality provisions of any employment contract, confidentiality and nondisclosure agreement or other agreement between the Participant and the Company, the right to exercise this option shall terminate immediately upon such violation.

(d) Exercise Period Upon Death or Disability. If the Participant dies or becomes disabled (within the meaning of Section 22(e)(3) of the Code) prior to the Final Exercise Date while he or she is an Eligible Participant and the Company has not terminated such relationship for "cause" as specified in paragraph (e) below, this option shall be exercisable, within the period of one year following the date of death or disability of the Participant, by the Participant (or in the case of death by an authorized transferee), provided that this option shall be exercisable only to the extent that this option was exercisable by the Participant on the date of his or her death or disability, and further provided that this option shall not be exercisable after the Final Exercise Date.

(e) Termination for Cause. If, prior to the Final Exercise Date, the Participant's employment or other relationship with the Company is terminated by the Company for Cause (as defined below), the right to exercise this option shall terminate immediately upon the effective date of such termination of employment or other relationship. If, prior to the Final Exercise Date, the Participant is given notice by the Company of the termination of his or her employment or other relationship by the Company for Cause, and the effective date of such employment or other termination is subsequent to the date of the delivery of such notice, the right to exercise this option shall be suspended from the time of the delivery of such notice until the earlier of (i) such time as it is determined or otherwise agreed that the Participant's employment or other relationship shall not be terminated for Cause as provided in such notice or (ii) the effective date of such termination of employment or other relationship (in which case the right to exercise this option shall, pursuant to the preceding sentence, terminate immediately upon the effective date of such termination of employment or other relationship). If the Participant is party to an employment, consulting or severance agreement with the Company that contains a definition of "cause" for termination of employment or other relationship, "Cause" shall have the meaning ascribed to such term in such agreement. Otherwise, "Cause" shall mean willful misconduct by the Participant or willful failure by the Participant to perform his or her responsibilities to the Company (including, without limitation, breach by the Participant of any provision of any employment, consulting, advisory, nondisclosure, non-competition or other similar agreement between the Participant and the Company), as determined by the Company, which determination shall be conclusive. The Participant's employment or other relationship shall be considered to have been terminated for "Cause" if the Company determines, within 30 days after the Participant's resignation, that termination for Cause was warranted.

4. Company Right of First Refusal.

(a) Notice of Proposed Transfer. If the Participant proposes to sell, assign, transfer, pledge, hypothecate or otherwise dispose of, by operation of law or otherwise (collectively, "transfer") any Shares acquired upon exercise of this option, then the Participant shall first give written notice of the proposed transfer (the "Transfer Notice") to the Company. The Transfer Notice shall name the proposed transferee and state the number of such Shares the Participant proposes to transfer (the "Offered Shares"), the price per share and all other material terms and conditions of the transfer.

(b) Company Right to Purchase. For 30 days following its receipt of such Transfer Notice, the Company shall have the option to purchase all or part of the Offered Shares at the price and upon the terms set forth in the Transfer Notice. In the event the Company elects to purchase all or part of the

Offered Shares, it shall give written notice of such election to the Participant within such 30-day period. Within 10 days after his or her receipt of such notice, the Participant shall tender to the Company at its principal offices the certificate or certificates representing the Offered Shares to be purchased by the Company, duly endorsed in blank by the Participant or with duly endorsed stock powers attached thereto, all in a form suitable for transfer of the Offered Shares to the Company. Promptly following receipt of such certificate or certificates, the Company shall deliver or mail to the Participant a check in payment of the purchase price for such Offered Shares; provided that if the terms of payment set forth in the Transfer Notice were other than cash against delivery, the Company may pay for the Offered Shares on the same terms and conditions as were set forth in the Transfer Notice; and provided further that any delay in making such payment shall not invalidate the Company's exercise of its option to purchase the Offered Shares.

(c) Shares Not Purchased By Company. If the Company does not elect to acquire all of the Offered Shares, the Participant may, within the 30-day period following the expiration of the option granted to the Company under subsection (b) above, transfer the Offered Shares which the Company has not elected to acquire to the proposed transferee, provided that such transfer shall not be on terms and conditions more favorable to the transferee than those contained in the Transfer Notice. Notwithstanding any of the above, all Offered Shares transferred pursuant to this Section 4 shall remain subject to the right of first refusal set forth in this Section 4 and such transferee shall, as a condition to such transfer, deliver to the Company a written instrument confirming that such transferee shall be bound by all of the terms and conditions of this Section 4.

(d) Consequences of Non-Delivery. After the time at which the Offered Shares are required to be delivered to the Company for transfer to the Company pursuant to subsection (b) above, the Company shall not pay any dividend to the Participant on account of such Offered Shares or permit the Participant to exercise any of the privileges or rights of a stockholder with respect to such Offered Shares, but shall, insofar as permitted by law, treat the Company as the owner of such Offered Shares.

(e) Exempt Transactions. The following transactions shall be exempt from the provisions of this Section 4:

(1) any transfer of Shares to or for the benefit of any spouse, child or grandchild of the Participant, or to a trust for their benefit;

(2) any transfer pursuant to an effective registration statement filed by the Company under the Securities Act of 1933, as amended (the "Securities Act"); and

(3) the sale of all or substantially all of the outstanding shares of capital stock of the Company (including pursuant to a merger or consolidation);

provided, however, that in the case of a transfer pursuant to clause (1) above, such Shares shall remain subject to the right of first refusal set forth in this Section 4.

(f) Assignment of Company Right. The Company may assign its rights to purchase Offered Shares in any particular transaction under this Section 4 to one or more persons or entities.

(g) Termination. The provisions of this Section 4 shall terminate upon the earlier of the following events:

(1) the closing of the sale of shares of Common Stock in an underwritten public offering pursuant to an effective registration statement filed by the Company under the Securities Act; or

(2) the sale of all or substantially all of the outstanding shares of capital stock, assets or business of the Company, by merger, consolidation, sale of assets or otherwise (other than a merger or consolidation in which all or substantially all of the individuals and entities who were beneficial owners of the Company's voting securities immediately prior to such transaction beneficially own, directly or indirectly, more than 75% (determined on an as-converted basis) of the outstanding securities entitled to vote generally in the election of directors of the resulting, surviving or acquiring corporation in such transaction).

(h) No Obligation to Recognize Invalid Transfer. The Company shall not be required (1) to transfer on its books any of the Shares which shall have been sold or transferred in violation of any of the provisions set forth in this Section 4, or (2) to treat as owner of such Shares or to pay dividends to any transferee to whom any such Shares shall have been so sold or transferred.

(i) Legends. The certificate representing Shares shall bear a legend substantially in the following form (in addition to, or in combination with, any legend required by applicable federal and state securities laws and agreements relating to the transfer of the Company securities):

"The shares represented by this certificate are subject to a right of first refusal in favor of the Company, as provided in a certain stock option agreement with the Company."

5. Agreement in Connection with Initial Public Offering.

The Participant agrees, in connection with the initial underwritten public offering of the Common Stock pursuant to a registration statement under the Securities Act, (i) not to (a) offer, pledge, announce the intention to sell, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any other securities of the Company or (b) enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of shares of Common Stock or other securities of the Company, whether any transaction described in clause (a) or (b) is to be settled by delivery of securities, in cash or otherwise, during the period beginning on the date of the filing of such registration statement with the Securities and Exchange Commission and ending 180 days after the date of the final prospectus relating to the offering (plus up to an additional 34 days to the extent requested by the managing underwriters for such offering in order to address FINRA Rule 2711(f)(4) or NYSE Rule 472(f)(4) or any similar successor provision), and (ii) to execute any agreement reflecting clause (i) above as may be requested by the Company or the managing underwriters at the time of such offering. The Company may impose stop-transfer instructions with respect to the shares of Common Stock or other securities subject to the foregoing restriction until the end of the "lock-up" period.

6. Withholding.

No Shares will be issued pursuant to the exercise of this option unless and until the Participant pays to the Company, or makes provision satisfactory to the Company for payment of, any federal, state or local withholding taxes required by law to be withheld in respect of this option.

7. Transfer Restrictions.

(a) This option may not be sold, assigned, transferred, pledged or otherwise encumbered by the Participant, either voluntarily or by operation of law, except by will or the laws of descent and distribution, and, during the lifetime of the Participant, this option shall be exercisable only by the Participant.

(b) The Participant agrees that he or she will not transfer any Shares issued pursuant to the exercise of this option unless the transferee, as a condition to such transfer, delivers to the Company a written instrument confirming that such transferee shall be bound by all of the terms and conditions of Section 4 and Section 5; provided that such a written confirmation shall not be required with respect to (1) Section 4 after such provision has terminated in accordance with Section 4(g) or (2) Section 5 after the completion of the lock-up period in connection with the Company's initial underwritten public offering.

8. Provisions of the Plan.

This option is subject to the provisions of the Plan (including the provisions relating to amendments to the Plan), a copy of which is furnished to the Participant with this option.

IN WITNESS WHEREOF, the Company has caused this option to be executed under its corporate seal by its duly authorized officer. This option shall take effect as a sealed instrument.

CASA SYSTEMS, INC.

By: _____

Name: _____

Title: _____

PARTICIPANT'S ACCEPTANCE

The undersigned hereby accepts the foregoing option and agrees to the terms and conditions thereof. The undersigned hereby acknowledges receipt of a copy of the Company's 2011 Stock Incentive Plan.

PARTICIPANT:

Address: _____

NOTICE OF STOCK OPTION EXERCISE

Date: _____¹

Casa Systems, Inc.
100 Old River Road, Unit 100
Andover, MA 01810

Attention: Treasurer

Dear Sir or Madam:

I am the holder of _____² Stock Option granted to me under the Casa Systems, Inc. (the "Company") 2011 Stock Incentive Plan on _____³ for the purchase of _____⁴ shares of Common Stock of the Company at a purchase price of \$____⁵ per share.

I hereby exercise my option to purchase _____⁶ shares of Common Stock (the "Shares"), for which I have enclosed _____⁷ in the amount of _____⁸. Please register my stock certificate as follows:

Name(s): _____⁹

Address: _____

_____¹⁰

- ¹ Enter the date of exercise.
- ² Enter either "an Incentive" or "a Nonstatutory".
- ³ Enter the date of grant.
- ⁴ Enter the total number of shares of Common Stock for which the option was granted.
- ⁵ Enter the option exercise price per share of Common Stock.
- ⁶ Enter the number of shares of Common Stock to be purchased upon exercise of all or part of the option.
- ⁷ Enter "cash", "personal check" or if permitted by the option or Plan, "stock certificates No. XXXX and XXXX".
- ⁸ Enter the dollar amount (price per share of Common Stock times the number of shares of Common Stock to be purchased), or the number of shares tendered. Fair market value of shares tendered, together with cash or check, must cover the purchase price of the shares issued upon exercise.
- ⁹ Enter name(s) to appear on stock certificate: (a) Your name only; (b) Your name and other name (i.e., John Doe and Jane Doe, Joint Tenants With Right of Survivorship); or (c) In the case of a Nonstatutory option only, a Child's name, with you as custodian (i.e., Jane Doe, Custodian for Tommy Doe). Note: There may be income and/or gift tax consequences of registering shares in a Child's name.
- ¹⁰ Social Security Number of Holder(s).

I represent, warrant and covenant as follows:

1. I am purchasing the Shares for my own account for investment only, and not with a view to, or for sale in connection with, any distribution of the Shares in violation of the Securities Act of 1933 (the "Securities Act"), or any rule or regulation under the Securities Act.

2. I have had such opportunity as I have deemed adequate to obtain from representatives of the Company such information as is necessary to permit me to evaluate the merits and risks of my investment in the Company.

3. I have sufficient experience in business, financial and investment matters to be able to evaluate the risks involved in the purchase of the Shares and to make an informed investment decision with respect to such purchase.

4. I can afford a complete loss of the value of the Shares and am able to bear the economic risk of holding such Shares for an indefinite period.

5. I understand that (i) the Shares have not been registered under the Securities Act and are "restricted securities" within the meaning of Rule 144 under the Securities Act, (ii) the Shares cannot be sold, transferred or otherwise disposed of unless they are subsequently registered under the Securities Act or an exemption from registration is then available; (iii) in any event, the exemption from registration under Rule 144 will not be available for at least one year and even then will not be available unless a public market then exists for the Common Stock, adequate information concerning the Company is then available to the public, and other terms and conditions of Rule 144 are complied with; and (iv) there is now no registration statement on file with the Securities and Exchange Commission with respect to any stock of the Company and the Company has no obligation or current intention to register the Shares under the Securities Act.

Very truly yours,

(Signature)

CASA SYSTEMS, INC.

Restricted Stock Agreement
Granted Under 2011 Stock Incentive Plan

AGREEMENT made this ____ day of _____, 20__, between Casa Systems, Inc., a Delaware corporation (the "Company"), and _____ (the "Participant").

For valuable consideration, receipt of which is acknowledged, the parties hereto agree as follows:

1. Purchase of Shares.

The Company shall issue and sell to the Participant, and the Participant shall purchase from the Company, subject to the terms and conditions set forth in this Agreement and in the Company's 2011 Stock Incentive Plan (the "Plan"), _____ shares (the "Shares") of common stock, \$0.001 par value, of the Company ("Common Stock"), at a purchase price of \$____ per share. The aggregate purchase price for the Shares shall be paid by the Participant by check payable to the order of the Company or such other method as may be acceptable to the Company. Upon receipt by the Company of payment for the Shares, the Company shall issue to the Participant one or more certificates in the name of the Participant for that number of Shares purchased by the Participant. The Participant agrees that the Shares shall be subject to the purchase options set forth in Sections 2 and 5 of this Agreement and the restrictions on transfer set forth in Section 4 of this Agreement.

2. Purchase Option.

(a) In the event that the Participant ceases to be employed by the Company for any reason or no reason, with or without cause, prior to the fourth anniversary of the Vesting Commencement Date (as defined below), the Company shall have the right and option (the "Purchase Option") to purchase from the Participant, for a sum of \$____ per share (the "Option Price"), some or all of the Unvested Shares (as defined below).

"Unvested Shares" means the total number of Shares multiplied by the Applicable Percentage at the time the Purchase Option becomes exercisable by the Company. The "Applicable Percentage" shall be (i) 100% during the period ending on the first anniversary of the Vesting Commencement Date, (ii) 75% less 2.0833% for each month of employment completed by the Participant with the Company from and after the first anniversary of the Vesting Commencement Date, and (iii) zero on or after the fourth anniversary of the Vesting Commencement Date. For purposes of this Agreement, "Vesting Commencement Date" shall mean _____.

(b) If the Participant is employed by a parent or subsidiary of the Company, any references in this Agreement to employment with the Company or termination of employment by or with the Company shall instead be deemed to refer to such parent or subsidiary.

3. Exercise of Purchase Option and Closing.

(a) The Company may exercise the Purchase Option by delivering or mailing to the Participant (or his estate), within 90 days after the termination of the employment of the Participant with the Company, a written notice of exercise of the Purchase Option. Such notice shall specify the number of Shares to be purchased. If and to the extent the Purchase Option is not so exercised by the giving of such a notice within such 90-day period, the Purchase Option shall automatically expire and terminate effective upon the expiration of such 90-day period.

(b) Within 10 days after delivery to the Participant of the Company's notice of the exercise of the Purchase Option pursuant to subsection (a) above, the Participant (or his estate) shall, pursuant to the provisions of the Joint Escrow Instructions referred to in Section 7 below, tender to the Company at its principal offices the certificate or certificates representing the Shares which the Company has elected to purchase in accordance with the terms of this Agreement, duly endorsed in blank or with duly endorsed stock powers attached thereto, all in form suitable for the transfer of such Shares to the Company. Promptly following its receipt of such certificate or certificates, the Company shall pay to the Participant the aggregate Option Price for such Shares (provided that any delay in making such payment shall not invalidate the Company's exercise of the Purchase Option with respect to such Shares).

(c) After the time at which any Shares are required to be delivered to the Company for transfer to the Company pursuant to subsection (b) above, the Company shall not pay any dividend to the Participant on account of such Shares or permit the Participant to exercise any of the privileges or rights of a stockholder with respect to such Shares, but shall, in so far as permitted by law, treat the Company as the owner of such Shares.

(d) The Option Price may be payable, at the option of the Company, in cancellation of all or a portion of any outstanding indebtedness of the Participant to the Company or in cash (by check) or both.

(e) The Company shall not purchase any fraction of a Share upon exercise of the Purchase Option, and any fraction of a Share resulting from a computation made pursuant to Section 2 of this Agreement shall be rounded to the nearest whole Share (with any one-half Share being rounded upward).

(f) The Company may assign its Purchase Option to one or more persons or entities.

4. Restrictions on Transfer.

(a) The Participant shall not sell, assign, transfer, pledge, hypothecate or otherwise dispose of, by operation of law or otherwise (collectively "transfer") any Shares, or any interest therein, that are subject to the Purchase Option, except that the Participant may transfer such Shares (i) to or for the benefit of any spouse, children, parents, uncles, aunts, siblings, grandchildren and any other relatives approved by the Board of Directors (collectively, "Approved Relatives") or to a trust established solely for the benefit of the Participant and/or Approved Relatives, provided that such Shares shall remain subject to this Agreement (including without limitation the restrictions on transfer set forth in this Section 4, the Purchase Option and the right of first refusal set forth in Section 5) and such permitted transferee shall, as a condition to such transfer, deliver to the Company a written instrument confirming that such transferee shall be bound by all of the terms and conditions of this Agreement or (ii) as part of the sale of all or substantially all of the shares of capital stock of the Company (including pursuant to a merger or consolidation), provided that, in accordance with the Plan, the securities or other property received by the Participant in connection with such transaction shall remain subject to this Agreement.

(b) The Participant shall not transfer any Shares, or any interest therein, that are no longer subject to the Purchase Option, except in accordance with Section 5 below.

5. Right of First Refusal.

(a) If the Participant proposes to transfer any Shares that are no longer subject to the Purchase Option (either because they are no longer Unvested Shares or because the Purchase Option expired unexercised), then the Participant shall first give written notice of the proposed transfer (the "Transfer Notice") to the Company. The Transfer Notice shall name the proposed transferee and state the number of such Shares the Participant proposes to transfer (the "Offered Shares"), the price per share and all other material terms and conditions of the transfer.

(b) For 30 days following its receipt of such Transfer Notice, the Company shall have the option to purchase all or part of the Offered Shares at the price and upon the terms set forth in the Transfer Notice. In the event the Company elects to purchase all or part of the Offered Shares, it shall give written notice of such election to the Participant within such 30-day period. Within 10 days after his or her receipt of such notice, the Participant shall tender to the Company at its principal offices the certificate or certificates representing the Offered Shares to be purchased by the Company, duly endorsed in blank by the Participant or with duly endorsed stock powers attached thereto, all in a form suitable for transfer of the Offered Shares to the Company. Promptly following receipt of such certificate or certificates, the Company shall deliver or mail to the Participant a check in payment of the purchase price for such Offered Shares; provided that if the terms of payment set forth in the Transfer Notice were other than cash against delivery, the Company may pay for the Offered Shares on the same terms and conditions as were set forth in the Transfer Notice; and provided further that any delay in making such payment shall not invalidate the Company's exercise of its option to purchase the Offered Shares.

(c) If the Company does not elect to acquire all of the Offered Shares, the Participant may, within the 30-day period following the expiration of the option granted to the Company under subsection (b) above, transfer the Offered Shares which the Company has not elected to acquire to the proposed transferee, provided that such transfer shall not be on terms and conditions more favorable to the transferee than those contained in the Transfer Notice. Notwithstanding any of the above, all Offered Shares transferred pursuant to this Section 5 shall remain subject to this Agreement (including without limitation the restrictions on transfer set forth in Section 4 and the right of first refusal set forth in this Section 5) and such transferee shall, as a condition to such transfer, deliver to the Company a written instrument confirming that such transferee shall be bound by all of the terms and conditions of this Agreement.

(d) After the time at which the Offered Shares are required to be delivered to the Company for transfer to the Company pursuant to subsection (b) above, the Company shall not pay any dividend to the Participant on account of such Offered Shares or permit the Participant to exercise any of the privileges or rights of a stockholder with respect to such Offered Shares, but shall, insofar as permitted by law, treat the Company as the owner of such Offered Shares.

(e) The following transactions shall be exempt from the provisions of this Section 5:

(1) a transfer of Shares to or for the benefit of any Approved Relatives, or to a trust established solely for the benefit of the Participant and/or Approved Relatives;

(2) any transfer pursuant to an effective registration statement filed by the Company under the Securities Act of 1933, as amended (the "Securities Act"); and

(3) the sale of all or substantially all of the outstanding shares of capital stock of the Company (including pursuant to a merger or consolidation);

provided, however, that in the case of a transfer pursuant to clause (1) above, such Shares shall remain subject to this Agreement (including without limitation the restrictions on transfer set forth in Section 4 and the right of first refusal set forth in this Section 5) and such transferee shall, as a condition to such transfer, deliver to the Company a written instrument confirming that such transferee shall be bound by all of the terms and conditions of this Agreement.

(f) The Company may assign its rights to purchase Offered Shares in any particular transaction under this Section 5 to one or more persons or entities.

(g) The provisions of this Section 5 shall terminate upon the earlier of the following events:

(1) the closing of the sale of shares of Common Stock in an underwritten public offering pursuant to an effective registration statement filed by the Company under the Securities Act; or

(2) the sale of all or substantially all of the outstanding shares of capital stock, assets or business of the Company, by merger, consolidation, sale of assets or otherwise (other than a merger or consolidation in which all or substantially all of the individuals and entities who were beneficial owners of the Company's voting securities immediately prior to such transaction beneficially own, directly or indirectly, more than 75% (determined on an as-converted basis) of the outstanding securities entitled to vote generally in the election of directors of the resulting, surviving or acquiring corporation in such transaction).

(h) The Company shall not be required (1) to transfer on its books any of the Shares which shall have been sold or transferred in violation of any of the provisions set forth in this Agreement, or (2) to treat as owner of such Shares or to pay dividends to any transferee to whom any such Shares shall have been so sold or transferred.

6. Agreement in Connection with Initial Public Offering.

The Participant agrees, in connection with the initial underwritten public offering of the Common Stock pursuant to a registration statement under the Securities Act, (i) not to (a) offer, pledge, announce the intention to sell, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any securities convertible into or exercisable or exchangeable for shares of Common Stock or (b) enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of shares of Common Stock, whether any transaction described in clause (a) or (b) is to be settled by delivery of shares of Common Stock or other securities, in cash or otherwise, during the period beginning on the date of the filing of such registration statement with the Securities and Exchange Commission and ending 180 days from the date of the final prospectus relating to the offering (plus up to an additional 34 days to the extent requested by the managing underwriters for such offering in order to address FINRA Rule 2711(f)(4) or NYSE Rule 472(f)(4) or any similar successor provision), and (ii) to execute any agreement reflecting clause (i) above as may be requested by the Company or the managing underwriters at the time of such offering. The Company may impose stop-transfer instructions with respect to the shares of Common Stock or other securities subject to the foregoing restriction until the end of the "lock-up" period.

7. Escrow.

The Participant shall, upon the execution of this Agreement, execute Joint Escrow Instructions in the form attached to this Agreement as Exhibit A. The Joint Escrow Instructions shall be delivered to the Secretary of the Company, as escrow agent thereunder. The Participant shall deliver to such escrow agent

a stock assignment duly endorsed in blank, in the form attached to this Agreement as Exhibit B, and hereby instructs the Company to deliver to such escrow agent, on behalf of the Participant, the certificate(s) evidencing the Shares issued hereunder. Such materials shall be held by such escrow agent pursuant to the terms of such Joint Escrow Instructions.

8. Restrictive Legends.

All certificates representing Shares shall have affixed thereto legends in substantially the following form, in addition to any other legends that may be required under federal or state securities laws:

“The shares of stock represented by this certificate are subject to restrictions on transfer and an option to purchase set forth in a certain Restricted Stock Agreement between the corporation and the registered owner of these shares (or his predecessor in interest), and such Agreement is available for inspection without charge at the office of the Secretary of the corporation.”

“The shares represented by this certificate have not been registered under the Securities Act of 1933, as amended, and may not be sold, transferred or otherwise disposed of in the absence of an effective registration statement under such Act or an opinion of counsel satisfactory to the corporation to the effect that such registration is not required.”

9. Provisions of the Plan.

(a) This Agreement is subject to the provisions of the Plan, a copy of which is furnished to the Participant with this Agreement.

(b) As provided in the Plan, upon the occurrence of a Reorganization Event (as defined in the Plan), the repurchase and other rights of the Company hereunder shall inure to the benefit of the Company's successor and shall apply to the cash, securities or other property which the Shares were converted into or exchanged for pursuant to such Reorganization Event in the same manner and to the same extent as they applied to the Shares under this Agreement. If, in connection with a Reorganization Event, a portion of the cash, securities and/or other property received upon the conversion or exchange of the Shares is to be placed into escrow to secure indemnification or similar obligations, the mix between the vested and unvested portion of such cash, securities and/or other property that is placed into escrow shall be the same as the mix between the vested and unvested portion of such cash, securities and/or other property that is not subject to escrow.

10. Investment Representations.

The Participant represents, warrants and covenants as follows:

(a) The Participant is purchasing the Shares for his own account for investment only, and not with a view to, or for sale in connection with, any distribution of the Shares in violation of the Securities Act, or any rule or regulation under the Securities Act.

(b) The Participant has had such opportunity as he has deemed adequate to obtain from representatives of the Company such information as is necessary to permit him to evaluate the merits and risks of his investment in the Company.

(c) The Participant has sufficient experience in business, financial and investment matters to be able to evaluate the risks involved in the purchase of the Shares and to make an informed investment decision with respect to such purchase.

(d) The Participant can afford a complete loss of the value of the Shares and is able to bear the economic risk of holding such Shares for an indefinite period.

(e) The Participant understands that (i) the Shares have not been registered under the Securities Act and are "restricted securities" within the meaning of Rule 144 under the Securities Act; (ii) the Shares cannot be sold, transferred or otherwise disposed of unless they are subsequently registered under the Securities Act or an exemption from registration is then available; (iii) in any event, the exemption from registration under Rule 144 will not be available for at least one year and even then will not be available unless a public market then exists for the Common Stock, adequate information concerning the Company is then available to the public, and other terms and conditions of Rule 144 are complied with; and (iv) there is now no registration statement on file with the Securities and Exchange Commission with respect to any stock of the Company and the Company has no obligation or current intention to register the Shares under the Securities Act.

11. Withholding Taxes; Section 83(b) Election.

(a) The Participant acknowledges and agrees that the Company has the right to deduct from payments of any kind otherwise due to the Participant any federal, state or local taxes of any kind required by law to be withheld with respect to the purchase of the Shares by the Participant or the lapse of the Purchase Option.

(b) The Participant has reviewed with the Participant's own tax advisors the federal, state, local and foreign tax consequences of this investment and the transactions contemplated by this Agreement. The Participant is relying solely on such advisors and not on any statements or representations of the Company or any of its agents. The Participant understands that the Participant (and not the Company) shall be responsible for the Participant's own tax liability that may arise as a result of this investment or the transactions contemplated by this Agreement. The Participant understands that it may be beneficial in many circumstances to elect to be taxed at the time the Shares are purchased rather than when and as the Company's Purchase Option expires by filing an election under Section 83(b) of the Internal Revenue Code of 1986 with the I.R.S. within 30 days from the date of purchase.

THE PARTICIPANT ACKNOWLEDGES THAT IT IS SOLELY THE PARTICIPANT'S RESPONSIBILITY AND NOT THE COMPANY'S TO FILE TIMELY THE ELECTION UNDER SECTION 83(b), EVEN IF THE PARTICIPANT REQUESTS THE COMPANY OR ITS REPRESENTATIVES TO MAKE THIS FILING ON THE PARTICIPANT'S BEHALF.

12. Miscellaneous.

(a) No Rights to Employment. The Participant acknowledges and agrees that the vesting of the Shares pursuant to Section 2 hereof is earned only by continuing service as an employee at the will of the Company (not through the act of being hired or purchasing shares hereunder). The

Participant further acknowledges and agrees that the transactions contemplated hereunder and the vesting schedule set forth herein do not constitute an express or implied promise of continued engagement as an employee or consultant for the vesting period, for any period, or at all.

(b) Severability. The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement, and each other provision of this Agreement shall be severable and enforceable to the extent permitted by law.

(c) Waiver. Any provision for the benefit of the Company contained in this Agreement may be waived, either generally or in any particular instance, by the Board of Directors of the Company.

(d) Binding Effect. This Agreement shall be binding upon and inure to the benefit of the Company and the Participant and their respective heirs, executors, administrators, legal representatives, successors and assigns, subject to the restrictions on transfer set forth in Sections 4 and 5 of this Agreement.

(e) Notice. All notices required or permitted hereunder shall be in writing and deemed effectively given upon personal delivery or five days after deposit in the United States Post Office, by registered or certified mail, postage prepaid, addressed to the other party hereto at the address shown beneath his or its respective signature to this Agreement, or at such other address or addresses as either party shall designate to the other in accordance with this Section 12(e).

(f) Pronouns. Whenever the context may require, any pronouns used in this Agreement shall include the corresponding masculine, feminine or neuter forms, and the singular form of nouns and pronouns shall include the plural, and vice versa.

(g) Entire Agreement. This Agreement and the Plan constitute the entire agreement between the parties, and supersedes all prior agreements and understandings, relating to the subject matter of this Agreement.

(h) Amendment. This Agreement may be amended or modified only by a written instrument executed by both the Company and the Participant.

(i) Governing Law. This Agreement shall be construed, interpreted and enforced in accordance with the internal laws of the State of Delaware without regard to any applicable conflicts of laws.

(j) Participant's Acknowledgments. The Participant acknowledges that he or she: (i) has read this Agreement; (ii) has been represented in the preparation, negotiation, and execution of this Agreement by legal counsel of the Participant's own choice or has voluntarily declined to seek such counsel; (iii) understands the terms and consequences of this Agreement; (iv) is fully aware of the legal and binding effect of this Agreement; and (v) understands that the law firm of WilmerHale, is acting as counsel to the Company in connection with the transactions contemplated by the Agreement, and is not acting as counsel for the Participant.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

CASA SYSTEMS, INC.

By: _____

Title: _____

Address:

[Name of Participant]

Address: _____

Exhibit A

CASA SYSTEMS, INC.

Joint Escrow Instructions

_____, 20__

Casa Systems, Inc.
100 Old River Road, Unit 100
Andover, MA 01810
Attn: Secretary

Dear Sir:

As Escrow Agent for Casa Systems, Inc., a Delaware corporation (the "Company"), and its successors in interest under the Restricted Stock Agreement (the "Agreement") of even date herewith, to which a copy of these Joint Escrow Instructions is attached, and the undersigned person ("Holder"), you are hereby authorized and directed to hold the documents delivered to you pursuant to the terms of the Agreement in accordance with the following instructions:

1. Appointment. Holder irrevocably authorizes the Company to deposit with you any certificates evidencing Shares (as defined in the Agreement) to be held by you hereunder and any additions and substitutions to said Shares. For purposes of these Joint Escrow Instructions, "Shares" shall be deemed to include any additional or substitute property. Holder does hereby irrevocably constitute and appoint you as his attorney-in-fact and agent for the term of this escrow to execute with respect to such Shares all documents necessary or appropriate to make such Shares negotiable and to complete any transaction herein contemplated. Subject to the provisions of this Section 1 and the terms of the Agreement, Holder shall exercise all rights and privileges of a stockholder of the Company while the Shares are held by you.

2. Closing of Purchase.

(a) Upon any purchase by the Company of the Shares pursuant to the Agreement, the Company shall give to Holder and you a written notice specifying the number of Shares to be purchased, the purchase price for the Shares, as determined pursuant to the Agreement, and the time for a closing hereunder (the "Closing") at the principal office of the Company. Holder and the Company hereby irrevocably authorize and direct you to close the transaction contemplated by such notice in accordance with the terms of said notice.

(b) At the Closing, you are directed (i) to date the stock assignment form or forms necessary for the transfer of the Shares, (ii) to fill in on such form or forms the number of Shares being transferred, and (iii) to deliver the same, together with the certificate or certificates evidencing the Shares to be transferred, to the Company against the simultaneous delivery to you of the purchase price for the Shares being purchased pursuant to the Agreement.

3. Withdrawal. The Holder shall have the right to withdraw from this escrow any Shares as to which the Purchase Option (as defined in the Agreement) has terminated or expired.

4. Duties of Escrow Agent.

(a) Your duties hereunder may be altered, amended, modified or revoked only by a writing signed by all of the parties hereto.

(b) You shall be obligated only for the performance of such duties as are specifically set forth herein and may rely and shall be protected in relying or refraining from acting on any instrument reasonably believed by you to be genuine and to have been signed or presented by the proper party or parties. You shall not be personally liable for any act you may do or omit to do hereunder as Escrow Agent or as attorney-in-fact of Holder while acting in good faith and in the exercise of your own good judgment, and any act done or omitted by you pursuant to the advice of your own attorneys shall be conclusive evidence of such good faith.

(c) You are hereby expressly authorized to disregard any and all warnings given by any of the parties hereto or by any other person or entity, excepting only orders or process of courts of law, and are hereby expressly authorized to comply with and obey orders, judgments or decrees of any court. If you are uncertain of any actions to be taken or instructions to be followed, you may refuse to act in the absence of an order, judgment or decrees of a court. In case you obey or comply with any such order, judgment or decree of any court, you shall not be liable to any of the parties hereto or to any other person or entity, by reason of such compliance, notwithstanding any such order, judgment or decree being subsequently reversed, modified, annulled, set aside, vacated or found to have been entered without jurisdiction.

(d) You shall not be liable in any respect on account of the identity, authority or rights of the parties executing or delivering or purporting to execute or deliver the Agreement or any documents or papers deposited or called for hereunder.

(e) You shall be entitled to employ such legal counsel and other experts as you may deem necessary properly to advise you in connection with your obligations hereunder and may rely upon the advice of such counsel.

(f) Your rights and responsibilities as Escrow Agent hereunder shall terminate if (i) you cease to be Secretary of the Company or (ii) you resign by written notice to each party. In the event of a termination under clause (i), your successor as Secretary shall become Escrow Agent hereunder; in the event of a termination under clause (ii), the Company shall appoint a successor Escrow Agent hereunder.

(g) If you reasonably require other or further instruments in connection with these Joint Escrow Instructions or obligations in respect hereto, the necessary parties hereto shall join in furnishing such instruments.

(h) It is understood and agreed that if you believe a dispute has arisen with respect to the delivery and/or ownership or right of possession of the securities held by you hereunder, you are authorized and directed to retain in your possession without liability to anyone all or any part of said securities until such dispute shall have been settled either by mutual written agreement of the parties concerned or by a final order, decree or judgment of a court of competent jurisdiction after the time for appeal has expired and no appeal has been perfected, but you shall be under no duty whatsoever to institute or defend any such proceedings.

(i) These Joint Escrow Instructions set forth your sole duties with respect to any and all matters pertinent hereto and no implied duties or obligations shall be read into these Joint Escrow Instructions against you.

(j) The Company shall indemnify you and hold you harmless against any and all damages, losses, liabilities, costs, and expenses, including attorneys' fees and disbursements, (including without limitation the fees of counsel retained pursuant to Section 4(e) above, for anything done or omitted to be done by you as Escrow Agent in connection with this Agreement or the performance of your duties hereunder, except such as shall result from your gross negligence or willful misconduct.

5. Notice. Any notice required or permitted hereunder shall be given in writing and shall be deemed effectively given upon personal delivery or upon deposit in the United States Post Office, by registered or certified mail with postage and fees prepaid, addressed to each of the other parties thereunto entitled at the following addresses, or at such other addresses as a party may designate by ten days' advance written notice to each of the other parties hereto.

| | |
|---------------|---|
| COMPANY: | Notices to the Company shall be sent to the address set forth in the salutation hereto, Attn: President |
| HOLDER: | Notices to Holder shall be sent to the address set forth below Holder's signature below. |
| ESCROW AGENT: | Notices to the Escrow Agent shall be sent to the address set forth in the salutation hereto. |

6. Miscellaneous.

(a) By signing these Joint Escrow Instructions, you become a party hereto only for the purpose of said Joint Escrow Instructions, and you do not become a party to the Agreement.

(b) This instrument shall be binding upon and inure to the benefit of the parties hereto and their respective successors and permitted assigns.

[Remainder of Page Intentionally Left Blank]

Very truly yours,

CASA SYSTEMS, INC.

By: _____

Title: _____

HOLDER:

(Signature)

Print Name

Address: _____

Date Signed: _____

ESCROW AGENT:

, Secretary

Exhibit B

(STOCK ASSIGNMENT SEPARATE FROM CERTIFICATE)

FOR VALUE RECEIVED, I hereby sell, assign and transfer unto _____ (_____) shares of Common Stock, \$0.001 par value per share, of Casa Systems, Inc. (the "Corporation") standing in my name on the books of the Corporation represented by Certificate(s) Number _____ herewith, and do hereby irrevocably constitute and appoint _____ attorney to transfer the said stock on the books of the Corporation with full power of substitution in the premises.

Dated: _____

[Name of Participant]

NOTICE: The signature(s) to this assignment must correspond with the name as written upon the face of the certificate, in every particular, without alteration, enlargement, or any change whatever and must be guaranteed by a commercial bank, trust company or member firm of the Boston, New York or Midwest Stock Exchange.

CASA SYSTEMS, INC.

Restricted Stock Unit Award Agreement
Granted Under 2011 Stock Incentive Plan1. Grant of RSUs.

This agreement (this "Agreement") evidences the grant by Casa Systems, Inc., a Delaware corporation (the "Company"), on _____, 201____ to _____, an employee of the Company (the "Participant"), of an award of a total of _____ restricted stock units (the "Award"), on the terms provided herein and in the Company's 2011 Stock Incentive Plan (the "Plan"). Each restricted stock unit entitles the Participant to one share of common stock, \$0.001 par value per share ("Common Stock"), of the Company, subject to continued employment, upon vesting.

2. Vesting Schedule.

(a) Upon the vesting of this Award, as described in this Section, the Company shall deliver to the Participant for each restricted stock unit that becomes vested, one (1) share of Common Stock (each such share, a "Share," and such shares collectively, the "Shares"); provided, however, that the Company shall withhold from the Participant at the time of delivery of the Shares the amount that the Company determines necessary to pay applicable withholding taxes as and to the extent provided in Section 8 below; and provided, further, that any fraction of a Share otherwise deliverable to the Participant as a result of a computation made pursuant to this Section or Section 8 shall be rounded down to the nearest whole Share. The Common Stock shall be delivered as soon as practicable following each vesting date or event set forth below, but in any case within 30 days after such date or event.

(b) Subject to Sections 2(c), 2(d) and 3, [25%] of the Restricted Stock Units shall become vested and payable to the Participant on the first anniversary of the Vesting Commencement Date (as defined below), [25%] of the Restricted Stock Units shall become vested and payable to the Participant on the second anniversary of the Vesting Commencement Date, [25%] of the Restricted Stock Units shall become vested and payable to the Participant on the third anniversary of the Vesting Commencement Date, and [25%] of the Restricted Stock Units shall become vested and payable to the Participant on the fourth anniversary of the Vesting Commencement Date, in each case so long as the Participant remains employed with the Company through each such vesting date.

(c) Notwithstanding Section 2(b), if the Participant dies or becomes disabled (within the meaning of Section 22(e)(3) of the Code) prior to the date on which all Restricted Stock Units have become vested and prior to the date on which the unvested portion of this Award has been terminated pursuant to Section 3, upon the Participant's death or disability, this Award shall become immediately and fully vested.

(d) Notwithstanding Section 2(b), if within twelve months following a Sale (as defined below) of the Company, the Participant's employment with the Company or the acquiring or succeeding corporation is terminated for Good Reason (as defined below) by the Participant in accordance with Good Reason Process (as defined below) or is terminated without

Cause (as defined below) by the Company or the acquiring or succeeding corporation, this Award shall become immediately and fully vested.

For purposes of this agreement, the following term shall have the following meaning:

“Good Reason” shall exist upon (i) a material diminution in Participant’s base compensation; (ii) a material diminution in Participant’s then authority, duties or responsibilities; (iii) a material change in geographic location at which participant performs services; or (iv) any material breach by the Company of this Agreement.

“Good Reason Process” means the following series of actions: (i) the Participant reasonably determines in good faith that Good Reason exists, (ii) the Participant notifies the Company or the acquiring or succeeding corporation in writing of the existence of Good Reason within 60 days of the occurrence of the event that gave rise to the existence of Good Reason, (iii) the Participant cooperates in good faith with the Company’s (or the acquiring or succeeding corporation’s) efforts to remedy the conditions that gave rise to the existence of Good Reason for a period of 30 days following such notice (such 30 day period, the “Cure Period”), (iv) notwithstanding such efforts, Good Reason continues to exist and (v) the Participant terminates his employment within 30 days after the end of the Cure Period. For the avoidance of doubt, if the Company or the acquiring or succeeding corporation successfully remedies the conditions that gave rise to the existence of Good Reason during the Cure Period, Good Reason shall be deemed not to have existed.

If the Participant is party to an employment, consulting or severance agreement with the Company that contains a definition of “cause” for termination of employment or other relationship, “Cause” shall have the meaning ascribed to such term in such agreement. Otherwise, “Cause” shall mean willful misconduct by the Participant or willful failure by the Participant to perform his or her responsibilities to the Company (including, without limitation, breach by the Participant of any provision of any employment, consulting, advisory, nondisclosure, non-competition or other similar agreement between the Participant and the Company), as determined by the Company, which determination shall be conclusive. The Participant’s employment or other relationship shall be considered to have been terminated for “Cause” if the Company determines, within 30 days after the Participant’s resignation, that termination for Cause was warranted.

3. Termination of Employment.

Notwithstanding any other provision of the Plan to the contrary, upon the termination of the Participant’s employment with the Company and its subsidiaries for any reason whatsoever, this Award, to the extent not yet vested, shall immediately and automatically terminate; provided, however, that the Board of Directors of the Company (the “Board”) may, in its sole and absolute discretion and pursuant to the terms and provisions of the Plan, agree to accelerate the vesting of this Award, upon termination of employment or otherwise, for any reason or no reason, but shall have no obligation to do so.

For purposes of the Plan and this Award, a termination of employment shall be deemed to have occurred on the date upon which the Participant ceases to perform active employment

duties for the Company following the provision of any notification of termination or resignation from employment, and without regard to any period of notice of termination of employment (whether expressed or implied) or any period of severance or salary continuation. Notwithstanding any other provision of the Plan, or this Agreement or any other agreement (written or oral) to the contrary, the Participant shall not be entitled (and by accepting an Award, thereby irrevocably waives any such entitlement) to any payment or other benefit to compensate the Participant for the loss of any rights under the Plan as a result of the termination or expiration of an Award in connection with any termination of employment. No amounts earned pursuant to the Plan or any Award shall be deemed to be eligible compensation in respect of any other plan of the Company or any of its subsidiaries.

4. Company Right of First Refusal.

(a) Notice of Proposed Transfer. If the Participant proposes to sell, assign, transfer, pledge, hypothecate or otherwise dispose of, by operation of law or otherwise (collectively, "transfer") any Shares acquired upon the vesting of this Award, then the Participant shall first give written notice of the proposed transfer (the "Transfer Notice") to the Company. The Transfer Notice shall name the proposed transferee and state the number of such Shares the Participant proposes to transfer (the "Offered Shares"), the price per share and all other material terms and conditions of the transfer.

(b) Company Right to Purchase. For 30 days following its receipt of such Transfer Notice, the Company shall have the option to purchase all or part of the Offered Shares at the price and upon the terms set forth in the Transfer Notice. In the event the Company elects to purchase all or part of the Offered Shares, it shall give written notice of such election to the Participant within such 30-day period. Within 10 days after his or her receipt of such notice, the Participant shall tender to the Company at its principal offices the certificate or certificates representing the Offered Shares to be purchased by the Company, duly endorsed in blank by the Participant or with duly endorsed stock powers attached thereto, all in a form suitable for transfer of the Offered Shares to the Company. Promptly following receipt of such certificate or certificates, the Company shall deliver or mail to the Participant a check in payment of the purchase price for such Offered Shares; provided that if the terms of payment set forth in the Transfer Notice were other than cash against delivery, the Company may pay for the Offered Shares on the same terms and conditions as were set forth in the Transfer Notice; and provided further that any delay in making such payment shall not invalidate the Company's exercise of its option to purchase the Offered Shares.

(c) Shares Not Purchased By Company. If the Company does not elect to acquire all of the Offered Shares, the Participant may, within the 30-day period following the expiration of the option granted to the Company under subsection (b) above, transfer the Offered Shares which the Company has not elected to acquire to the proposed transferee, provided that such transfer shall not be on terms and conditions more favorable to the transferee than those contained in the Transfer Notice. Notwithstanding any of the above, all Offered Shares transferred pursuant to this Section 4 shall remain subject to the right of first refusal set forth in this Section 4 and such transferee shall, as a condition to such transfer, deliver to the Company a written instrument confirming that such transferee shall be bound by all of the terms and conditions of this Section 4.

(d) Consequences of Non-Delivery. After the time at which the Offered Shares are required to be delivered to the Company for transfer to the Company pursuant to subsection (b) above, the Company shall not pay any dividend to the Participant on account of such Offered Shares or permit the Participant to exercise any of the privileges or rights of a stockholder with respect to such Offered Shares, but shall, insofar as permitted by law, treat the Company as the owner of such Offered Shares.

(e) Exempt Transactions. The following transactions shall be exempt from the provisions of this Section 4:

(1) any transfer of Shares to or for the benefit of any spouse, child or grandchild of the Participant, or to a trust for their benefit;

(2) any transfer pursuant to an effective registration statement filed by the Company under the Securities Act of 1933, as amended (the "Securities Act"); and

(3) the sale of all or substantially all of the outstanding shares of capital stock of the Company (including pursuant to a merger or consolidation);

provided, however, that in the case of a transfer pursuant to clause (1) above, such Shares shall remain subject to the right of first refusal set forth in this Section 4.

(f) Assignment of Company Right. The Company may assign its rights to purchase Offered Shares in any particular transaction under this Section 4 to one or more persons or entities

(g) The provisions of this Section 4 shall terminate upon the earlier of the following events:

(1) the closing of the sale of shares of Common Stock in an underwritten public offering pursuant to an effective registration statement filed by the Company under the Securities Act; or

(2) the sale of all or substantially all of the outstanding shares of capital stock, assets or business of the Company, by merger, consolidation, sale of assets or otherwise (other than a merger or consolidation in which all or substantially all of the individuals and entities who were beneficial owners of the Company's voting securities immediately prior to such transaction beneficially own, directly or indirectly, more than 75% (determined on an as-converted basis) of the outstanding securities entitled to vote generally in the election of directors of the resulting, surviving or acquiring corporation in such transaction). A transaction of the type contemplated in this Section 4(g)(2) is referred to herein as a "Sale" of the Company.

(h) The Company shall not be required (1) to transfer on its books any of the Shares which shall have been sold or transferred in violation of any of the provisions set forth in this Section 4, or (2) to treat as owner of such Shares or to pay dividends to any transferee to whom any such Shares shall have been so sold or transferred.

(i) Legends. The certificate representing Shares shall bear a legend substantially in the following form (in addition to, or in combination with, any legend required by applicable federal and state securities laws and agreements relating to the transfer of the Company securities):

“The shares represented by this certificate are subject to a right of first refusal in favor of the Company, as provided in a certain restricted stock unit award agreement with the Company.”

5. Agreement in Connection with Initial Public Offering.

The Participant agrees, in connection with the initial underwritten public offering of the Common Stock pursuant to a registration statement under the Securities Act, (i) not to (a) offer, pledge, announce the intention to sell, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any other securities of the Company or (b) enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of shares of Common Stock or other securities of the Company, whether any transaction described in clause (a) or (b) is to be settled by delivery of securities, in cash or otherwise, during the period beginning on the date of the filing of such registration statement with the Securities and Exchange Commission and ending 180 days after the date of the final prospectus relating to the offering (plus up to an additional 34 days to the extent requested by the managing underwriters for such offering in order to address FINRA Rule 2711(f)(4) or NYSE Rule 472(f)(4) or any similar successor provision), and (ii) to execute any agreement reflecting clause (i) above as may be requested by the Company or the managing underwriters at the time of such offering. The Company may impose stop-transfer instructions with respect to the shares of Common Stock or other securities subject to the foregoing restriction until the end of the “lock-up” period.

6. No Assignment; Transfer Restrictions.

(a) Except as expressly permitted under the Plan, this Agreement may not be assigned by the Participant by operation of law or otherwise.

(b) The Participant agrees that he or she will not transfer any Shares issued pursuant to this Award unless the transferee, as a condition to such transfer, delivers to the Company a written instrument confirming that such transferee shall be bound by all of the terms and conditions of Section 4 and Section 5; provided that such a written confirmation shall not be required with respect to (1) Section 4 after such provision has terminated in accordance with Section 4(g) or (2) Section 5 after the completion of the lock-up period in connection with the Company’s initial underwritten public offering.

7. No Rights to Continued Employment.

Neither this Agreement nor this Award shall be construed as giving the Participant any right to continue in the employ of the Company or any of its subsidiaries, or shall interfere in any way with the right of the Company to terminate such employment.

8. Tax Obligations.

As a condition to the granting of this Award and the vesting thereof, the Participant acknowledges and agrees that he/she is responsible for the payment of income and employment taxes (and any other taxes required to be withheld) payable in connection with the vesting of an Award. The Company shall retain and withhold from delivery at the time of vesting that number of Shares having a fair market value equal to the taxes owed by the Participant, which retained Shares shall fund the payment of such taxes by the Company on behalf of the Participant. Notwithstanding the immediately preceding sentence, the Participant may, by written notice to the Company delivered not less than five days prior to a vesting date, elect to remit to the Company or any applicable subsidiary an amount sufficient to pay such taxes in lieu of the Company retaining and withholding Shares to fund the payment of such taxes. If the Participant makes such an election, the Participant shall make such payment to the Company or the applicable subsidiary of the Company on or before the applicable vesting date in a form that is reasonably acceptable to the Company, as the Company may determine in its sole discretion.

9. Notices.

All notices required or permitted hereunder shall be in writing and deemed effectively given upon personal delivery or five days after deposit in the United States Post Office, by registered or certified mail, postage prepaid, addressed to the other party hereto at the address shown beneath his or its respective signature to this Agreement, or at such other address or addresses as either party shall designate to the other in accordance with this Section 9.

10. Failure to Enforce Not a Waiver.

The failure of the Company to enforce at any time any provision of this Agreement shall in no way be construed to be a waiver of such provision or of any other provision hereof.

11. Amendments.

This Agreement may be amended or modified at any time by an instrument in writing signed by the parties hereto.

12. Authority.

The Board has complete authority and discretion to determine Awards, and to interpret and construe the terms of the Plan and this Agreement. The determination of the Board as to any matter relating to the interpretation or construction of the Plan or this Agreement shall be final, binding and conclusive on all parties.

13. Rights as a Stockholder.

The Participant shall have no rights as a stockholder of the Company with respect to any shares of common stock of the Company underlying or relating to any Award until the issuance of a stock certificate to the Participant in respect of such Award.

14. Provisions of the Plan.

This Award is subject to the provisions of the Plan (including the provisions relating to amendments to the Plan), a copy of which is furnished to the Participant with this Award.

IN WITNESS WHEREOF, the Company has caused this Award to be executed under its corporate seal by its duly authorized officer. This Award shall take effect as a sealed instrument.

CASA SYSTEMS, INC.

By: _____

Name: _____

Title: _____

PARTICIPANT'S ACCEPTANCE

The undersigned hereby accepts the foregoing Award and agrees to the terms and conditions thereof. The undersigned hereby acknowledges receipt of a copy of the Company's 2011 Stock Incentive Plan.

PARTICIPANT:

Address: _____

Casa Systems, Inc.*100 Old River Road, Unit 100**Andover, MA 01810**Telephone (978) 688-6706**Fax (978) 688-6584**Web <http://www.casa-systems.com>*

CASA

May 25, 2011

Gary D. Hall

[]

Dear Gary:

On behalf of Casa Systems, Inc. (the "Company"), I am pleased to set forth the terms of your employment with the Company:

1. You will be employed to serve on a full-time basis as the Chief Financial Officer (CFO), effective June 27th, 2011. As the CFO of the Company, you will report to the Chief Executive Officer of the Company and be responsible for finance, accounting, treasury, tax plus such other duties as may from time to time be assigned to you by the Company.

2. Your total compensation will include base salary, bonus and stock options. Your starting base salary rate will be US\$17,500 dollars per month, which annualized is equivalent to US\$210,000 dollars, subject to taxes and other withholdings as required by law. Such salary and bonus may be adjusted from time to time in accordance with normal business practice and in the sole discretion of the Company. Your target annual bonus (prorated if less than twelve-month period) will be \$60,000 based on the Company and you achieving goals set by the Board of Directors.

3. Subject to the approval of the Board of Directors of the Company, the Company may grant to you an incentive stock option (the "Option") under the Company's 2003 Stock Incentive Plan (the "Plan") for the purchase of an aggregate of 60,000 shares of common stock of the Company at a price per share equal to the fair market value at the time of Board approval. The Option shall be subject to all terms, vesting schedules and other provisions set forth in the Plan and in a separate option agreement.

4. You may participate in any and all benefit programs that the Company establishes and makes available to its employees from time to time, provided that you are eligible under (and subject to all provisions of) the plan documents governing those programs. The benefits made available by the Company, and the rules, terms and conditions for participation in such programs, may be changed by the Company at any time without advance notice.

5. You will be eligible for a maximum of fifteen (15) days of vacation per calendar year subject to proration to your date of hire and to be taken at such times as may be approved by the Company. The number of vacation days for which you are eligible shall accrue at the rate of 1.25 days per month that you are employed during such calendar year.

6. Following a Sale of the Company, should you be discharged by the Company or the acquiring company without Cause or if you terminate your employment with the Company for Good Reason within six (6) months of the Sale of the Company, then, subject to the Company's receipt of an effective general release in a form and scope acceptable to the Company within 30 days after your termination, you will be provided with the following severance package:

- 12 months base salary (total US\$210,000) and 12 months medical and dental insurance coverage.
- One-year acceleration of your stock option grant specified in this offer.

“Cause” shall mean willful misconduct by the employee or willful failure by the employee to perform his or her responsibilities to the Company (including, without limitation, breach by the employee of any provision of any employment, consulting, advisory, nondisclosure, non on or other similar agreement between the employee and the Company), as determined by the Company, which determination shall be conclusive. The employee shall be considered to have been discharged for “Cause” if the Company determines, within 30 days after the employee's resignation, that termination for Cause was warranted.

“Good Reason” shall mean that you have complied with the Good Reason Process following the occurrence of any of the following events:

1. The demotion of your title or a material reduction in your responsibility or authority for the operations of the Company, which includes not serving as the Chief Financial Officer of the acquiring or surviving entity, without your written consent,
2. A material reduction in your then current base salary without your written consent, or
3. The relocation of your office more than 30 miles from your then current office location without your written consent.

“Good Reason Process” means that (i) you have reasonably determined in good faith that a Good Reason condition has occurred; (ii) you notify the Company in writing of the occurrence of the Good Reason condition within 60 days of the occurrence of such condition; (iii) you cooperate in good faith with the Company's efforts, for a period of 30 days following such notice (the ‘Cure Period’), to remedy the condition; (iv) notwithstanding such efforts, the Good Reason condition continues to exist; and (v) you terminate your employment within 30 days after the end of the Cure Period. If the Company cures the Good Reason condition during the Cure Period, Good Reason shall be deemed out to have occurred.”

“Sale” shall mean the sale of all or substantially all of the outstanding shares of capital stock, assets or business of the Company, by merger, consolidation, sale of assets or otherwise (other than a merger or consolidation in which all or substantially all of the individuals and entities who were beneficial owners of the Common Stock immediately prior to such transaction beneficially own, directly or indirectly, more than 50% of the outstanding securities entitled to vote generally in the election of directors of the resulting, surviving or acquiring corporation in such transaction).

7. You will be required to execute an Assignment, Invention and Non-Disclosure Agreement and a Non-Competition and Non-Solicitation Agreement in the forms attached as a condition of employment

8. You represent that you are not bound by any employment contract, restrictive covenant or other restriction preventing you from entering into employment with or carrying out your responsibilities for the Company, or which is in any way inconsistent with the terms of this letter.

9. In accordance with federal law, you will be required to provide the Company with documentation of your identity and eligibility to work in the United States. You agree to provide to the Company, within three days following your hire date, such documentation, as required by the Immigration Reform and Control Act of 1986. This documentation can be a U.S. Passport or a valid driver’s license and a U.S. birth certificate or U.S. Social Security card. Please refer to the I-9 Form enclosed for all other types of acceptable documentation. You may need to obtain a work visa in order to be eligible to work in the United States. If that is the case, your employment with the Company will be conditioned upon your obtaining a work visa in a timely manner as determined by the Company.

10. This offer is contingent upon a satisfactory background check. This letter shall not be construed as an agreement, either expressed or implied, to employ you for any stated term, and shall in no way alter the Company’s policy of “employment at will”, under which both you and the Company remain free to terminate the employment relationship, with or without cause, at any time, with or without notice. Similarly, nothing in this letter shall be construed as an agreement, either express or implied, to pay you any compensation or grant you any benefit beyond the end of your employment with the Company.

If you agree with the initial terms of your employment with the Company as set forth in this letter, please sign the enclosed duplicate of this letter in the space provided below and return it to me or, by June 18th, 2011. If you do not accept this offer by June 18th, 2011, this offer will be revoked.

Very Truly Yours

/s/ Jerry Guo

By: _____

Name: Jerry Guo

Title: President and CEO

The foregoing correctly sets forth the initial terms of my at-will employment by Casa Systems Inc.

/s/ Gary D. Hall

Date: 6/16/11

Name: Gary D. Hall

Enclosures: Assignment, Invention and Non-Disclosure Agreement
Non-competition and Non-Solicitation Agreement
I-9 Form



100 Old River Road, Unit 100
 Andover, MA 01810 USA
 Phone: 978-688-6706 Fax: (978) 688-6584
 Web: <http://casa-systems.com>

August 18, 2012

Abraham Pucheril

[]

Dear Abraham,

On behalf of Casa Systems, Inc. (the "Company"), I am pleased to set forth the terms of your employment with the Company:

1) You will be employed to serve on a full-time basis as Vice President of Worldwide Sales, effective August 20, 2012. In this role, you will report to the CEO of the Company or a senior operational executive designated by the CEO, and will be responsible for worldwide sales except China; plus such other duties as may from time to time be assigned to you by the Company.

2) Your total compensation includes base salary, management bonus, sales bonus, and stock options. Your starting cash compensation is specified below, subject to taxes and other withholdings as required by law. Such compensation may be adjusted from time to time in accordance with normal business practice and in the sole discretion of the Company. All compensations are in US dollars.

- a) Base Salary: \$19,167 per month, which annualized is equivalent to \$230,004 dollars.
- b) Management bonus of \$30,000 per year depending on the performance of the Company and the performance of your management duties evaluated during the first quarter of the following year
- c) Sales bonus: Target sales bonus is \$60,000 per quarter (3-month period) payable quarterly, which is equivalent to \$240,000 when annualized.
 - i) Your sales bonus for 2012 is specified below:

For the remaining period in Q3 2012, you will be paid the target bonus prorated based on the number of days you work

For Q4, 2012, your sales bonus are based on: 1) sales revenue to Liberty Global Inc. and all its subsidiaries on target sales revenue of \$5,000,000; 2) company on target sales revenue of \$15,500,000.

- (a) $LGI\ Accounts\ Q4\ Revenue / \$5,000,000 * \$30,000$
- (b) $(LGI\ Accounts\ Q4\ Revenue - \$5,000,000) / \$5,000,000 * \$30,000 * 1.5$
- (c) $Company\ Q4\ Revenue / \$15,500,000 * \$30,000$
- (d) $(Company\ Q4\ Revenue - \$15,500,000) / \$15,500,000 * \$30,000 * 1.5$

(e) Revenue is recognized when products are shipped according to GAAP

ii) Your sales bonus in 2013 will be calculated based on sales revenue worldwide except China with the target revenue determined by the Company and its Board

3) You may participate in any and all bonus and benefit programs that the Company establishes and makes available to its employees from time to time, provided that you are eligible under (and subject to all provisions of) the plan documents governing those programs. The benefits made available by the Company, and the rules, terms and conditions for participation in such programs, may be changed by the Company at any time without advance notice.

4) Subject to the approval of the Board of Directors of the Company, the Company may grant to you an incentive stock option (the "Option") under the Company's Stock Incentive Plan (the "Plan") for the purchase of an aggregate of sixty thousand (60,000) shares of common stock of the Company at a price per share equal to the fair market value at the time of Board approval. The Option shall be subject to all terms, vesting schedules and other provisions set forth in the Plan and in a separate option agreement.

5) You will be eligible for a maximum of fifteen (15) days of vacation per calendar year subject to proration to your date of hire and to be taken at such times as may be approved by the Company. The number of vacation days for which you are eligible shall accrue at the rate of .8333 day per month that you are employed during such calendar year.

6) You will be required to execute an Assignment, Invention and Non-Disclosure Agreement and a Non-Competition and Non-Solicitation Agreement in the forms attached as a condition of employment.

7) You represent that you are not bound by any employment contract, restrictive covenant or other restriction preventing you from entering into employment with or carrying out your responsibilities for the Company, or which is in any way inconsistent with the terms of this letter.

8) In accordance with federal law, you will be required to provide the Company with documentation of your identity and eligibility to work in the United States. You agree to provide to the Company, within three days following your hire date, such documentation, as required by the Immigration Reform and Control Act of 1986. This documentation can be a U.S. Passport **or** a valid driver's license **and** a U.S. birth certificate or U.S. Social Security card. Please refer to the I-9 Form enclosed for all other types of acceptable documentation. You may need to obtain a work visa in order to be eligible to work in the United States. If that is the case, your employment with the Company will be conditioned upon your obtaining a work visa in a timely manner as determined by the Company.

9) This letter shall not be construed as an agreement, either expressed or implied, to employ you for any stated term, and shall in no way alter the Company's policy of "employment at will", under which both you and the Company remain free to terminate the employment relationship, with or without cause, at any time, with or without notice. Similarly, nothing in this letter shall be construed as an agreement, either express or implied, to pay you any compensation or grant you any benefit beyond the end of your employment with the Company.

If you agree with the initial terms of your employment with the Company as set forth in this letter, please sign the enclosed duplicate of this letter in the space provided below and return it to me or Diane Brown, Director of Human Resources. If you do not accept this offer by August 20, 2012 this offer will be revoked.

Please plan on being available at 9:30 a.m. on your first day of employment for orientation with Diane Brown, Director of Human Resources. Your manager will be available following orientation to assist you with your initial introduction and assimilation to Casa Systems.

Very Truly Yours,

By: /s/ Jerry Guo

Name: Jerry Guo

Title: President & CEO

The foregoing correctly sets forth the initial terms of my at-will employment by Casa Systems, Inc.

/s/ Abraham Pucheril

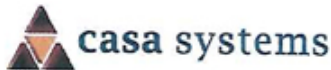
Name: Abraham Pucheril

Date: Aug 20/2012

Enclosures:

Assignment, invention and Non-Disclosure Agreement
Non-Competition and Non-Solicitation Agreement

1-9 Form
Benefit Summary Sheet



CONSULTING AGREEMENT

THIS CONSULTING AGREEMENT (the "Agreement"), made this 5th day of March, 2012 is entered into by Casa Systems, Inc., a Delaware corporation with its principal place of business at 100 Old River Road, Andover, MA 01810, USA (the "Company"), and William Styslinger, an individual residing at 15 Boscombe Overcliff Drive, Bournemouth BH5 1LN UK 01720 (the "Consultant").

INTRODUCTION

The Company and the Consultant desire to establish the terms and conditions under which the Consultant will provide services to the Company. In consideration of the mutual covenants and promises contained herein and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by the parties hereto, the parties agree as follows:

1. Title and Services. The Consultant shall be a senior advisor to the CEO of Casa Systems. The Consultant agrees to perform sales management, corporate strategy and other advisory services to the CEO of the Company as may be requested from time to time by the CEO of the Company and at the CEO's sole discretion, including, but not limited to, the services specified on Schedule A to this Agreement. The Consultant shall report to the CEO of the Company. The Consultant agrees to devote at least 20 hours per week to the performance of such services. During the Consultation Period (as defined below) and for a period of twelve (12) months thereafter, the Consultant shall not engage in any activity that has a conflict of interest with the Company, including any competitive employment, business, or other activity, and he shall not assist any other person or organization that competes, or intends to compete, with the Company.

2. Term. This Agreement shall commence on the date of the 1ST of February, 2012 and shall continue until the 31ST of January, 2014 (such period, as it may be extended by one year through mutual agreement, being referred to as the "Consultation Period"), unless sooner terminated in accordance with the provisions of Section 4.

3. Compensation.

3.1 Base Fee: In connection with his engagement under this Agreement, the Consultant shall receive a consulting fee of USD\$20,000 per month (equivalent to an annual base fee of \$240,000), subject to the Consultant's continued service hereunder.

3.2 Bonus: In addition, he will be eligible to receive the following annual bonus if the Company's annual GAAP revenue in a calendar year (Annual Revenue) reaches the annual target (Target). The Target for 2012 is USD\$50,000,000 recognizable revenue according to GAAP. The bonus is payable before the end of February of the following calendar year.

(a) None if Annual Revenue is below Target

(b) $25\% \times \$240,000 = \$60,000$ when Annual Revenue reaches Target.

(c) $(\text{Annual Revenue} - \text{Target}) / 20,000,000 \times \$240,000$ additional bonus if Annual Revenue is above Target

(d) The total annual bonus is capped at \$480,000 for a calendar year

3.3 Stock option: Subject to the approval of the Board of Directors of the Company, a) the Company may grant to you a non-qualified incentive stock option (the "Option") under the Company's 2011 Stock Incentive Plan (the "Plan") for the purchase of an aggregate of 40,000 shares of common stock of the Company at a price per share equal to the fair market value at the time of Board approval; You shall be responsible for all personal income taxes related to the Option and Restricted Stock. The Option shall vest in 36 months and be subject to all terms, vesting schedules and other provisions set forth in the Plan and in a separate incentive stock agreement.

3.4 Benefits. The Consultant shall not be entitled to any benefits, coverages or privileges, including, without limitation, social security, unemployment, medical or pension payments, made available to employees of the Company. The Consultant's relationship with Company shall be that of independent contractor and nothing in this Agreement shall be construed to create a partnership, joint venture, or employer-employee relationship. The Consultant is not an agent of Company and is not authorized to make any representation, warranty, contract or commitment on behalf of Company or with respect to Company's products.

3.5 The Consultant shall not be entitled to any of the benefits which Company may make available to its employees, such as group insurance, profit-sharing or retirement benefits. The Consultant shall be solely responsible for all tax returns and payments required to be filed with or made to the appropriate taxing authority with respect to the Consultant's performance of the Services and receipt of Fees under this Agreement.

3.6 Because the Consultant is an independent contractor, the Company shall not withhold or make payments for social security, unemployment insurance or disability insurance, or obtain workers' compensation insurance on the Consultant's behalf, if the applicable law requires such withholdings or payments. The Consultant shall accept exclusive liability for complying with all applicable governing laws, including obligations such as payment of taxes, social security, disability and other contributions based on Fees paid to the Consultant under this Agreement. The Consultant shall indemnify and defend and hold Company harmless from and against any and all claims for such taxes or contributions, including penalties and interest as well as any claims related to payment of compensation to Contract Personnel.

4. Termination. The Company, may terminate the Consultation Agreement effective immediately upon receipt of written notice to the Consultant with or without Cause. If the Company terminates this Consulting Agreement without Cause before the end of the Consulting Period, the Consultant shall be entitled to receive the Base Fee and stock option vesting for the remaining time of the Consulting Period or for twelve (12) months, whichever is shorter.

“Cause” shall mean willful misconduct by the Consultant or willful failure by the Consultant to perform his or her responsibilities to the Company (including, without limitation, breach by the Consultant of any provision of any employment, consulting, advisory, nondisclosure, noncompetition or other similar agreement between the Consultant and the Company), as determined by the Company, which determination shall be conclusive. The Consultant shall be considered to have been terminated for “Cause” if the Company determines, within 30 days after the Consultant’s termination, that termination for Cause was warranted.

4.1 Notwithstanding the foregoing, the Company may terminate the Consultation Period effective immediately upon receipt of written notice without any compensation due to cancellation, if the Consultant breaches or threatens to breach any provision of Section 6.

5. Cooperation. The Consultant shall use his best efforts in the performance of his obligations under this Agreement. The Company shall provide such access to its information and property as may be reasonably required in order to permit the Consultant to perform his obligations hereunder. The Consultant shall cooperate with the Company’s personnel, shall not interfere with the conduct of the Company’s business and shall observe all rules, regulations and security requirements of the Company concerning the safety of persons and property.

6. Inventions and Proprietary Information.

6.1 Inventions.

(a) All inventions, discoveries, computer programs, data, technology, designs, innovations and improvements (whether or not patentable and whether or not copyrightable) (“Inventions”) related to the business of the Company which are made, conceived, reduced to practice, created, written, designed or developed by the Consultant, solely or jointly with others and whether during normal business hours or otherwise, (i) during the Consultation Period, (ii) thereafter if resulting or directly derived from Proprietary Information (as defined below) and (iii) prior the Consultation Period if listed on Schedule C to this Agreement, shall be the sole property of the Company. The Consultant hereby assigns to the Company all Inventions and any and all related patents, copyrights, trademarks, trade names, and other industrial and intellectual property rights and applications therefor, in the United States and elsewhere and appoints any officer of the Company as his duly authorized attorney to execute, file, prosecute and protect the same before any government agency, court or authority. Upon the request of the Company and at the Company’s expense, the Consultant shall execute such further assignments, documents and other instruments as may be necessary or desirable to fully and completely assign all Inventions to the Company and to assist the Company in applying for, obtaining and enforcing patents or copyrights or other rights in the United States and in any foreign country with respect to any Invention. The Consultant also hereby waives all claims to moral rights in any Inventions.

(b) The Consultant shall promptly disclose to the Company all Inventions and will maintain adequate and current written records (in the form of notes, sketches, drawings and as may be specified by the Company) to document the conception and/or first actual reduction to practice of any Invention. Such written records shall be available to and remain the sole property of the Company at all times.

6.2 Proprietary Information.

(a) The Consultant acknowledges that his relationship with the Company is one of high trust and confidence and that in the course of his service to the Company it will have access to and contact with Proprietary Information. The Consultant agrees that he will not, during the Consultation Period or at any time thereafter, disclose to others, or use for his benefit or the benefit of others, any Proprietary Information or Invention.

(b) For purposes of this Agreement, Proprietary Information shall mean, by way of illustration and not limitation, all information (whether or not patentable and whether or not copyrightable) owned, possessed or used by the Company, including, without limitation, any Invention, formula, vendor information, customer information, apparatus, equipment, trade secret, process, research, report, technical data, know-how, computer program, software, software documentation, hardware design, technology, marketing or business plan, forecast, unpublished financial statement, budget, license, price, cost and employee list that is communicated to, learned of, developed or otherwise acquired by the Consultant in the course of his service as a consultant to the Company.

(c) The Consultant's obligations under this Section 6.2 shall not apply to any information that (i) is or becomes known to the general public under circumstances involving no breach by the Consultant or others of the terms of this Section 6.2, (ii) is generally disclosed to third parties by the Company without restriction on such third parties, or (iii) is approved for release by written authorization of an officer of the Company.

(d) Upon termination of this Agreement or at any other time upon request by the Company, the Consultant shall promptly deliver to the Company all records, files, memoranda, notes, designs, data, reports, price lists, customer lists, drawings, plans, computer programs, software, software documentation, sketches, laboratory and research notebooks and other documents (and all copies or reproductions of such materials) relating to the business of the Company.

(e) The Consultant represents that his retention as a consultant with the Company and his performance under this Agreement does not, and shall not, breach any agreement that obligates him to keep in confidence any trade secrets or confidential or proprietary information of his or of any other party or to refrain from competing, directly or indirectly, with the business of any other party or otherwise conflict with any of his agreements or obligations to any other party. The Consultant shall not disclose to the Company any trade secrets or confidential or proprietary information of any other party.

(f) The Consultant acknowledges that the Company from time to time may have agreements with other persons or with the United States Government, or agencies

thereof, that impose obligations or restrictions on the Company regarding inventions made during the course of work under such agreements or regarding the confidential nature of such work. The Consultant agrees to be bound by all such obligations and restrictions that are known to him and to take all action necessary to discharge the obligations of the Company under such agreements.

6.3 Remedies. The Consultant acknowledges that any breach of the provisions of this Section 6 shall result in serious and irreparable injury to the Company for which the Company cannot be adequately compensated by monetary damages alone. The Consultant agrees, therefore, that, in addition to any other remedy it may have, the Company shall be entitled to enforce the specific performance of this Agreement by the Consultant and to seek both temporary and permanent injunctive relief (to the extent permitted by law) without the necessity of proving actual damages.

7. Non-Solicitation. During the Consultation Period and for a period of twelve (12) months thereafter, the Consultant shall not, either alone or in association with others, (i) solicit, or permit any organization directly or indirectly controlled by the Consultant to solicit, any employee of the Company to leave the employ of the Company, or (ii) solicit for employment, hire or engage as an independent contractor, or permit any organization directly or indirectly controlled by the Consultant to solicit for employment, hire or engage as an independent contractor, any person who was employed by the Company at any time during the term of the Consultant's employment with the Company; provided, that this clause (ii) shall not apply to any individual whose employment with the Company has been terminated for a period of six months or longer.

8. Other Agreements. The Consultant hereby represents that, except as the Consultant has disclosed in writing to the Company, the Consultant is not bound by the terms of any agreement with any current or prior employer or other party to refrain from using or disclosing any trade secret or confidential or proprietary information in the course of his relationship with the Company, to refrain from competing, directly or indirectly, with the business of such employer or any other party or to refrain from soliciting employees, customers or suppliers of such employer or other party. The Consultant agrees to furnish the Company with a copy of any such agreement upon request.

9. Independent Contractor Status. The Consultant shall perform all services under this Agreement as an "independent contractor" and not as an employee or agent of the Company. The Consultant is not authorized to assume or create any obligation or responsibility, express or implied, on behalf of, or in the name of, the Company or to bind the Company in any manner.

10. Notices. All notices required or permitted under this Agreement shall be in writing and shall be deemed effective upon personal delivery or upon deposit in the United States Post Office, by registered or certified mail, postage prepaid, addressed to the other party at the address shown above, or at such other address or addresses as either party shall designate to the other in accordance with this Section 10.

11. Pronouns. Whenever the context may require, any pronouns used in this Agreement shall include the corresponding masculine, feminine or neuter forms, and the singular forms of nouns and pronouns shall include the plural, and vice versa.

12. Entire Agreement. This Agreement constitutes the entire agreement between the parties and supersedes all prior agreements and understandings, whether written or oral, relating to the subject matter of this Agreement.

13. Amendment. This Agreement may be amended or modified only by a written instrument executed by both the Company and the Consultant.

14. Governing Law. This Agreement shall be construed, interpreted and enforced in accordance with the laws of the Commonwealth of Massachusetts.

15. Successors and Assigns. This Agreement shall be binding upon, and inure to the benefit of, both parties and their respective successors and assigns, including any corporation with which, or into which, the Company may be merged or which may succeed to its assets or business, provided, however, that the obligations of the Consultant are personal and shall not be assigned by him.

16. Interpretation. If any restriction set forth in Section 1 or Section 7 is found by any court of competent jurisdiction to be unenforceable because it extends for too long a period of time or over too great a range of activities or in too broad a geographic area, it shall be interpreted to extend only over the maximum period of time, range of activities or geographic area as to which it may be enforceable.

17. Miscellaneous.

17.1 No delay or omission by the Company in exercising any right under this Agreement shall operate as a waiver of that or any other right. A waiver or consent given by the Company on any one occasion shall be effective only in that instance and shall not be construed as a bar or waiver of any right on any other occasion.

17.2 The captions of the sections of this Agreement are for convenience of reference only and in no way define, limit or affect the scope or substance of any section of this Agreement.

17.3 In the event that any provision of this Agreement shall be invalid, illegal or otherwise unenforceable, the validity, legality and enforceability of the remaining provisions shall in no way be affected or impaired thereby.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year set forth above.

CASA SYSTEMS, INC.

By: /s/ Jerry Guo

Name: Jerry Guo

Title: CEO

CONSULTANT

By: /s/ William Styslinger

William Styslinger

SCHEDULE A

Description of Services

1. Global sales management, recruiting, market development.
2. Corporate strategy
3. Other advices to the CEO on general company matters

Nonstatutory Stock Option Agreement
Granted Under 2011 Stock Incentive Plan

1. Grant of Option.

This agreement evidences the grant by Casa Systems, Inc., a Delaware corporation (the "Company"), on May 25, 2012 (the "Grant Date") to William Styslinger, an employee, consultant or director of the Company (the "Participant"), of an option to purchase, in whole or in part, on the terms provided herein and in the Company's 2011 Stock Incentive Plan (the "Plan"), a total of 40,000 shares (the "Shares") of common stock, \$0.001 par value per share, of the Company ("Common Stock") at \$ 16.92 per Share. Unless earlier terminated, this option shall expire at 5:00 p.m., Eastern time, on May 24, 2022 (the "Final Exercise Date").

It is intended that the option evidenced by this agreement shall not be an incentive stock option as defined in Section 422 of the Internal Revenue Code of 1986, as amended, and any regulations promulgated thereunder (the "Code"). Except as otherwise indicated by the context, the term "Participant", as used in this option, shall be deemed to include any person who acquires the right to exercise this option validly under its terms.

2. Vesting Schedule.

This option will become exercisable ("vest") as to 33.333% of the original number of Shares on the first anniversary of the Vesting Commencement Date (as defined below) and as to an additional 2.778% of the original number of Shares at the end of each successive month following the first anniversary of the Vesting Commencement Date until the third anniversary of the Vesting Commencement Date. For purposes of this Agreement, "Vesting Commencement Date" shall mean February 1, 2012.

If the Participant's engagement as a consultant to the Company pursuant to that certain Consulting Agreement, dated March 5, 2012, by and between the Company and the Participant (as the same may be amended and/or restated from time to time, the "Consulting Agreement") is terminated without Cause (as defined in the Consulting Agreement) by the Company, this option shall vest as to an additional number of Shares equal to the lesser of (i) 33.3333% of the original number of Shares and (ii) the number of Shares, if any, with respect to which this option has not vested as of such termination.

The right of exercise shall be cumulative so that to the extent the option is not exercised in any period to the maximum extent permissible it shall continue to be exercisable, in whole or in part, with respect to all Shares for which it is vested until the earlier of the Final Exercise Date or the termination of this option under Section 3 hereof or the Plan.

3. Exercise of Option.

(a) Form of Exercise. Each election to exercise this option shall be accompanied by a completed Notice of Stock Option Exercise in the form attached hereto as Exhibit A, signed by the Participant, and received by the Company at its principal office, accompanied by this agreement, and payment in full in the manner provided in the Plan. The Participant may purchase less than the number of shares covered hereby, provided that no partial exercise of this option may be for any fractional share or for fewer than ten whole shares.

Addendum

THIS FIRST ADDENDUM to Consulting Agreement dated March 5, 2012, between Casa Systems, Inc. and William Styslinger is made and entered into this 1st day of January, 2016.

The Consulting Agreement will be extended for a period of twelve (12) months, January 1, 2016, through December 31, 2016.

IN WITNESS WHEREOF, the parties hereto have executed this Addendum as of the day and year set forth above.

CASA SYSTEMS, INC.

By: /s/ Lucy Xie
Lucy Xie, Senior Vice President

CONSULTANT

By: /s/ William Styslinger
William Styslinger

Casa Systems, Inc. | 100 Old River Road, Suite 100 | Andover, MA 01810 | TEL: 978-688-6706

Return To:
Middlesex Savings Bank
Attn: Loan Servicing
120 Flanders Road
Westborough, MA 01851

MORTGAGE, SECURITY AGREEMENT AND FINANCING STATEMENT

This **MORTGAGE, SECURITY AGREEMENT AND FINANCING STATEMENT** (this "Mortgage") entered into as of July 1, 2015 between **Casa Properties LLC**, a Delaware limited liability company with an address of 100 Old River Road, Suite 100, Andover, Massachusetts 01810 (the "Borrower") and **Middlesex Savings Bank**, which is organized and existing under the laws of the Commonwealth of Massachusetts, and whose address is 6 Main Street, Natick, Massachusetts 01760 (the "Lender").

The real property, which is the subject matter of this Mortgage, has the following address: 100 Old River Road, Andover, Massachusetts 01810. This Mortgage secures all Obligations (as hereinafter defined) including without limitation all liabilities pursuant to (i) that certain Term Note by Borrower in favor of the Lender with an original principal amount of SEVEN MILLION NINE HUNDRED FIFTY THOUSAND AND 00/100 DOLLARS (\$7,950,000.00) even date (the "Note") as such Note may be modified, extended and/or amended; and (ii) that certain Commercial Mortgage Loan Agreement between Borrower and Lender of even date (the "Loan Agreement") as such Loan Agreement may be modified, extended and/or amended; and (iii) all other documents executed by Borrower in connection therewith. The Note, the Loan Agreement, and said other documents referred to in (iii) above are collectively referred to as the "Security Instruments".

Property Address: 100 Old River Road, Andover, MA

1. Mortgage, Obligations, and Future Advances

1.1 Mortgage. For valuable consideration paid, the receipt and sufficiency of which is hereby acknowledged, the Borrower hereby grants to the Lender, with MORTGAGE COVENANTS, the "Property" described below, to secure the prompt payment and performance of the Obligations.

1.2 Property. The term "Property", as used in this Mortgage, shall mean: (a) the land described in Exhibit A attached hereto, and all easements, rights, privileges and appurtenances thereto, and including all of Borrower's right, title and interest in and to the rights-of-ways, streets, and alleys adjacent thereto, whether any of the same now exist or are hereafter acquired by reversion or otherwise; (b) the buildings and other structures and improvements now or hereafter upon the land, including all machinery, fixtures and equipment owned by the Borrower of every kind and nature whatsoever forming a part of said buildings or other structures (the "Improvements") including all materials stored on the land for incorporation into the Improvements; (c) the lease or leases, now in existence

or those which may be created in the future during the term of this Mortgage, which leases cover portions or all of the Property, and any extensions and renewals of any thereof and any guarantees of all present and future lessee's obligations under any thereof, and all rents, income and profits arising from the leases and extensions and renewals thereof, if any, and together with all rents, income and profits due or to become due from any and all other tenancies for the use or occupation of the Property or any part thereof which may be created in the future during the term of this Mortgage, whether or not recorded, specifically excluding all duties or obligations of the Lender of any kind arising there under (the "Leases"); (d) all of the licenses, permits, approvals, agreements, Special Permits, Orders of Condition, Certificates of Compliance, and all of the Lender's right, title and interest therein, whether now existing or hereafter acquired, related to the Property or the Improvements, either as constructed or to be constructed as part of any construction project contemplated in the Loan Agreement (the "Assigned Approvals"); and (e) all of the Borrower's right, title and interest in, to and under all architectural, design and construction agreements, and all other contracts, agreements, warranties, licenses, approvals, permits, plans and specifications whether now or hereafter existing and in any way relating, directly or indirectly to, or issued or prepared in connection with the Property, or in connection with any contemplated construction on the Property (the "Plans and Specifications").

1.3 Mortgage as Security Agreement and Financing Statement. This Mortgage shall be deemed to be a security agreement and financing statement pursuant to the terms of the Uniform Commercial Code of Massachusetts (M.G.L. c. 106). No modification to any other Security Instrument shall require modification of this Mortgage unless otherwise required by law, or unless there is a material change in the definition of "Property" hereunder.

1.4 Obligations. The term "Obligation(s)", as used in this Mortgage, shall mean, without limitation, all indebtedness, liabilities, commitments, and performances which the Borrower owes to the Lender, whether arising under this Mortgage, the Note, any other Security Instrument, or otherwise, now existing or hereafter arising, and whether direct or indirect, absolute or contingent, joint or several, due or not due.

1.5 Cross-Collateral and Future Advances. It is the express intention of the Borrower that this Mortgage secure payment and performance of all of the Obligations, whether now existing or hereinafter incurred by reason of any future advances by the Lender or otherwise, and regardless of whether such Obligations are or were contemplated by the parties at the time of the granting of this Mortgage. Notice of the continuing grant of this Mortgage shall not be required to be stated on the face of any document evidencing any of the Obligations, nor shall such documents be required to otherwise specify that they are secured hereby.

2. Representations, Warranties, Covenants

2.1 Representations and Warranties. The Borrower represents and warrants that:

- (a) This Mortgage has been duly executed and delivered by the Borrower and is the legal, valid and binding obligation of the Borrower enforceable in accordance with its terms, except as limited by bankruptcy, insolvency, reorganization, moratorium and other laws affecting the enforcement of creditors' rights generally;

- (b) The Borrower is the sole legal owner of the Property, holding good and marketable fee simple title to the Property, subject to no liens, encumbrances, leases, security interests or rights of others, other than as set forth in Exhibit A attached hereto.
- (c) Each Obligation is a commercial obligation and does not represent a loan used for personal, family or household purposes and is not a consumer transaction or otherwise subject to the provisions of M.G.L. Chapter 140D, the Federal Truth in Lending Act or Federal Reserve Board Regulation Z, or other such consumer statutes or regulations.

2.2 Recording Further Assurances. The Borrower covenants that it shall, at its sole cost and expense and upon the request of the Lender, cause the Mortgage, and each amendment, modification or supplement hereto, to be recorded and filed in such manner and in such places, and shall at all times comply with all such statutes and regulations, as may be required by law in order to establish, preserve and protect the interest of the Lender in the Property and the rights of the Lender under this Mortgage. Upon the written request of the Lender, and at the sole expense of the Borrower, the Borrower will promptly execute and deliver such further instruments and documents and take such further actions as the Lender may deem desirable to obtain the full benefits of this Mortgage and of the rights and powers herein granted, including, without limitation, deliver of any certificate of title and filing any financing statement under the Uniform Commercial Code of Massachusetts (M.G.L. c. 106). The Borrower authorizes the Lender to file any such financing statement without the signature of the Borrower, to the extent permitted by applicable law, and to file a copy of this Agreement in lieu of a financing statement.

2.3 Restrictions on Sale by Borrower. The Borrower covenants that it will not, directly or indirectly, without the prior written approval of the Lender, which approval shall not be unreasonably withheld, conditioned, or delayed, in each instance sell, convey, assign, transfer, mortgage, pledge, hypothecate, lease or dispose of all or any part of any legal or beneficial interest in the Property or any part thereof or permit any of the foregoing, except as expressly permitted by the terms of the Security Instruments and except those transactions which are in the normal course of Borrower's business, or as permitted under the Loan Agreement.

2.4 Provisions Regarding the Leases. Except as permitted under the Loan Agreement, Borrower shall not materially alter, modify or change any of the Leases or terminate the term thereof or accept a surrender thereof or cancel any of the Leases or waive or release any Lessee from the performance or observance by such Lessee of any obligation or condition thereof, or execute an assignment of the Leases or the rents and profits there from, or agree, permit or consent to a subordination of any of the Leases to a mortgage or alter, amend or modify any guaranty of said Leases or cancel or terminate such guaranty or consent to an assignment or subletting under any Lease or anticipate rents, or any other payments thereunder for more than thirty (30) days prior to accrual without the prior written consent of the Lender, which consent shall not be unreasonably withheld, conditioned or delayed.

All subsequent Leases and tenancies for the use and occupation of the Property or any part thereof shall be and are hereby made subject to all of the terms of the assignment referred to in Section 1.2 above, and the Borrower shall further assign and transfer the same to the Lender by assignment satisfactory to Lender upon their creation, if Lender so requests.

Upon and during the continuation of an Event of Default, or any default in the covenants to be performed by Borrower as lessor under any Lease, the Lender may, at its option, without notice, and without regard to the adequacy of the security for the indebtedness hereby secured, in person or by agent, with or without bringing any action, suit or proceeding, enter upon and take possession of the Property, and have, hold, manage, lease and operate the same on such terms, employing such management agents and for such period of time as the Lender may deem proper; and may demand, collect and receive all rents, issues and profits of the Property, and to do all things required of or permitted to the Lender as lessor under the Leases. It is not the intention of the parties hereto that an entry by the Lender upon the Property under the terms of this instrument shall constitute the Lender a "mortgagee in possession" in contemplation of law, except at the option of the Lender.

Notwithstanding the foregoing, so long as there is no Event of Default which has not been cured, the Borrower shall have the right to collect, but not more than thirty (30) days prior to accrual, all rents, issues and profits from the Property and to retain, use and enjoy the same.

Nothing herein shall obligate Lender to perform the obligations of Landlord under any of the Leases or other tenancy arrangements, which obligations Borrower shall perform, and the Borrower hereby agrees to indemnify the Lender against and hold it harmless from any and all liability, loss or damage which it may or might incur under the Leases or under or by reason of the provisions hereof and of and from any and all claims and demands whatsoever which may be asserted against it by reason of any alleged obligation or undertaking on its part to perform or discharge any of the terms of the Leases. Should the Lender incur any such liability, loss or damage under any Lease or under or by reason of the provisions hereof, or in defense against any such claims or demands, the amount thereof, including costs, expenses and reasonable attorneys' fees, together with interest thereon at the rate set forth in the Note, shall be secured hereby and by the Mortgage, and the Borrower shall reimburse Lender therefor immediately upon demand and, upon failure to do so, the Lender may declare all sums evidenced by the Note and secured hereby immediately due and payable.

Lender shall have the right, by the execution of suitable written instruments, from time to time, to subordinate this Mortgage and the right of Lender to any Lease from time to time in force with reference to the Property, and, on the execution of any such instrument, this Mortgage shall be subordinate to the Lease for which such subordination is applicable with the same force and effect as if such Lease had been executed and delivered prior to the execution, delivery and recording of this Mortgage.

2.5 Provisions Regarding Assigned Approvals. The Borrower covenants, warrants and represents that it is and shall be the sole owner of the Assigned Approvals free and clear of all pledges, liens, security interests and other encumbrances of every nature whatsoever except those in favor of the Lender, has the full right, power and authority to assign, and to grant the security interest in the Assigned Approvals as herein provided, shall not make any other assignment of, or permit any pledge, lien, security interest or other encumbrance to exist with respect to, the Assigned Approvals except in favor of the Lender, and shall not transfer, assign, sell or exchange the Borrower's interest in the Assigned Approvals. No Assigned Approvals shall be amended, modified or changed in any material respect, or cancelled or terminated, without the Lender's prior written consent in each instance.

So long as there is no Event of Default, Borrower shall have and may exercise all rights as the owner or holder of the Assigned Approvals, which are lawful and are not inconsistent with the provisions of any of the Security Instruments. Immediately upon the occurrence of any Event of Default, and for so long as the Event of Default remains uncured, the right described in the preceding sentence shall cease and terminate, and in such event the Lender is hereby expressly and irrevocably authorized (but not required) to exercise every right, option, power or authority inuring to the Borrower under any one or more of the Assigned Approvals as fully as the Borrower could. In such event, the Borrower hereby irrevocably directs the grantor or licensor of, or the contracting party to, any such Assigned Approval, to the extent permitted by such Assigned Approval and under any recognition or other agreement executed by such grantor, licensor or contracting party, upon demand and after notice from the Lender of the Borrower's default, to recognize and accept the Lender as the holder of such as such grantor, licensor or contracting party would recognize and accept the Borrower and its performance there under.

Nothing contained herein shall operate to obligate or be construed to obligate the Lender to perform any of the terms, covenants or conditions contained in the Assigned Approvals or otherwise to impose any obligation upon the Lender with respect to the Assigned Approvals prior to written notice by the Lender to the Borrower of the Lender's election to assume the Borrower's obligations under one or more of the Assigned Approvals. Until such election, the payment, performance or observance of any obligation, requirement or condition under the Assigned Approvals is and shall be that of the Borrower.

2.6 Provisions Regarding Plans and Specifications. The Borrower hereby agrees to obtain consents to the assignment of Plans and Specifications provided for herein, and to obtain agreements to attorn directly to and recognize the Lender in place of the Borrower from and during the continuation of an Event of Default from construction contractor and from such other parties as may be from time to time required by the Lender, such consents and agreements to be in form and substance reasonably satisfactory to the Lender. The Borrower hereby authorizes the Lender, at the Lender's option, from and during the continuation of an Event of Default to act as owner in place of the Borrower under such contracts and permits and directs all such other parties to such contracts and permits to recognize and perform for the Lender thereafter as if the Lender were the Borrower hereunder and the Borrower hereby provides that such parties shall be fully protected from any liability to the Borrower in so doing.

2.7 Insurance. With respect to the Property and any tangible personal property owned by the Borrower comprising or intended to comprise any of the Collateral, Borrower shall obtain and maintain, and provide Lender with evidence of: (i) insurance coverages which meet all property, hazard and other insurance requirements of Lender (including but not limited to physical hazard insurance on an “all risks” basis in an amount not less than 100% of the full replacement cost of the Property and flood insurance if and as required by applicable federal law and as otherwise required by the Lender); and (ii) prepayment of the premiums for such insurance for at least one (1) year.

All policies regarding such insurance shall be issued by companies licensed to do business in the state where the policy is issued and also in the Commonwealth of Massachusetts, be otherwise acceptable to the Lender, provide deductible amounts acceptable to the Lender, name the Lender as mortgagee, loss payee and additional insured, and provide that no cancellation or material modification of such policies shall occur without at least thirty (30) days’ prior written notice to the Lender. Such policies shall include: (i) a mortgage endorsement determined by the Lender in good faith to be equivalent to the “standard” mortgage endorsement so that the insurance, as to the interest of the Lender, shall not be invalidated by any act or neglect of the Borrower or the owner of the Property, any foreclosure or other proceedings or notice of sale relating to the Property, any change in the title to or ownership of the Property, or the occupation or use of the Property for purposes more hazardous than are permitted at the date of inception of such insurance policies; (ii) a replacement cost endorsement; (iii) an agreed amount endorsement; (iv) a contingent liability from operation endorsement; and (v) such other endorsements as the Lender may request. The Borrower will furnish to the Lender upon request such original policies, certificates of insurance or other evidence of the foregoing as are acceptable to the Lender. The terms of all insurance policies shall be such that no coinsurance provisions apply, or if a policy does contain a coinsurance provision, the Borrower shall insure the Property in an amount sufficient to prevent the application of the coinsurance provisions.

In the event of a casualty, so long as no Event of Default has occurred and remains uncured, Lender shall release such portion of the insurance proceeds as is necessary to restore the Property to its prior condition insofar as is practicable, so long as such insurance proceeds are sufficient to restore the Property and Borrower complies with Lender’s then standard requirements with respect to the release of construction draws and so long as sufficient leases remain in place or Borrower has commitments for new leases such that sufficient revenues are generated to service the Note.

2.8 Operation of Property. The Borrower covenants and agrees as follows:

(a) unless Lender has otherwise consented in writing, not to allow changes in the nature of the occupancy or use for which the Property was intended at the time this Mortgage was executed, shall not initiate or acquiesce in a change in the zoning classification of the Property, or subject the Property to restrictive or negative covenants;

(b) not to permit the Property to be used for any unlawful or improper purpose, and at all times comply with all Federal, state and local laws, ordinances and regulations, and to obtain and maintain all governmental or other approvals relating to the Borrower, the Property or the use

thereof, including, without limitation, any applicable zoning or building codes or regulations and any laws or regulations relating to the handling, storage, release or cleanup of Hazardous Substances, and to provide prompt written notice to the Lender of: (i) any violation of any such law, ordinance or regulation by the Borrower or relating to the Property; (ii) receipt of notice from any Federal, state or local authority alleging any such violation; and (iii) the presence or release on the Property of any Hazardous Substances;

(c) at all times to keep the Property in at least the same condition as it is as of the date hereof (damage from reasonable wear and tear, eminent domain taking, and damage by fire or other casualty excepted) and not to commit or permit any strip, waste, impairment, deterioration or alteration of the Property or any part thereof; and

(d) to complete in a good and workmanlike manner, in accordance with all applicable governmental laws, regulations and requirements, all improvements to be made to the Property.

2.9 Inspection Rights. The Borrower hereby grants to the Lender and its representatives, agents, contractors and employees the right to from time to time, upon reasonable notice to Borrower, to: (i) enter upon the Property and conduct such inspections, testing, and studies of the Property as the Lender deems necessary or desirable; and (ii) examine all records and documents; including, without limitation, all test results or studies, reports, memoranda, licenses, permits and all other papers or materials relating to the Property.

2.10 Payment of Real Estate Taxes etc. The Borrower shall pay when due all Federal, state, municipal or other taxes, betterment assessments and other governmental levies, water rates, sewer charges, insurance premiums and other charges on the Property, the Mortgage or any Obligation that could, if unpaid, result in a lien on the Property or on any interest therein. Any time after the occurrence of an Event of Default, upon the demand of Lender, the Borrower shall deposit from time to time with the Lender sums determined by the Lender to be sufficient to pay when due the amounts referred to in this paragraph. Notwithstanding the establishment of any such escrow account, the Borrower shall have the right to contest any notice, lien, encumbrance, claim, tax, charge, betterment assessment or premium filed or asserted against or relating to the Property; provided that it contests the same diligently and in good faith and by proper proceedings and at the Lender's request, provides the Lender with adequate cash security, in the Lender's reasonable judgment, against the enforcement thereof. The Borrower shall furnish to the Lender the receipted real estate tax bills or other evidence of payment of real estate taxes for the Property within five (5) days prior to the date from which interest or penalty would accrue for nonpayment thereof. The Borrower shall also furnish to the Lender evidence of all other payments referred to above within fifteen (15) days after written request therefor by the Lender.

2.11 Hazardous Waste. The Borrower warrants and represents that neither Borrower or any of the Borrower's agents or employees have, as of this date, caused, or are aware of a release or threat of release of any "oil", "hazardous material", "hazardous wastes" or "hazardous substances" (the "Materials") as those terms are defined under the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. Sec. 9601 et seq., as

amended, the Massachusetts Hazardous Waste Management Act, M.G.L., Chapter 21C, as amended, and the Massachusetts Oil and Hazardous Material Release Prevention and Response Act, M.G.L., Chapter 21E, as amended, and regulations adopted there under (collectively the "Superfund and Hazardous Waste Laws") on the Property; or arranged for the transport of, or transported any Materials in such a manner as to violate, or result in potential liabilities under, any Superfund and Hazardous Waste Laws; or received any notification, order or demand from the Environmental Protection Agency or from the Commonwealth of Massachusetts (the "Commonwealth") Department of Environmental Quality Engineering under any of the Superfund and Hazardous Waste Laws; or incurred any liability under any Superfund and Hazardous Waste Laws in connection with the mismanagement, improper disposal, or release of any Materials; and, to the best of the Borrower's knowledge, no predecessor-in-title to the Property committed any act or omission which caused a release thereon which would give rise to a lien on the Property filed with the Commonwealth of Massachusetts or the Federal government; and that no statement of claim or lien affecting the Property has been recorded or filed by the Federal government or the Commonwealth of Massachusetts for costs incurred by such parties with respect to the Property or any other property owned by the undersigned; and that the Borrower is not aware of the presence of any Materials or the threat of a release of Materials on or in the Property which could give rise to liability under any Superfund and Hazardous Waste Laws or under any other applicable Federal, state or local law, rule or regulation. Notwithstanding the foregoing, nothing shall prohibit Borrower or any occupant of the Property from using any part thereof for the use, generation, treatment, storage or disposal of Hazardous Materials customarily used and in quantities customarily associated with the permitted use of the Property, so long as the same is in compliance with all applicable laws and regulations.

2.12 Indemnification. The Borrower warrants and guaranties that all certifications made in Section 2.11 above are true and correct to the best of the Borrower's knowledge and belief. The Borrower hereby covenants and guaranties to protect, indemnify, and hold the Lender harmless from and against all loss, damage, and expense, including attorney's fees and costs of litigation, suffered or incurred by Lender under or on account of any circumstance subject to the Superfund and Hazardous Waste Laws, including, without limitation, all loss, damage and expense incurred by the Lender on account of the filing of a lien against the Property by the Commonwealth of Massachusetts or the Federal government on account of the presence of any Materials located on or to be located on the Property. The obligations of the Borrower hereunder shall not cease or lapse unless and until all obligations, under all documents executed in connection with the above-captioned loan, including payment of indebtedness under the Note have been fully performed.

If in the event the Borrower shall receive notification of the presence of hazardous waste on the Property from any agency of the Commonwealth of Massachusetts or of the Government of the United States of America, then the Borrower shall within three (3) days of its receipt thereof forward to the Lender at its principal place of business a true and exact copy of the notice so received. Should the Borrower have reason to know that hazardous waste as defined in M.G.L. Chapter 21E, as amended, are present upon any or all of the Property, then the Borrower

shall immediately notify the Lender as recited above of the presence of the said hazardous waste. The failure of the Borrower to notify the Lender of notice of hazardous waste shall be deemed to be a default by the Borrower and the Lender shall have the right to exercise its statutory powers relative to foreclosure and/or entrance upon the Property.

In the event that there shall be a release of oil or hazardous materials or substances on, upon or into the Property, the Lender shall have the right (but not the obligation), upon five (5) business days advance written notice to the Borrower (or without notice in the case of emergencies), to cause the release to be contained and/or removed on behalf of the Borrower. The contractor(s) selected by the Lender shall have the right to enter upon the Property with such men, machinery and equipment as they shall deem necessary for such purpose and shall undertake such remedial containment and clean-up actions as they shall deem appropriate, without thereby incurring any liability to the Borrower on account thereof. The Borrower agrees to cooperate with any such contractor(s) and to render such assistance to such contractor(s) as may be requested to facilitate the remedial containment and clean-up actions. The Borrower should be liable to the Lender for all costs and expenses, including all attorneys fees incurred on account of such remedial action undertaken on the Borrower's behalf and shall reimburse the Lender therefor on demand. In the event that the Borrower fails to so reimburse the Lender on demand, such failure shall constitute an Event of Default hereunder. The Borrower hereby agrees to indemnify, defend and hold harmless the Lender from and against any and all loss, liability, damage and expense, including costs associated with the administrative and judicial proceedings and attorney fees to which the Lender may become exposed, or which the Lender may incur, in exercising in whole or in part of failing or neglecting to exercise any of its rights under this section.

2.13 Lender as Secured Party. In addition to the rights and remedies otherwise provided for by law or in equity and in any of the Security Instruments, upon the occurrence and during the continuation of any Event of Default, (i) the Lender shall have the rights and remedies of a secured party under the Uniform Commercial Code, as enacted in Massachusetts (M.G.L. c. 106), with respect to any of the Property owned by Borrower which constitutes personal property, subject to the applicable terms of the Loan Agreement; and (ii) the Borrower shall be deemed to have constituted and appointed the Lender its true and lawful attorney-in-fact with full power of substitution in the Borrower's name to do any act or to execute any document or instrument deemed by such attorney-in-fact to be necessary or desirable to be done or to be executed in order to accomplish and effectuate any term of the collateral assignments set out here. It is understood and agreed that this power of attorney shall be deemed to be a power coupled with an interest which cannot be revoked. Notwithstanding the foregoing, wherever Borrower appoints Lender as Borrower's "true and lawful attorney", such appointments shall only be effective five (5) days after Lender reasonably requests in writing that Borrower perform some act and Borrower fails to do so or after an Event of Default which remains uncured.

3. Certain Rights of the Lender

3.1 Legal Proceedings. The Lender shall have the right, but not the duty, to intervene or otherwise participate in any legal or equitable proceeding that, in the Lender's reasonable judgment, might affect the Property or any of the rights created or secured by this Mortgage. The Lender shall have such right whether or not there shall have occurred an Event of Default.

3.2 Appraisals/Assessments. The Lender shall have the right, at the Borrower's sole cost and expense, to obtain appraisals, environmental site assessments or other inspections of the portions of the Property that are real estate at such times as the Lender deems necessary or as may be required by applicable law, or prevailing Lender credit or underwriting policies. Notwithstanding the foregoing, so long as no Event of Default has occurred and remains uncured and any governmental regulatory agency does not require additional appraisals, Lender shall order no more than one appraisal at Borrower's expense during the term of the Note, and in the absence of the occurrence of a release of Materials giving rise to Lender's reasonable belief of contamination of the Property, Lender shall not order any environmental site assessments at Borrower's expense.

4. Defaults and Remedies

4.1 Events of Default. Event of Default shall mean the occurrence of any one or more of the Events of Default set forth in the Note or any of the Security Instruments.

4.2 Remedies. On the occurrence and during the continuation of any Event of Default the Lender may, at any time thereafter, at its option and, to the extent permitted by applicable law, without notice, exercise any or all of the remedies set forth in the Note or any of the Security Instruments, as applicable.

4.3 Cumulative Rights and Remedies. All of the foregoing rights, remedies and options are cumulative and in addition to any rights the Lender might otherwise have, whether at law or by agreement and may be exercised separately or concurrently. The Borrower further agrees that the Lender may exercise any or all of its rights or remedies set forth herein without having to pay the Borrower any sums for use or occupancy of the Property.

4.4 Borrower's Waiver of Certain Rights. To the extent permitted by applicable law, the Borrower hereby waives the benefit of all present and future laws (i) providing for any appraisal before sale of all or any portion of the Property, or (ii) in any way extending the time for the enforcement of the collection of the Obligations or creating or extending a period of redemption from any sale made hereunder.

5. Miscellaneous

5.1 Waiver of Homestead. The Borrower hereby waives and terminates any rights to any homestead exemptions on record as of the date of this Mortgage respecting the Property under the provisions of M.G.L. c. 188, § 1.

5.2 Severability. If any provision of this Mortgage or portion of such provision or the application thereof to any person or circumstance shall to any extent be held invalid or unenforceable, the remainder of this Mortgage (or the remainder of such provision) and the application thereof to other persons or circumstances shall not be affected thereby.

5.3 Exercise of Rights. Borrower agrees that all rights of the holder hereof as to personal property security and real estate security may be exercised together or separately and further agrees that, in exercising its power of sale, such holder may sell the personal property security or any part thereof either separately from, or together with, the real estate security or any part thereof, in such order as such holder may, in its discretion, elect, and whether or not the aggregate proceeds thereof exceed the indebtedness secured by this Mortgage. At any sale, any combination of or all of the security may be offered for sale for one total price and the proceeds of such sale accounted for in one account without distinguishing between the items of security or assigning to the separate securities proportions of the proceeds of such sale accounted for in one account without distinguishing proportions of the proceeds; and, in case such holder, in the exercise of the power of sale herein given, elects to sell in parts or parcels, said sales may be held from time to time and the power shall not be fully executed until all of the personal property security and real estate security not previously sold shall have been sold.

5.4 Condominium Provisions. If, and to the extent that any of the Property includes a unit in a condominium project (the "Condominium Project") the Property shall include Borrower's undivided interest in the common elements of the Condominium Project, the title to which is held by a unit owner's association (the "Owners' Association") and the uses, proceeds and benefits of Borrower's interest therein. In such case, and in addition to the covenants and agreements made elsewhere in this Mortgage, Borrower further covenant and agree as follows:

- A. Borrower shall perform all of Borrower's obligations under the Condominium Project's Constituent Documents. The "Constituent Documents" are the (i) Master Deed or any other document which creates the Condominium Project; (ii) declaration of trust, by-laws, and regulations (or other equivalent documents) of or by the Owners' Association") Borrower shall promptly pay, when due, all dues and assessments imposed pursuant to the Constituent Documents.
- B. Borrower shall take such actions as may be reasonable to insure that the Owners' Association maintains, with a generally accepted insurance carrier, a "master" or "blanket" policy which is satisfactory to the Lender and which provides hazard insurance coverage in the amounts, for the periods, and against the hazards the Lender requires, including fire hazards included within the term "extended coverage", and Borrower shall give the Lender prompt notice of any lapse in such required hazard insurance coverage. In the event of a distribution of hazard insurance proceeds in lieu of restoration or repair following a loss to the Property, whether to the unit or to common elements, any proceeds payable to Borrower are hereby assigned and shall be paid to the Lender for application to the Obligations, with any excess paid to Borrower.

- C. Borrower shall take such actions as may be reasonable to insure that the Owners' Association maintains a public liability insurance policy acceptable in form, amount, and extent of coverage to the Lender.
- D. The proceeds of any award or claim for damages, direct or consequential, payable to Borrower in connection with any condemnation or other taking of all or any part of the Property, whether of the unit or of the common elements, or for any conveyance in lieu of condemnation, are hereby assigned and shall be paid to the Lender. Such proceeds shall be applied by the Lender to the sums secured by the Mortgage as provided for in paragraph 2.7 of the Mortgage.
- E. Borrower shall not, except after notice to the Lender and with the Lender's prior written consent, either partition or subdivide the Property or consent to:
 - (i) the abandonment or termination of the Condominium Project, except for abandonment or termination required by law in the case of substantial destruction by fire or other casualty or in the case of a taking by condemnation or eminent domain;
 - (ii) any amendment to any provision of the Constituent Documents if the provision is not for the express benefit of the Lender;
 - (iii) termination of professional management and assumption of self-management of the Owners Association; or
 - (iv) any action which would have the effect of rendering the public liability insurance coverage maintained by the Owners Association unacceptable to the Lender.
- F. If Borrower does not pay condominium dues and assessments when due, then the Lender may pay them. Any amounts disbursed by the Lender under this paragraph F shall become additional debt of Borrower secured by the Mortgage. Unless Borrower and the Lender agree to other terms of payment, these amounts shall bear interest from the date of disbursement at the Note rate and shall be payable, with interest, upon notice from the Lender to Borrower requesting payment

5.5 JURY WAIVER. THE BORROWER AND LENDER EACH HEREBY KNOWINGLY, VOLUNTARILY AND INTENTIONALLY, AND AFTER AN OPPORTUNITY TO CONSULT WITH LEGAL COUNSEL, WAIVE ANY AND ALL RIGHTS TO A TRIAL BY JURY IN ANY ACTION OR PROCEEDING IN CONNECTION WITH THIS MORTGAGE, THE OBLIGATIONS, ALL MATTERS CONTEMPLATED HEREBY AND DOCUMENTS EXECUTED IN CONNECTION HEREWITH. THE BORROWER CERTIFIES THAT NEITHER THE LENDER NOR ANY OF ITS REPRESENTATIVES, AGENTS OR COUNSEL HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT THE LENDER WOULD NOT IN THE EVENT OF ANY SUCH PROCEEDING SEEK TO ENFORCE THIS WAIVER OF RIGHT TO TRIAL BY JURY.

This Mortgage is upon the STATUTORY CONDITION, for any breach of which the Lender shall have the STATUTORY POWER OF SALE and any other remedies provided by applicable law, including, without limitation, the right to pursue a judicial sale of the Property or any portion thereof by deed, assignment or otherwise. The Borrower agrees and acknowledges that the acceptance by the Lender of any payments from either the Borrower or the Guarantor after the occurrence and during the continuation of any Event of Default, the exercise by the Lender of any remedy set forth herein or the commencement of foreclosure proceedings against the Property shall not waive the Lender's right to foreclose or operate as a bar or estoppel to the exercise of any other rights or remedies of the Lender. The Borrower agrees and acknowledges that the Lender, by making payments or incurring costs described herein, shall be subrogated to any right of the Borrower to seek reimbursement from any third parties, including, without limitation, any predecessor in interest to the Borrower's title or other party who may be responsible under any law, regulation or ordinance relating to the presence or cleanup of Hazardous Substances.

[Signatures contained on the following page]

EXECUTED under seal as of the date first above written.

Borrower:

CASA PROPERTIES LLC, a Delaware limited liability company

By: /s/ Gary Hall

Name: Gary Hall

Title: Duly Authorized Signatory

COMMONWEALTH OF MASSACHUSETTS

County of Suffolk

On this 1st day of July, 2015, before me, the undersigned notary public, personally appeared Gary Hall, duly authorized signatory of Casa Properties LLC, proved to me through satisfactory evidence of identification, which were driver's license, personally known to me or personally known to a 3rd party personally known to me, to be the person whose name is signed on the preceding or attached document, and acknowledged to me that he signed it voluntarily for its stated purpose.

/s/ Brian Atherton

NOTARY PUBLIC

My Commission Expires: 4-28-17

EXHIBIT A

PROPERTY DESCRIPTION

A certain parcel of land in Andover, Essex County, Massachusetts, shown on a plan entitled "Plan of Land, Andover, Mass." dated October 11, 1985 (Scale 1" = 40') prepared by Harry R. Feldman, Inc., and recorded with the Essex North Registry of Deeds as Plan No. 10531, which land is bounded and described according to said plan as follows:

| | | |
|---------------|---|--------------------|
| NORTHEASTERLY | by Old River Road, one thousand six hundred twenty-six and 85/100 | (1,626.85) feet; |
| EASTERLY | by land now or formerly of the Town of Andover, eighty and 33/100 | (80.33) feet; |
| SOUTHERLY | by River Road (relocated), three hundred ninety-six and 04/100 | (396.04) feet; and |
| SOUTHWESTERLY | by the ramp to Route 93, one thousand three hundred eighty-six and 80/100 | (1,386.80) feet. |

LESS AND EXCEPT that land taken in Layout No. 7093 and Order of Taking by the Commonwealth of Massachusetts Department of Public Works, dated December 23, 1992, recorded with the Essex North District County Registry of Deeds in Book 3632, Page 114, with reference made to the plan recorded with said Deeds as Plan No. 12172.

The above-referenced land, less the land taken by Andover Layout No. 7093 and Order of Taking, is described as follows:

A certain parcel of land located at the intersection of Old River Road and River Road numbered 100 Old River Road in Andover (Essex County), MA, bounded and described as follows:

Beginning at a Massachusetts Highway Bound located on the northeasterly sideline of Route I-93;

Thence running southeasterly by a curve to the left having a radius of 207.61 feet, a length of 219.52 feet, the chord of which is 209.43 feet along a bearing of S 43°12'44" E, to a Massachusetts Highway Bound at a point of non-tangency on the northerly sideline of River Road;

Thence turning and running N 75°11'52" E, a distance of 170.10 feet along said sideline of River Road to a Massachusetts Highway Bound at a point of curvature;

Thence running more northeasterly by a curve to the right having a radius of 1,455.00 feet, a length of 109.79 feet along said sideline of River Road to a point of tangency;

Thence running N 79°31'16" E, a distance of 115.67 feet along said sideline of River Road to a point of curvature;

Thence running less northeasterly, northerly and northwesterly by a curve to the left having a radius of 71.00 feet, a length of 162.09 feet along said sideline, the chord of which is 129.11 feet along a bearing of N 14°07'20" E, to a Massachusetts Highway Bound at a point of tangency;

Thence running N 51°16'35" W, a distance of 324.13 feet to a Massachusetts Highway Bound;

Thence turning and running N 52°50'00" W, a distance of 47.72 feet to a point;

Thence turning and running N 54°46'20" W, a distance of 250.00 feet to a point;

Thence turning and running N 56°13'30" W, a distance of 242.00 feet to a point;

Thence turning and running N 56°04'40" W, a distance of 110.64 feet to a point of curvature;

Thence running more northwesterly by a curve to the left having a radius of 347.10 feet, a distance of 89.19 feet to a point of tangency.

Thence running N 70°48'00" W, a distance of 83.07 feet to a point of curvature;

Thence running more northwesterly by a curve to the left having a radius of 250.00 feet, a length of 89.99 feet, the chord of which is 89.50 feet along a bearing of N 81°06'44" W, to a point of compound curvature;

Thence running westerly by a curve to the left having a radius of 750.00 feet, a length of 307.96 feet, the chord of which is 305.80 feet along a bearing of S 76°48'45" W, to a point of non-tangency on the northeasterly sideline of Route I-93;

The above nine courses being along the southwesterly sideline of Old River Road;

Thence turning and running southeasterly by a curve to the left having a radius of 260.00 feet, a length of 230.00 feet along said sideline of Route I-93, the chord of which is 222.57 feet along a bearing of S 45°49'10" E, to a point of tangency;

Thence running S 71°09'43" E, a distance of 261.45 feet to a Massachusetts Highway Bound at a point of curvature;

Thence running southeasterly and southerly by a curve to the right having a radius of 560.00 feet, a length of 569.24 feet along said sideline of Route I-93, the chord of which is 545.05 feet along a bearing of S 42°02'29" E, to a point of compound curvature and the point of beginning;

Containing an area of 419,017 square feet or 9.619 acres.

Meaning and intending to convey all the property conveyed to Mortgagor by Quitclaim Deed of Q Old River Property, LLC recorded with the Essex North Registry of Deeds (the "Registry") in Book 14158, Page 207.

REGISTRATION RIGHTS AGREEMENT

This REGISTRATION RIGHTS AGREEMENT, dated as of April 26, 2010 (this "Agreement"), is entered into by and among Casa Systems, Inc., a Delaware corporation (the "Company"), LGI Ventures BV, a company registered under the laws of the Netherlands ("LGIV"), SeaChange International, Inc., a Delaware corporation ("SeaChange"), and Summit Partners Private Equity Fund VII-A, L.P., a Delaware limited partnership, Summit Partners Private Equity Fund VII-B, L.P., a Delaware limited partnership, Summit Investors I, LLC, a Delaware limited liability company, and Summit Investors I (UK), L.P., a Cayman Islands exempted limited partnership (collectively, "Summit"). LGIV, SeaChange and Summit are collectively referred to herein as the "Investors" and, together with the Company, are referred to herein as the "Parties").

WHEREAS, pursuant to that certain Series A Convertible Preferred Stock Purchase Agreement, dated as of July 6, 2005, by and between the Company and SeaChange (the "SeaChange Series A Purchase Agreement"), the Company sold, issued and delivered to SeaChange, and SeaChange purchased and accepted, 1,290,679 shares of the Company's Series A Convertible Preferred Stock, par value \$.001 per share (the "Series A Preferred Stock");

WHEREAS, pursuant to that certain Series B Convertible Preferred Stock Purchase Agreement, dated as of June 26, 2009, by and between the Company and SeaChange (the "SeaChange Series B Purchase Agreement"), the Company sold, issued and delivered to SeaChange, and SeaChange purchased and accepted, 73,000 shares of the Company's Series B Convertible Preferred Stock, par value \$.001 per share (the "Series B Preferred Stock");

WHEREAS, pursuant to that certain Registration Rights Agreement, dated as of July 6, 2005, by and between the Company and SeaChange, the Company and SeaChange set the terms and conditions of the registration rights granted to SeaChange by the Company in connection with SeaChange's purchase of Series A Preferred Stock pursuant to the SeaChange Series A Purchase Agreement, which Registration Rights Agreement was amended on June 26, 2009, to, among other things, provide that such registration rights would also apply to the Series B Preferred Stock purchased by SeaChange pursuant to the SeaChange Series B Purchase Agreement (as amended, the "SeaChange Registration Rights Agreement");

WHEREAS, pursuant to that certain Securities Purchase Agreement, dated as of June 26, 2009, by and among the Company, LGIV and UPC Broadband Operations B.V., a company registered under the laws of the Netherlands (the "LGIV Series B Purchase Agreement"), the Company sold, issued and delivered to LGIV, and LGIV purchased and accepted, (i) 279,018 shares of Series B Preferred Stock and (ii) a Stock Purchase Warrant, dated June 26, 2009 (the "Warrant"), to purchase from the Company, up to an aggregate of 396,431 shares of the Company's Common Stock, par value \$.001 per share (the "Common Stock");

WHEREAS, pursuant to that certain Registration Rights Agreement, dated as of June 26, 2009, by and between the Company and LGIV (the "LGIV Registration Rights Agreement"), the Company and LGIV set the terms and conditions of the registration rights granted to LGIV by the Company in connection with LGIV's purchase of Series B Preferred Stock and the Warrant;

WHEREAS, pursuant to that certain Series C Convertible Preferred Stock Purchase Agreement, dated as of the date hereof, by and between the Company and Summit (the "Summit Series C Purchase Agreement"), the Company is selling, issuing and delivering to Summit, and Summit is purchasing and accepting, 3,859,200 shares of the Company's Series C Convertible Preferred Stock, par value \$.001 per share (the "Series C Preferred Stock" and, together with the Series A Preferred Stock and the Series B Preferred Stock, the "Preferred Stock");

WHEREAS, the Company has agreed to grant certain registration rights to Summit in connection with its purchase of Series C Preferred Stock, and the Company, SeaChange, LGIV and Summit desire to enter into this Registration Rights Agreement to reflect such rights and supersede each of the SeaChange Registration Rights Agreement and the LGIV Registration Rights Agreement; and

WHEREAS, this Agreement terminates and supersedes each of the SeaChange Registration Rights Agreement and the LGIV Registration Rights Agreement, and sets forth the registration rights of each of the Investors, all as more fully set forth herein.

NOW, THEREFORE, in consideration of the foregoing recitals, the mutual promises hereinafter set forth, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereby agree as follows:

1. Certain Definitions. Certain capitalized terms used in this Agreement and not defined in this Section 1 are defined elsewhere in this Agreement. As used in this Agreement, the following terms shall have the meanings indicated:

"Affiliate" of any Person means any other Person who, directly or indirectly, controls, is controlled by or is under common control with such first Person.

"Board of Directors" means the board of directors of the Company (or any committee thereof authorized to take action with respect to matters contemplated by this Agreement), as constituted from time to time.

"Charter" means the Amended and Restated Certificate of Incorporation of the Company, as amended, as the same shall be in effect from time to time.

"Commission" means the Securities and Exchange Commission.

"Common Shares" means (i) shares of Common Stock that are issued or issuable upon conversion of shares of (A) Series B Preferred Stock purchased under the LGIV Series B Purchase Agreement, (B) Series A Preferred Stock purchased under the SeaChange Series A Purchase Agreement, (C) Series B Preferred Stock purchased under the SeaChange Series B Purchase Agreement and (D) Series C Preferred Stock purchased under the Summit Series C Purchase Agreement, (ii) the Warrant Shares, and (iii) all other shares of Common Stock held by Holders (or any of them) at any time, including without limitation any shares of Common Stock acquired (or which may be acquired upon the exercise or conversion of securities) by a Holder pursuant to any warrant, preemptive right, right of first refusal or otherwise, and including any shares of Common Stock issued as a result of stock splits, stock dividends, stock combinations, reclassifications, recapitalizations or other similar events.

“Exchange Act” means the Securities Exchange Act of 1934, as amended, or any similar successor federal statute and the rules and regulations promulgated thereunder, as the same shall be in effect from time to time.

“Free Writing Prospectus” means each “free writing prospectus” within the meaning of Rule 405 promulgated by the Commission under the Securities Act.

“Holder” means an Investor and any Permitted Transferee (as defined in Section 22) of an Investor hereunder, for so long as such Person owns Registrable Shares.

“Maximum Number of Shares” means, with respect to any underwritten offering, the maximum number of shares of Common Stock (including Registrable Shares) that the managing underwriter(s) advise the Company can be included in such offering without having an adverse effect on the marketing of such offering, including the price at which the shares can be sold.

“Other Shares” means shares of Common Stock (or securities convertible into or exercisable for Common Stock) that are held by Other Stockholders.

“Other Stockholders” means holders of Common Stock (or of securities convertible into or exercisable for Common Stock) that have obtained registration rights from the Company outside of this Agreement.

“Person” means an individual, entity, corporation, partnership, limited liability company, joint venture, trust, or unincorporated organization, or a government or any agency or political subdivision thereof.

“Preferred Shares” means, as of the date of determination, shares of (A) Series B Preferred Stock originally issued pursuant to the LGIV Series B Purchase Agreement, (B) Series A Preferred Stock originally issued pursuant to the SeaChange Series A Purchase Agreement, (C) Series B Preferred Stock originally issued pursuant to the SeaChange Series B Purchase Agreement and (D) Series C Preferred Stock originally issued pursuant to the Summit Series C Purchase Agreement.

“prospectus” means the prospectus related to any Registration Statement (including a prospectus that discloses information previously omitted from a prospectus filed as part of an effective Registration Statement in reliance on Rule 415), as amended or supplemented by any amendment (including post-effective amendments), pricing term sheet, Free Writing Prospectus or prospectus supplement, and all documents and materials incorporated by reference in such prospectus.

“Registrable Shares” means any Common Shares that are owned by a Holder; provided, that any particular shares will cease to be Registrable Shares: (i) if and when such shares have been registered under the Securities Act pursuant to an effective Registration Statement and disposed of in accordance with such Registration Statement; (ii) if and when such

shares have been disposed in compliance with the requirements of Rule 144; (iii) upon any sale in any manner to a Person which is not entitled to the rights under this Agreement; or (iv) for purposes of Sections 4 and 6 of this Agreement, at such time, following an initial underwritten public offering of shares of Common Stock pursuant to an effective Registration Statement, as such shares represent less than 1% of the Company's total outstanding Common Stock and become eligible for sale pursuant to Rule 144(b)(1)(i) under the Securities Act; provided, however, with respect to clause (iv), a period of at least one year, as determined in accordance with paragraph (d) of Rule 144 under the Securities Act, has elapsed since the later of the date such shares were acquired from the Company or an affiliate of the Company. For purposes of this defined term "Registrable Shares," a Holder shall be deemed to own any Common Shares that are issuable, on the date of determination, upon conversion of any Preferred Shares owned by such Holder.

"Registration Expenses" means all expenses incurred by the Company in complying with Sections 4, 5 and 6, including all registration and filing fees, costs and expenses associated with the listing of any Common Stock on any securities exchange, printing expenses, fees and disbursements of counsel and independent public accountants for the Company, fees and expenses (including counsel fees) incurred in connection with complying with state securities or "blue sky" laws, fees incident to any review by the Financial Industry Regulatory Authority, Inc., transfer taxes, fees of transfer agents and registrars, costs of insurance and fees and disbursements of one counsel for all Holders of Registrable Shares included in any Registration Statement, but excluding any Selling Expenses.

"Registration Statement" means a registration statement filed by the Company with the Commission for a public offering and sale of securities of the Company.

"Rule 144" means Rule 144 as promulgated by the Commission under the Securities Act, as such Rule may be amended from time to time, or any similar successor rule promulgated by the Commission.

"Rule 415" means Rule 415 as promulgated by the Commission under the Securities Act, as such Rule may be amended from time to time, or any similar successor rule promulgated by the Commission.

"Securities Act" means the Securities Act of 1933, as amended, or any similar successor federal statute and the rules and regulations promulgated thereunder, as the same shall be in effect from time to time.

"Selling Expenses" means, in connection with any sale of Registrable Shares, all underwriting discounts and selling commissions incurred by the Holder(s) of such Registrable Shares.

"Special Counsel" means Baker Botts L.L.P., Choate, Hall & Stewart LLP, or such other law firm of national reputation as may be selected by the Holder owning the highest percentage of the Registrable Shares to be included in a Registration Statement.

"Warrant Shares" means shares of Common Stock issued upon exercise of the Warrant.

2. Legend. The Parties agree and acknowledge that upon issuance by the Company of any shares pursuant to the SeaChange Series A Purchase Agreement, the SeaChange Series B Purchase Agreement, the LGIV Series B Purchase Agreement, the Warrant or the Summit Series C Purchase Agreement all certificates evidencing such shares (and any shares issued upon conversion or exercise thereof) shall bear a legend (the "Legend"), prominently stamped or printed thereon, reading substantially as follows:

"THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 OR APPLICABLE STATE SECURITIES LAWS AND MAY NOT BE TRANSFERRED OR OTHERWISE DISPOSED OF UNLESS REGISTERED UNDER SUCH ACT AND ALL SUCH STATE SECURITIES LAWS OR AN EXEMPTION FROM REGISTRATION IS AVAILABLE."

The Company covenants and agrees that, upon request, it will remove the Legend from any such shares upon the earlier to occur of: (i) in the case of Common Shares, once such shares are registered under the Securities Act; or (ii) in the case of Common Shares or Preferred Shares covered by a Legend, promptly following the Company's receipt of an opinion of counsel satisfactory to the Company (it being agreed that Baker Botts L.L.P. or Choate, Hall & Stewart LLP shall be satisfactory to the Company for this purpose) to the effect that such shares may be publicly sold without registration under the Securities Act and any applicable state securities laws.

3. Notice of Proposed Transfer. Prior to any proposed transfer of any Preferred Shares or Common Shares (other than under the circumstances described in Sections 4, 5 or 6) owned by a Holder, such Holder shall give written notice to the Company of its intention to effect such transfer. Each such notice shall describe the manner of the proposed transfer and, if requested by the Company, shall be accompanied by an opinion of counsel satisfactory to the Company (it being agreed that Baker Botts L.L.P. or Choate, Hall & Stewart LLP shall be satisfactory for this purpose) to the effect that the proposed transfer may be effected without registration under the Securities Act and any applicable state securities laws, whereupon such Holder shall be entitled to transfer such stock in accordance with the terms of its notice; provided, however, that no such opinion of counsel shall be required for a transfer by the Investor to an Affiliate of the Investor. Notwithstanding the foregoing and subject to the restrictions contained in Section 22, Preferred Shares or Common Shares owned by a Holder may not be transferred to a Competitor (as such term is defined in the Second Amended and Restated Investor Rights Agreement, by and among the Company, SeaChange, LGIV and Summit, dated on or around the date hereof, as amended and/or restated from time to time). Each certificate for Preferred Shares or Common Shares transferred as above provided shall bear the Legend, except that such certificate shall not bear the Legend if (i) such transfer is in accordance with the provisions of Rule 144 (or any other rule permitting public sale without registration under the Securities Act) or (ii) the opinion of counsel referred to above is to the further effect that the transferee and any subsequent transferee would be entitled to transfer such securities in a public sale without registration under the Securities Act. The restrictions provided for in this Section 3 shall not apply to securities which are not required to bear the Legend prescribed by Section 2 in accordance with the provisions of that Section.

4. Required Registration.

(a) At any time after the earliest of (i) six months after the Company's initial registration statement covering a public offering of securities of the Company under the Securities Act shall have become effective and (ii) six months after the Company shall have initially become a reporting company under Section 12 of the Exchange Act, a Holder with a demand registration right (as set forth in Section 4(c)) may, by written notice to the Company (a "Demand Request"), request the Company to prepare and file a registration statement registering all or a portion of the Registrable Shares owned by such Holder under the Securities Act on an appropriate form under the Securities Act (a "Demand Registration Statement"), in each case, for the type of offering contemplated by the Demand Request (which may include an offering to be made on a delayed or continuous basis under Rule 415, if the Company is then permitted to rely upon such Rule), provided that the Registrable Shares for which registration has been requested shall constitute at least 20% of the total Registrable Shares held by such Holder issued and outstanding as of the date hereof if such Holder shall request the registration of less than all Registrable Shares owned by such Holder (or any lesser percentage if the reasonably anticipated aggregate price to the public of such public offering would exceed \$5,000,000). For purposes of this Section 4 and Sections 5, 6, 15 and 18, solely for purposes of determining a percentage of Registrable Shares then outstanding, as of any date of determination, there shall be deemed outstanding the Warrant Shares and all Common Shares into which any Preferred Shares or other securities owned by a Holder are then exercisable or then convertible, as the case may be; provided, however, that the only securities which the Company shall be required to register pursuant hereto shall be shares of Common Stock; and provided, further, however, that, in any underwritten public offering contemplated by this Section 4 or Sections 5 and 6, the Holders shall be entitled to (i) in the case of Preferred Shares, to sell such shares to the underwriters for conversion into shares of Common Stock which are then sold in the offering or (ii) in the case of Preferred Shares and the Warrant, make the conversion or exercise thereof, as the case may be, contingent upon the Registration Statement for the offering being declared effective and the underwriting agreement being signed by the underwriters. Notwithstanding anything to the contrary contained herein, no request may be made under this Section 4 within 120 days after the effective date of a Registration Statement filed by the Company solely for the account of the Company covering a firm commitment underwritten public offering in which the Holders shall have been entitled to join pursuant to Section 5 or Section 6 and in which there shall have been registered all Registrable Shares as to which registration shall have been requested.

(b) Following receipt of any Demand Request under this Section 4, the Company shall immediately notify (each such notice, a "Demanded Registration Notice") all Holders of Registrable Shares (if any) from whom the applicable Demand Request was not received and shall use its best efforts to register under the Securities Act, for public sale in accordance with the method of disposition specified in such Demanded Registration Notice, the number of Registrable Shares specified in such Demanded Registration Notice (and in all notices received by the Company from other Holders within 30 days after the date of the Demanded Registration Notice). If such method of disposition shall be an underwritten public offering, Holders of a majority of the Registrable Shares to be sold in such offering may designate the managing underwriter of such offering, subject to the approval of the Company, which approval shall not be unreasonably withheld or delayed.

(c) The Company shall be obligated to register Registrable Shares pursuant to this Section 4 on only two occasions where the Demand Request is initiated by Summit, two occasions where the Demand Request is initiated by SeaChange and two occasions where the Demand Request is initiated by LGIV, provided, however, that such obligation shall be deemed satisfied when a Registration Statement covering all Registrable Shares specified in a Demand Request (and all notices in response to a Demanded Registration Notice) received by the Company shall have become effective and, (A) if such method of disposition is a firm commitment underwritten public offering, all such shares shall have been sold pursuant thereto or (B) if such method of disposition is not a firm commitment underwritten public offering, such Registration Statement has remained effective for a period of not less than 120 days (such 120-day period to be tolled during any period in which the prospectus included in a Registration Statement may not be used under the circumstances described in Section 7(a)(vi) or Section 17(c)) or, if shorter, until such time as all shares covered thereby have been sold pursuant thereto.

(d) The Company shall be entitled to include for sale in any Demand Registration Statement, whether for its own account or for the account of Other Stockholders, in accordance with the method of disposition specified in the applicable Demand Request, shares of Common Stock. If such method of disposition shall be an underwritten offering and the managing underwriter(s) advises the Company in writing that the number of Registrable Shares and Other Shares proposed to be registered exceeds the Maximum Number of Shares, then the following "cutback" rules shall apply: there will be included in such registration (x) first, (I) if the applicable Demand Request was made by Summit or LGIV in accordance with the provisions hereof, the shares requested to be included by the Holders, which shares shall be allocated, if the aggregate number of such shares exceeds the Maximum Number of Shares, pro rata among all Holders on the basis of the number of shares each Holder had originally requested to include in such registration, (II) if the applicable Demand Request was made by SeaChange in accordance with the provisions hereof and the aggregate number of shares requested to be included by SeaChange and Summit exceeds the Maximum Number of Shares, the shares requested to be included by SeaChange and Summit, which shares shall be allocated pro rata among SeaChange and Summit on the basis of the number of shares each such Holder had originally requested to include in such registration, and (III) if the applicable Demand Request was made by SeaChange in accordance with the provisions hereof and the aggregate number of shares requested to be included by SeaChange and Summit does not exceed the Maximum Number of Shares, the shares requested to be included by SeaChange and Summit, and then the shares requested to be included by LGIV to the extent that such shares of LGIV may be included in such registration without the amount of registered securities thereunder exceeding the Maximum Number of Shares, (y) second, to the extent that any additional shares of Common Stock may be included in such registration without the amount of registered securities thereunder exceeding the Maximum Number of Shares, the shares of Common Stock that the Company proposes to issue for its own account, the number of which shares may not exceed the difference between the Maximum Number of Shares and those shares proposed to be included pursuant to clause (x); and (z) third, to the extent that any additional shares of Common Stock may be included in such registration without the amount of registered securities thereunder exceeding the Maximum Number of Shares, the shares of Common Stock that the Company proposes to issue for the account of any Other Stockholder pro rata among such Persons on the basis of the number of shares such Persons had originally requested to include in such registration. If a Demand Registration

Statement involves an underwritten offering of Registrable Shares, then the Company and/or any Other Stockholders whose shares are included in such Demand Registration Statement shall sell their shares in the underwritten offering on the same terms and conditions as those applicable to the Registrable Shares. Except for registration statements on Form S-4, S-8 or any successor thereto, the Company will not file with the Commission any other registration statement with respect to its Common Stock, whether for its own account or that of Other Stockholders, from the date of receipt of a Demand Request until the completion of the period of distribution of the registration contemplated thereby.

(e) Notwithstanding anything to the contrary contained herein, at any time prior to the effective time of a Demand Registration Statement, the Holder that submitted the Demand Request in respect of such registration statement may request withdrawal of, and the Company shall withdraw, such Demand Registration Statement. Any withdrawn Demand Registration Statement shall count towards one of the demand registrations of such Holder referred to in the first sentence of Section 4(c), unless the Holder(s) reimburse the Company for its reasonable out-of-pocket expenses incurred in connection with the preparation and filing of such withdrawn Demand Registration Statement (insofar as such expenses relate to the registration of Registrable Shares).

(f) The right of any Holder to initiate a Demand Request shall automatically terminate if such Holder no longer owns any Registrable Shares.

5. Incidental Registration.

(a) If the Company at any time (other than pursuant to Section 4 or Section 6) proposes to register any of its securities under the Securities Act for sale to the public, whether for its own account or for the account of other security holders or both (except with respect to registration statements on Forms S-4, S-8 or another form not available for registering the offer and sale of restricted shares to the public), each such time the Company will give written notice to all Holders of Registrable Shares of its intention so to do. Upon the written request of any such Holder, received by the Company within 30 days after the giving of any such notice by the Company, to register any of such Holder's Registrable Shares, the Company will use its best efforts, subject to Section 5(b), to cause all the Registrable Shares as to which registration shall have been so requested to be included among the securities to be covered by the Registration Statement proposed to be filed by the Company, all to the extent requisite to permit the sale or other disposition by the Holder of such Registrable Shares so registered.

(b) In the event that any registration pursuant to this Section 5 shall involve an underwritten public offering of Common Stock and the number of shares proposed to be included therein exceeds the Maximum Number of Shares, then the following "cutback" rules shall apply:

(i) If the registration was originated by the Company for a primary offering, then there will be included in such registration: (x) first, all of the shares of Common Stock that the Company proposes to issue for its own account; and (y) second, to the extent that any additional shares of Common Stock may be included in such registration without the amount of registered securities thereunder exceeding the Maximum Number of Shares, the shares

proposed to be included by all Holders, if any, which shares shall be allocated, if the aggregate number of shares proposed to be included by clause (x) and this clause (y) exceeds the Maximum Number of Shares, *pro rata* among such Persons on the basis of the number of shares such Persons had originally requested to include in such registration; and (z) third, to the extent that any additional shares of Common Stock may be included in such registration without the amount of registered securities thereunder exceeding the Maximum Number of Shares, the shares proposed to be included by the Other Stockholders, if any, allocated *pro rata* among such Persons on the basis of the number of shares such Persons had originally requested to include in such registration;

(ii) If the registration was originated by a Holder, then there will be included in such registration: (x) first, all of the shares of Common Stock that each Holder proposes to register, which shares shall be allocated, if the aggregate number of shares exceeds the Maximum Number of Shares, in accordance with clause (x) of the second sentence of Section 4(d) above; (y) second, to the extent that any additional shares of Common Stock may be included in such registration without the amount of registered securities thereunder exceeding the Maximum Number of Shares, those shares of Common Stock proposed to be registered by the Company; and (z) if such number of shares described in the foregoing clauses (x) and (y) do not exceed the Maximum Number of Shares, the shares proposed to be included by Other Stockholders, if any, allocated *pro rata* among such Persons on the basis of the number of shares such Persons had requested to include in such registration; and

(iii) If the registration was originated by Other Stockholders, then there will be included in such registration: (x) first, all of the shares of Common Stock that such originating Other Stockholders, the Company and the Holders propose to register, which shares shall be allocated, if the aggregate number of shares proposed to be included by this clause (x) exceeds the Maximum Number of Shares, *pro rata* among such Persons on the basis of the number of shares such Persons had requested to include in such registration; and (y) if such number of shares described in the foregoing clause (x) does not exceed the Maximum Number of Shares, the shares proposed to be included by any Other Stockholders that are not included among such originating Other Stockholders, if any, allocated *pro rata* among such Persons on the basis of the number of shares such Persons had requested to include in such registration.

(c) Notwithstanding anything to the contrary contained herein, at any time prior to the effective time of a registration pursuant to this Section 5, (i) the Company may withdraw such registration without incurring any liability to any Holder and (ii) a Holder may withdraw the Registrable Shares that it had sought to have included therein without incurring any liability to the Company.

6. Registration on Form S-3. If at any time (i) one or more Holders request in a written notice that the Company file a registration statement on Form S-3 (or any successor thereto) for a public offering of all or any portion of the Registrable Shares held by such requesting Holder(s), the reasonably anticipated aggregate price to the public of which would exceed \$5,000,000, and (ii) the Company is a registrant entitled to use Form S-3 (or any successor thereto) to register the offer and sale of such shares in accordance with the intended manner of disposition thereof, then the Company shall use its best efforts to promptly register under the Securities Act on a registration on Form S-3 (or any successor thereto), for public sale

in accordance with the method of disposition specified in such notice, the number of Registrable Shares specified in such notice. Whenever the Company is required by this Section 6 to use its best efforts to effect the registration of Registrable Shares, each of the procedures and requirements of Section 4 (including but not limited to (i) the requirement that the Company notify all other Holders of Registrable Shares from whom notice has not been received and provide them with the opportunity to participate in the offering, (ii) the provisions regarding allocations in Section 4(d) and (iii) the last sentence of Section 4(a)) shall apply to such registration, provided, however, that the Company shall not be required to effect more than two registrations in any twelve-month period under this Section 6, and provided, further, however, that the requirements contained in the first sentence of Section 4(a) shall not apply to any registration on Form S-3 which may be requested and obtained under this Section 6.

7. Registration Procedures.

(a) If and whenever the Company is required by the provisions of Sections 4, 5 or 6 to effect registration of the offer and sale of any Registrable Shares pursuant to a Registration Statement to be filed under the Securities Act, the Company will:

(i) at least three business days prior to the initial filing of the Registration Statement with the Commission, furnish to Special Counsel a copy of such Registration Statement as proposed to be filed, and the Company will in good faith consider incorporating into such Registration Statement any comments of Special Counsel received by the Company within three business days of furnishing such copy. If a Registration Statement is reviewed by the Commission: (A) the Company will as promptly as reasonably practicable provide Special Counsel with a copy of each comment letter issued in respect of such Registration Statement and a copy of the Company's proposed responses thereto; (B) the Company shall further provide Special Counsel with a copy of any proposed amendment to be filed with the Commission no less than four business days prior to the Company's proposed filing date; (C) the Company will in good faith consider incorporating into such amendment any comments of Special Counsel received by the Company within three business days of furnishing such copy; and (D) once the Registration Statement is cleared from review, the Company will as promptly inform Special Counsel of the effectiveness thereof. The Company will use its best efforts to cause a Registration Statement to become effective as promptly as practicable after the initial filing thereof with the Commission and use its best efforts to cause such Registration Statement to remain effective for the period of the distribution contemplated thereby (determined as hereinafter provided).

(ii) after a Registration Statement is initially declared effective, prepare and file with the Commission such amendments and supplements to such Registration Statement and the related prospectus as may be necessary to keep such Registration Statement effective for the period of the distribution contemplated thereby and comply with the provisions of the Securities Act with respect to the disposition of all Registrable Shares covered by such Registration Statement in accordance with the sellers' intended method of disposition set forth in such Registration Statement for such period. The Company shall, at least three business days prior to the filing of a post-effective amendment to the Registration Statement or a prospectus (including a prospectus supplement, a Free Writing Prospectus and any documents to be incorporated by reference in the prospectus to the extent they expressly relate to an offering

under the Registration Statement), furnish a copy of such proposed filing to Special Counsel and any underwriter (if such filing relates to an underwritten offering), and the Company will in good faith consider incorporating into such proposed filing any comments of Special Counsel received by the Company within two business days of furnishing such copy.

(iii) as promptly as reasonably practicable furnish to Special Counsel copies of any and all transmittal letters and other correspondence with the Commission and all correspondence from the Commission to the Company relating to the Registration Statement or any prospectus or any amendment or supplement thereto.

(iv) after a Registration Statement is declared effective, and in connection with any underwritten offering under the Registration Statement, furnish to the Holders whose Registrable Shares are included in such Registration Statement such number of copies of the Registration Statement, each amendment and supplement thereto (in each case including all exhibits thereto but excluding documents incorporated by reference therein other than those that expressly relate to the offering), the prospectus included in such Registration Statement (including any prospectus supplements) and such other documents as any such Holders or underwriters may reasonably request in order to facilitate the disposition of the Registrable Shares included in the Registration Statement.

(v) use its best efforts (i) to register or qualify the Registrable Shares under such other securities or blue sky laws of such jurisdictions in the United States (in the event an exemption is not available) as any Holder of Registrable Shares covered by a Registration Statement reasonably (in the light of such Holder's intended plan of distribution) requests and (ii) to do any and all other acts and things that may be reasonably necessary or advisable to enable such Holder to consummate the disposition in such jurisdictions of the Registrable Shares owned by such Holder; provided that the Company will not be required to (w) qualify generally to do business in any jurisdiction where it would not otherwise be required to qualify but for this Section 7(a)(v), (x) conform its capitalization or the composition of its assets at the time to the securities or blue sky laws of any such jurisdiction, (y) subject itself to taxation in any such jurisdiction or (z) consent to general service of process in any such jurisdiction.

(vi) as promptly as reasonably practicable notify each other Holder of Registrable Shares covered by the Registration Statement, at any time when a prospectus relating thereto is required to be delivered (or deemed delivered) under the Securities Act, of the occurrence of an event of which the Company has knowledge requiring the preparation of a supplement or amendment to such prospectus so that, as thereafter delivered (or deemed delivered) to the purchasers of such Registrable Shares, such prospectus will not contain an untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they are made, not misleading, and the Company will as promptly as reasonably practicable prepare and furnish to such Holders a supplement to or an amendment of such prospectus so that, as thereafter delivered (or deemed delivered) to the purchasers of such Registrable Shares, such prospectus will not contain any untrue statement of material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances in which they were made, not misleading.

(vii) enter into reasonable and customary agreements (including an underwriting or other agreement in form customary in the securities business for companies of the size and investment stature of the Company) and use best efforts to take such other actions as are reasonably required or requested by a Holder or underwriter in order to expedite or facilitate the disposition of any Registrable Shares pursuant to a Registration Statement.

(viii) upon execution of a customary confidentiality agreement (if such Holder is not already bound by a confidentiality obligation to the Company), make available for inspection by any Holder of Registrable Shares covered by a Registration Statement, any underwriter participating in an underwritten offering pursuant to the Registration Statement, Special Counsel, and any attorney, accountant or other professional retained by any such Holder or underwriter (collectively, the “Inspectors”), all financial and other records, pertinent corporate documents and properties of the Company (collectively, the “Records”) and cause the Company’s and its significant subsidiaries’ officers, directors and employees to, and shall use commercially reasonable efforts to cause the Company’s independent accountants to, as promptly as reasonably practicable, supply all information reasonably requested by any Inspector in connection with such Registration Statement or underwritten offering, in each case, to the extent reasonably necessary to establish the applicable Person’s due diligence defense under U.S. securities laws; provided that in no event shall the Company be required to make available to the Holders any information which the Board of Directors in its good faith judgment believes is competitively sensitive. The Inspectors shall coordinate with one another so that the inspection permitted hereunder will not unnecessarily interfere with the Company’s conduct of business. In any event, Records which the Company determines, in good faith, to be confidential and which it notifies or otherwise identifies in writing to the Inspectors are confidential shall not be disclosed by the Inspectors unless (and only to the extent that) (i) the disclosure of such Records is necessary to permit a Holder to enforce its rights under this Agreement or (ii) the release of such Records is ordered pursuant to a subpoena or other order from a court of competent jurisdiction. Each Holder agrees that information obtained by it as a result of such inspections shall be deemed confidential and shall not be used by it as the basis for any market transactions in the securities of the Company (unless and until such is made generally available to the public by the Company) or for any reason not related to the registration of Registrable Securities. Each Holder further agrees that it will, upon learning that disclosure of such Records is sought in a court of competent jurisdiction, cause give notice to the Company and allow the Company, at its expense, to undertake appropriate action to prevent disclosure of the Records deemed confidential.

(ix) otherwise use best efforts (i) to comply with all applicable rules and regulations of the Commission to the extent necessary to permit it to lawfully fulfill its obligations under this Agreement, and (ii) to make available to its security holders, as promptly as reasonably practicable, an earnings statement covering a period of 12 months, beginning upon the first disposition of Registrable Shares pursuant to a Registration Statement, which earnings statement shall satisfy the provisions of Section 11(a) of the Securities Act.

(x) use its best efforts to cause all Registrable Shares to be listed on each securities exchange on which the Common Stock is then listed.

(b) For purposes of Section 7(a)(i) and 7(a)(ii), the period of distribution of Registrable Shares in a firm commitment underwritten public offering shall be deemed to extend until each underwriter has completed the distribution of all securities purchased by it, and the period of distribution of Registrable Shares in any other registration shall be deemed to extend until the earlier of the sale of all Registrable Shares covered thereby and 120 days after the effective date thereof (such 120-day period to be tolled during any period in which the prospectus included in a Registration Statement may not be used under the circumstances described in Section 7(a)(vi) or 17(c)).

(c) In connection with each Registration Statement filed hereunder covering Registrable Shares, the Holders of such shares will furnish to the Company in writing such information with respect to themselves and the proposed distribution by them as reasonably shall be necessary in order to assure compliance with federal and applicable state securities laws.

8. Expenses. The Company will pay all Registration Expenses incurred in connection with the performance of its obligations pursuant to Sections 4, 5 or 6. All Selling Expenses in connection with the offer and sale of Registrable Shares shall be borne by the selling Holders in proportion to the number of Registrable Shares sold by each, or in such other proportion as they may mutually agree among themselves.

9. Indemnification and Contribution. (a) The Company agrees to indemnify and hold harmless to the fullest extent permitted by law each Holder whose Registrable Shares are covered by a Registration Statement, its officers, directors and each Person, if any, who controls such Holder within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act, from and against any and all losses, claims, damages, liabilities, and expenses, or any action or proceeding in respect thereof (each, a "Liability" and collectively, "Liabilities") (including reimbursement of such Holder for any legal or any other expenses reasonably incurred by it in investigating or defending such Liabilities) arising out of or based upon any untrue statement or alleged untrue statement of a material fact contained in such Registration Statement or any prospectus relating to such Registrable Shares (or in any amendment or supplement thereto), or arising out of or based upon any omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, or arising out of any violation of any securities law by the Company or any officer or employee of the Company, except insofar as such Liabilities arise out of or are based upon any such untrue statement or omission or alleged untrue statement or omission based upon information furnished in writing to the Company by such Holder expressly for use therein or except insofar as such Liabilities arise out of any violation of any securities law by such Holder resulting from any action or omission of such Holder in connection with such Registration Statement.

(b) Each Holder whose Registrable Shares are included in a Registration Statement agrees, severally and not jointly, to indemnify and hold harmless to the fullest extent permitted by law the Company, its officers, directors, agents, and each Person, if any, who controls the Company within the meaning of either Section 15 of the Securities Act or Section 20 of the Exchange Act, to the same extent as the foregoing indemnity from the Company to such Holder in Section 9(a) (including reimbursement of the Company for any legal or any other expenses reasonably incurred by it in investigating or defending such Liabilities), but only to the extent such Liabilities arise out of or are based upon information furnished in writing by such Holder expressly for use in the Registration Statement, prospectus or in any amendment or

supplement thereto relating to such Holder's Registrable Shares or to the extent such Liabilities arise out of any violation of any securities law by such Holder resulting from any action or omission of such Holder in connection with such Registration Statement; provided, however, that the liability of such Holder hereunder shall be limited to the proportion of any such Liabilities which is equal to the proportion that the public offering price of the Registrable Shares sold by such Holder under such Registration Statement bears to the total public offering price of all securities sold thereunder, but not in any event to exceed the net proceeds received by such Holder from the sale of its Registrable Shares covered by such Registration Statement.

(c) After receipt by any Person (an "Indemnified Party") of any notice of the commencement of any action, suit, proceeding or investigation or threat thereof in respect of which indemnity may be sought pursuant to Section 9(a) or 9(b), such Indemnified Party shall as promptly as reasonably practicable notify the Person against whom such indemnity may be sought (the "Indemnifying Party") in writing. Following notice of commencement of any such action given to the Indemnifying Party as above provided, the Indemnifying Party shall be entitled to participate in and, to the extent it may wish, jointly with any other Indemnifying Party similarly notified, to assume the defense of such action at its own expense, with counsel reasonably satisfactory to such Indemnified Party. In any such proceeding so assumed by the Indemnifying Party, any Indemnified Party shall have the right to retain its own counsel, but the fees and expenses of such counsel shall be at the expense of such Indemnified Party unless (i) the Indemnifying Party and the Indemnified Party shall have mutually agreed to the retention of such counsel or (ii) representation of both parties by the same counsel would be inappropriate due to actual or potential differing or conflicting interests between them. It is understood that the Indemnifying Party, in connection with any proceeding or related proceedings in the same jurisdiction, shall be liable only for the reasonable fees and expenses of one firm of attorneys (in addition to any necessary local counsel) at any time for all such Indemnified Parties, and that all such fees and expenses shall be reimbursed as they are incurred upon submission of reasonably itemized invoices. In the case of any such separate firm for Holders who are entitled to indemnity pursuant to Section 9(a), such firm shall be designated in writing by the Indemnified Party who had the largest number of Registrable Shares included in the Registration Statement at issue. The Indemnifying Party shall not be liable for any settlement of any proceeding effected without its written consent, which consent shall not be unreasonably withheld, but if settled with such consent, or if there be a final judgment for the plaintiff, the Indemnifying Party shall indemnify and hold harmless such Indemnified Parties from and against any loss or liability (to the extent set forth in this Section 9) by reason of such settlement or judgment. No Indemnifying Party shall, without the prior written consent of the Indemnified Party, which consent shall not be unreasonably withheld, conditioned or delayed, effect any settlement of any pending or threatened proceeding in respect of which any Indemnified Party is or could have been a party and indemnity could have been sought hereunder by such Indemnified Party, unless such settlement includes an unconditional release of such Indemnified Party from all liability arising out of such proceeding.

(d) If the indemnification provided for hereunder shall for any reason be held by a court of competent jurisdiction to be unavailable to an Indemnified Party in respect of any Liability referred to herein, then each such Indemnifying Party, in lieu of indemnifying such Indemnified Party, shall contribute to the amount paid or payable by such Indemnified Party as a result of such Liabilities between the Company on the one hand and each Holder whose

Registrable Shares are covered by the Registration Statement in issue on the other, in such proportion as is appropriate to reflect the relative fault of the Company and of each such Holder in connection with any untrue statement of a material fact contained in the Registration Statement, any prospectus or any amendment or supplement thereto or caused by any omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, which resulted in such Liabilities, as well as any other relevant equitable considerations. The relative fault of the Company on the one hand and of each such Holder on the other shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by such party, and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission.

(e) The Company and the Holders (including each Permitted Transferee) agree that it would not be just and equitable if contribution pursuant to Section 9(d) were determined by *pro rata* allocation or by any other method of allocation which does not take account of the equitable considerations referred to in Section 9(d). The amount paid or payable by an Indemnified Party as a result of the Liabilities referred to in Section 9(d) shall be deemed to include, subject to the limitations set forth above, any legal or other expenses reasonably incurred by such Indemnified Party in connection with investigating or defending any such action or claim. Notwithstanding the provisions of this Section 9, no Holder shall be required to contribute any amount in excess of the amount of the net proceeds received by such Holder from the sale of its Registrable Shares covered by the Registration Statement in issue. No Person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Exchange Act) shall be entitled to contribution from any Person who was not guilty of such fraudulent misrepresentation.

10. Recapitalization, Exchanges, etc. The provisions of this Agreement shall (i) apply to the full extent set forth herein with respect to any and all securities into which any of the Registrable Shares are converted, exchanged or substituted in any recapitalization or other capital reorganization involving the Company and (ii) be appropriately adjusted for any dividends of Common Stock in respect of the Common Stock, stock splits, reverse splits, combinations, recapitalizations and the like occurring after the date hereof.

11. Rule 144 Reporting. In order to make available to the Holders the benefits of certain rules and regulations of the Commission which may permit the sale of Registrable Shares to the public without registration under the Securities Act, at all times after ninety (90) days after the effective date of any Registration Statement covering a public offering of securities of the Company under the Securities Act, the Company agrees to:

(a) make and keep public information available, as those terms are understood and defined in Rule 144 under the Securities Act;

(b) use its best efforts to file with the Commission in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act; and

(c) furnish to each Holder forthwith upon request a written statement by the Company as to its compliance with the reporting requirements of the Securities Act and the Exchange Act, and the rules and regulations thereunder, a copy of the most recent annual or quarterly report of the Company, and such other reports and documents so filed by the Company as such Holder may reasonably request in availing itself of any rule or regulation of the Commission allowing such Holder to sell any Registrable Shares without registration.

12. Binding Effect. This Agreement shall be binding upon and inure to the benefit of the Company and the Holders and their respective successors and Permitted Transferees.

13. Notices. All notices, requests, consents and other communications hereunder shall be in writing and shall be delivered in person, mailed by certified or registered mail, return receipt requested, or sent by telecopier or telex, addressed to such party at the address of such party set forth on the signature page hereto, or, in any case, at such other address or addresses as shall have been furnished in writing to the Company (in the case of a Holder) or to the Holders (in the case of the Company). In the case of any notice sent to Summit, a copy of such notice (which shall not be deemed notice) shall be sent to Choate, Hall & Stewart LLP, Two International Place, Boston, MA 02110, Attention T.J. Murphy, Fax: (617) 248-4000, Email: tmurphy@choate.com.

14. Governing Law. This Agreement shall be construed and enforced in accordance with and governed by the laws of the State of Massachusetts, without regard to its principles of conflicts of laws.

15. Amendments and Waivers. Any amendment, modification or supplement of or to, or any waiver of, any term or condition of this Agreement shall be effective only if in writing and signed by the Company and Holders owning a majority of the Registrable Shares then outstanding. Notwithstanding the foregoing, this Agreement may not be amended, modified or supplemented, and the observance of any term hereunder may not be waived, with respect to a Holder without the written consent of such Holder unless such amendment, modification, termination or waiver applies to all Holders in the same fashion and, in connection therewith, no Holder receives any consideration or other inducement that is not received by all Holders. No failure to enforce any provision of this Agreement shall be deemed to or shall constitute a waiver of such provision and no waiver of any of the provisions of this Agreement shall be deemed to or shall constitute a waiver of any other provision hereof (whether or not similar) nor shall such waiver constitute a continuing waiver.

16. Counterparts. This Agreement may be executed in any number of counterparts, all of which taken together shall constitute one and the same instrument, and any Party may execute this Agreement by signing any such counterpart.

17. Termination; Suspension.

(a) The obligations of the Company to register Registrable Shares under Sections 4, 5 or 6 shall terminate on the earlier to occur of (i) no Registrable Shares being outstanding and (ii) the seventh anniversary of the initial public offering of the Company's Common Stock.

(b) If requested in writing by the underwriters for the initial underwritten public offering of securities of the Company, no Holder shall sell publicly any Registrable Shares or any other shares of Common Stock (other than Registrable Shares or other shares of Common Stock being registered in such offering), without the consent of such underwriters, for a period of not more than one hundred and eighty (180) days following the effective date of the registration statement relating to such offering (plus up to an additional 34 days to the extent requested by the managing underwriters for such offering in order to address NASD Rule 2711(f) of the Financial Industry Regulatory Authority, Inc. or any similar successor provision); provided, however, that all other Persons selling shares of Common Stock in such offering, all holders of at least 1% of the Company's outstanding shares of Common Stock (assuming for such purpose the conversion of all outstanding equity securities into Common Stock) and all officers and directors of the Company shall also have agreed not to sell publicly their Common Stock under the circumstances and pursuant to the terms set forth in this Section 17(b).

(c) Notwithstanding the provisions of Section 7(a), the Company's obligation to file a Registration Statement, or cause such Registration Statement to become and remain effective, may be suspended, for the shortest period practicable and in any event for a period not to exceed ninety (90) days in any 24-month period (a "Blackout Period"), if the Company determines, in good faith, that to file such Registration Statement, or for it to remain effective, would (i) require the public disclosure of material non-public information concerning any transaction or negotiations involving the Company or any of its consolidated subsidiaries that would materially interfere with such transaction or negotiations, (ii) require the public disclosure of material non-public information concerning the Company at a time when its directors and executive officers are restricted from trading in the Common Stock or (iii) otherwise materially interfere with financing plans, acquisition activities or business activities of the Company. If the Company declares a Blackout Period with respect to a Demand Registration Statement that has not yet been declared effective, then the Holder(s) that submitted the Demand Request in respect of such registration statement may request withdrawal of, and the Company shall withdraw, such Demand Registration Statement (i) without it counting towards one of the demand registrations referred to in the first sentence of Section 4(c) and (ii) without the Holders having any liability to the Company in respect of any expenses it incurred in connection with the preparation and filing of such withdrawn Demand Registration Statement.

18. Future Registration Rights. After the date hereof and for so long as this Agreement remains in effect, without the prior written consent of the holders of a majority of the Registrable Shares, the Company shall not grant to any Person the right to (a) require the Company to initiate the registration of any securities, or (b) require the Company to include in any registration securities owned by such Person, unless under the terms of such arrangement such Person may include securities in such registration only to the extent that the inclusion thereof does not limit the number of Registrable Shares included therein or adversely affect the offering price thereof (as determined by the managing underwriter(s) for such offering).

19. Severability. The provisions of this Agreement are severable and, in the event that any court of competent jurisdiction shall determine that any one or more of the provisions or part of a provision contained in this Agreement shall, for any reason, be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provision or part of a provision of this Agreement; but this Agreement shall be reformed and construed as if such invalid or illegal or unenforceable provision, or part of a provision, had never been contained herein, and such provisions or part reformed so that it would be valid, legal and enforceable to the maximum extent possible.

20. Further Assurances. From and after the date of this Agreement, upon the request of any other Party, each Party shall execute and deliver such instruments, documents and other writings as may be reasonably necessary or desirable to confirm and carry out and to effectuate fully the intent and purposes of this Agreement.

21. Specific Enforcement. Each Party acknowledges and agrees that the other Parties would be irreparably damaged if any of the provisions of this Agreement are not performed in accordance with their specific terms and that any breach of this Agreement by the Parties could not be adequately compensated in all cases by monetary damages alone. Accordingly, in addition to any other right or remedy to which any Party may be entitled under this Agreement, at law or in equity, it shall be entitled to enforce any provision of this Agreement by a decree of specific performance and to temporary, preliminary and permanent injunctive relief to prevent breaches or threatened breaches of any of the provisions of this Agreement, without posting any bond or other undertaking.

22. Transfer of Registration Rights. Each Holder shall have the right to transfer, by written agreement, any or all of its rights granted under this Agreement to any direct or indirect transferee of such Holder's Registrable Shares (each Person to whom such Registrable Shares shall have been so transferred hereunder, a "Permitted Transferee"); provided, (i) such transferee is an Affiliate of the Investor or (ii) such transferee is transferred at least 100,000 Registrable Shares (subject to appropriate adjustment for stock splits, stock dividends, recapitalizations and similar events occurring after the date of this Agreement), and in either such case, (x) such transferee agrees, in writing in form and substance reasonably satisfactory to the Company, to be bound by the terms and provisions of this Agreement; and (y) such transfer of Registrable Shares shall be effected in accordance with applicable securities laws, this Agreement and any other agreements relating to the Registrable Shares between the Company and such Holder. A Permitted Transferee shall have all of the rights of a Holder hereunder as to any Registrable Shares owned by it. Following any transfer or assignment made pursuant to this Section 22 in connection with the transfer by a Holder of a portion of its Registrable Shares, such Holder shall retain all rights under this Agreement with respect to the remaining portion of its Registrable Shares.

23. Termination of SeaChange Registration Rights Agreement and LGIV Registration Rights Agreement. Each of the SeaChange Registration Rights Agreement and the LGIV Registration Rights Agreement is hereby terminated in its entirety. This Agreement constitutes and contains the entire agreement and understanding of the parties with respect to the subject matter hereof and supersedes any and all prior negotiations, correspondence, agreements, understandings, duties or obligations between the parties respecting the subject matter hereof, including the SeaChange Registration Rights Agreement and the LGIV Registration Rights Agreement.

24. Interpretation. When reference is made in this Agreement to a Section, such reference shall be to a Section of this Agreement, unless otherwise indicated. The headings contained in this Agreement are for convenience of reference only and shall not affect in any way the meaning or interpretation of this Agreement. The language used in this Agreement shall be deemed to be the language chosen by the Parties hereto to express their mutual intent, and no rule of strict construction shall be applied against any party. Whenever the context may require, any pronouns used in this Agreement shall include the corresponding masculine, feminine or neuter forms, and the singular form of nouns and pronouns shall include the plural, and vice versa. Any reference to any federal, state, local or foreign statute or law shall be deemed also to refer to all rules and regulations promulgated thereunder, unless the context requires otherwise. Whenever the words “include,” “includes” or “including” are used in this Agreement, they shall be deemed to be followed by the words “without limitation.”

25. Waiver of Jury Trial. EACH PARTY HERETO ACKNOWLEDGES AND AGREES THAT ANY CONTROVERSY THAT MAY ARISE UNDER THIS AGREEMENT IS LIKELY TO INVOLVE COMPLICATED AND DIFFICULT ISSUES, AND THEREFORE IT HEREBY IRREVOCABLY AND UNCONDITIONALLY WAIVES ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY LITIGATION DIRECTLY OR INDIRECTLY ARISING OUT OF OR RELATING TO THIS AGREEMENT AND ANY OF THE AGREEMENTS DELIVERED IN CONNECTION HEREWITH OR THE TRANSACTIONS CONTEMPLATED HEREBY OR THEREBY.

26. Aggregation. All Registrable Shares held or acquired by Affiliates of a particular Investor shall be aggregated together for the purpose of determining the availability of any rights of such Investor under this Agreement and such Affiliates may apportion such rights as among themselves in any manner they deem appropriate.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the date first above written.

CASA SYSTEMS, INC.

By: /s/ Jerry Guo
Name: Jerry Guo
Title: President

Address: []

LGI VENTURES BV

Represented by Chellomedia B.V., sole director of LGI Ventures B.V.,
in its turn duly represented by Liberty Global Europe Management B.V.,
in its turn duly represented by:

 /s/ A.M. Tuijten
Name: A.M. Tuijten
Title: Director

Address: []

 /s/ W.E. Musselman
Name: W.E. Musselman
Title: Director

SEACHANGE INTERNATIONAL, INC.

By: /s/ William C. Styslinger
Name: William C. Styslinger
Title: CEO

Address: []

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the date first above written.

SUMMIT PARTNERS PRIVATE EQUITY FUND VII-A, L.P.

By: Summit Partners PE VII, L.P.
Its General Partner
By: Summit Partners PE VII, LLC
Its General Partner

By: /s/ Bruce R. Evans
Bruce R. Evans, Member

Address: 222 Berkeley Street, 18th Floor
Boston, MA 02116

SUMMIT INVESTORS I, LLC

By: Summit Investors Management, LLC
Its Manager
By: Summit Partners L.P.
Its Manager
By: Summit Master Company, LLC
Its General Partner

By: /s/ Bruce R. Evans
Bruce R. Evans, Member

Address: 222 Berkeley Street, 18th Floor
Boston, MA 02116

SUMMIT PARTNERS PRIVATE EQUITY FUND VII-A, L.P.

By: Summit Partners PE VII, L.P.
Its General Partner
By: Summit Partners PE VII, LLC
Its General Partner

By: /s/ Bruce R. Evans
Bruce R. Evans, Member

Address: 222 Berkeley Street, 18th Floor
Boston, MA 02116

SUMMIT INVESTORS I (UK), L.P.

By: Summit Investors Management, LLC
Its General Partner
By: Summit Partners L.P.
Its Manager
By: Summit Master Company, LLC
Its General Partner

By: /s/ Bruce R. Evans
Bruce R. Evans, Member

Address: 222 Berkeley Street, 18th Floor
Boston, MA 02116

Subsidiaries of Casa Systems, Inc.

| <u>Name of Subsidiary</u> | <u>Jurisdiction of Incorporation or Organization</u> |
|---|--|
| Casa Communications Limited | Ireland |
| Casa Properties LLC | Delaware |
| Casa Systems B.V. | Netherlands |
| Casa Systems Canada Ltd. | Quebec, Canada |
| Casa Systems SAS | France |
| Casa Systems Securities Corporation | Massachusetts |
| Guangzhou Casa Communication Technology LTD | China |