CELADON GROUP INC
Form 10-Q
May 10, 2012

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

FORM 10-Q

[X] QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended March 31, 2012

or

[ ] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Commission file number: 001-34533

CELADON GROUP, INC.
(Exact name of registrant as specified in its charter)

Delaware	13-3361050
(State or other jurisdiction of incorporation or organization)	(IRS Employer Identification No.)
9503 East 33rd Street One Celadon Drive Indianapolis, IN	46235-4207
(Address of principal executive offices)	(Zip Code)

(317) 972-7000
(Registrant's telephone number, including area code)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.
Yes [X] No
[ ]

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T

(§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).
Yes [ ] No [ ]

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of "accelerated filer and large accelerated filer" in Rule 12b-2 of the Exchange Act. (Check one):
Large accelerated filer [ ] Accelerated filer [X] Non-accelerated filer [ ]

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12-b2 of the Exchange Act).
Yes [ ] No
[X]

As of April 30, 2012 (the latest practicable date), 22,802,806 shares of the registrant's common stock, par value $0.033 per share, were outstanding.

CELADON GROUP, INC.

Index to

March 31, 2012 Form 10-Q

Part I.	Financial Information		
	Item 1.	Financial Statements	
		Condensed Consolidated Statements of Income for the three and nine months ended March 31, 2012 and 2011 (Unaudited)	3
		Condensed Consolidated Balance Sheets at March 31, 2012 and June 30, 2011 (Unaudited)	4
		Condensed Consolidated Statements of Cash Flows for the nine months ended March 31, 2012 and 2011 (Unaudited)	5
		Notes to Condensed Consolidated Financial Statements (Unaudited)	6
	Item 2.	Management's Discussion and Analysis of Financial Condition and Results of Operations	16
	Item 3.	Quantitative and Qualitative Disclosures about Market Risk	24
	Item 4.	Controls and Procedures	24
Part II.	Other Information		
	Item 1.	Legal Proceedings	26
	Item 1A.	Risk Factors	26
	Item 4.	Mine Safety Disclosures	26
	Item 6.	Exhibits	27

PART I. FINANCIAL INFORMATION

Item I. Financial Statements

CELADON GROUP, INC.
CONDENSED CONSOLIDATED STATEMENTS OF INCOME
(Dollars in thousands except per share amounts)
(Unaudited)

	2012
REVENUE:	
Freight revenue	$120,988
Fuel surcharge revenue	32,321
Total revenue	153,309
OPERATING EXPENSES:	
Salaries, wages, and employee benefits	41,720
Fuel	41,253
Purchased transportation	26,833
Revenue equipment rentals	2,332
Operations and maintenance	10,130
Insurance and claims	3,527
Depreciation and amortization	11,563
Cost of products and services sold	---
Communications and utilities	1,080
Operating taxes and licenses	2,531
General and other operating	1,737
Total operating expenses	142,706
	10,603

Operating income	
Interest expense	1,382
Interest income	(4)
Income from sale of majority interest in subsidiary	---
Other (income) expense, net	(199)
Income before income taxes	9,424
Income tax expense	3,766
Net income	$5,658
Income per common share:	
Diluted	$0.25

fluctuations in demand for our products and services, including seasonal variations, especially in th

- the sequential expansion of our operating performance typically from the first quarter to the second quarter, and our ability to sustain that expansion in subsequent quarters;
- our ability to hire, train, develop, integrate and retain a sufficient number of skilled sales and engineering employees to support our continued growth, including internationally and to replace turn-over of our employees in these functions and locations;
- turn-over of our skilled sales and engineering employees, including internationally;
- the complexity, length and associated unpredictability of our sales cycles for our products and services;
- changes in end-customers' budgets for technology purchases and delays in their purchasing decisions and cycles;
- technical challenges in end-customer networks, which may be unrelated to our products, which could delay adoption and installation and impact the operation of our products and purchases of our services;
- delay in development and availability of component parts needed for development and timely introduction of our next-generation products and product features;
- our ability to develop and sustain sales capacity across all our sales territories;
- changing market conditions;
- changes in the competitive dynamics of our target markets, including new entrants, further consolidation and pricing trends;
- variation in sales channels, product costs, prices or the mix of products we sell;
- our contract manufacturers' and component suppliers' ability to meet our product demand forecasts on time, at acceptable prices, or at all;
- our ability to develop and make more productive relationships with our channel partners and our channel partners' ability to effectively develop sales opportunities and distribute our products;
- the timing of our product releases or upgrades by us or by our competitors, such as next-generation products or product features;
- our ability to develop, introduce and ship in a timely manner new products and product enhancements, to support and improve such products after introduction, and to anticipate future market demands that meet our end-customers' and channel partners' requirements;
- our ability to successfully expand the suite of products we sell and services we offer to existing end-customers and channel partners, to manage the transition of our end-customers to these new products and services and to limit disruption to our end-customers' ordering practices and the pricing environment for our legacy products and services;
- the potential need to record additional inventory reserves for products that may become obsolete or slow moving due to our new product introductions, changes in end-customer requirements, new competitive product or service

offerings or our over-estimation of demand for such products as of any particular period;

- our decision to continue or increase our investments in sales, marketing, engineering and other activities in response to changes in the marketplace or perceived marketplace opportunities or in anticipation of or to position us for future growth;
- our ability to control costs, including our operating expenses and the costs of the components we purchase while also continuing to invest in sales, marketing, engineering and other activities;
- the continuing strength of the U.S. dollar relative to the currencies of the countries of our VADs or end-customer who purchase our products, or our contract manufacturers or the component suppliers to our contract manufacturers, may require us to reduce pricing for our products outside the United States in order to maintain sales and revenue performance, or raise the cost we must pay to our manufacturers for our products, resulting in either case in lower revenue and/or gross margins for those products;
- our ability to derive benefits from our investments in sales, marketing, engineering or other activities;

11

- growth in our headcount, including hiring related to our status as a public company and hiring to support any future growth in our business, especially skilled sales and engineering employees;
- volatility in our stock price, which may lead to higher stock compensation expenses or harm our ability to effectively incentivize our employees using stock-based compensation;
- the ability of our competitors, including those with greater financial resources, to drive down pricing on our products and services, which could materially reduce our revenue and gross margins;
- our ability to achieve as of any particular period or over time a level of financial performance consistent with the expectations of our investors and industry analysts; and
- general economic or political conditions in our domestic and international markets.

The effects of these factors individually or in combination could result in unpredictability in our quarterly and annual operating results, our ability to forecast those results and our ability to achieve those forecasts. As a result, comparing our operating results on a period-to-period basis may not be meaningful. You should not rely on our past results as an indication of our future performance. This variability and unpredictability could also result in our failing to meet the expectations of our investors or financial analysts for any period. We may release guidance in our quarterly earnings conference calls, quarterly earnings releases, or otherwise, based on predictions of management, which are necessarily speculative in nature. Our guidance may vary materially from actual results. For example, on October 13, 2014, we issued a press release announcing our preliminary results for the third quarter ended September 30, 2014, which were below our previously stated guidance primarily due to weaker than expected order volume. Similarly, on February 11, 2015, we provided a guidance range for revenue for our first quarter ending March 31, 2015, which was below the estimates of financial analysts at that time. On April 13, 2015, we provided a revised lower guidance range for our revenue for the quarter, primarily due to a combination of significantly lower-than-expected U.S. education business during the quarter, orders received late in the quarter that could not be recognized as revenue, and continued sales execution challenges. If our revenue or operating results, or the rate of growth of our revenue or operating results, fall below the expectations of our investors or financial analysts, or below any forecasts or guidance we may provide to the market, or if the forecasts we provide to the market are below the expectations of analysts or investors, the price of our common stock could decline substantially. Such a stock price decline could occur even when we have met our own or other publicly stated revenue or earnings forecasts. Our failure to meet our own or other publicly stated revenue or earnings forecasts, or even when we meet our own forecasts but fall short of analyst or investor expectations, could cause our stock price to decline and expose us to costly lawsuits, including securities class action suits. Such litigation against us could impose substantial costs and divert of management’s attention and resources.
Our business creates significant seasonal variance in our quarterly revenue, which makes it difficult to compare or forecast our financial results on a quarter-by-quarter basis.
Our revenue fluctuates on a seasonal basis, which affects the comparability of our results between periods. For example, our total revenue has historically decreased from our fourth quarter to the first quarter of our next fiscal year due to seasonal buying patterns and budget cycles within both our education vertical and general enterprise end-customers. Demand in the education vertical tends to be weakest in the first and fourth quarters. However, we also historically have seen a sequential increase in end-of-year purchases by enterprise customers in our fourth quarter, which we believe is mainly due to an expectation to complete purchases within their calendar-year budget cycle. These seasonal variations are difficult to predict accurately and at times may be entirely unpredictable. In addition, the typical sequential expansion of our operating performance from the first quarter to the second quarter can create execution, delivery and product support challenges in subsequent quarters. Our ability to sustain that expansion in subsequent quarters, particularly in our less-developed sales territories, introduces additional risk into our business and our ability to accurately provide our own publicly stated revenue and earnings forecasts. In addition, we rely upon forecasts of end-customer demand to build inventory in advance of anticipated sales. We believe our past growth has, in part, made our seasonal patterns more difficult to discern, making it more difficult for us to predict future seasonal patterns and, therefore, forecast product demand and inventory requirements. Moreover, part of our strategy is to increase our sales in non-education verticals, and if our sales mix changes the seasonal nature of our revenue may change in an unpredictable way, which could increase the volatility of both our financial results and stock price.

The market and demand for our products and services may not develop as we expect.

Our year-over-year revenue grew 10% from 2014 to 2015, 28% from 2013 to 2014 and 50% from 2012 to 2013. The slowing rate of our revenue growth may continue as the general demand for wireless networking in the industry verticals that we target, or demand for our products in particular, may grow at a slower rate than we anticipate or not at all. For example, enterprises may rely more heavily upon cellular connectivity, whose speed and convenience may grow rapidly in coming years, while costs decline. The wireless networking radio spectrum may become more crowded, reducing performance of wireless networking devices.

Part of our strategy depends upon expanding sales of our cloud-managed wireless networking, switching and routing products to medium and large enterprise headquarters, branch offices and teleworkers. In addition, we intend to develop our next-generation cloud services platform as a basis for data services and data analytic applications. Sales of such products, services and applications to enterprise end-customers typically require long sales cycles and are subject to price sensitivity. Moreover, many potential end-customers in the enterprise market have substantial network expertise and experience, which may require a more-costly and sophisticated marketing and sales strategy. It is unclear whether our end-customers will pay for data analytics or other SaaS services we expect to provide or, instead, require us to provide them as enhancements to our support offerings (at no cost to them or incremental revenue to us). If our competitors offer services or provide technologies or application platforms superior to our cloud-managed platform, alone or as part of a more integrated offering or at reduced pricing, it would have a material adverse effect on our business, operating results and financial condition. For example, Ruckus also announced in 2015, that they are developing access point products and applications intended for the enterprise, a market in which we currently compete.

Our target end-customers could discontinue use of wireless networking technology, the use of wireless networking-enabled mobile devices could decrease or wireless networking could cease to be the preferred connectivity option for our target markets. As a result, demand for our products, services and applications may not continue to develop as we anticipate, or at all, and the value of our stock could decline.

A significant portion of our sales is concentrated in the education vertical, which may cause us to have longer sales cycles, and be subject to program funding constraints.

A significant portion of our revenue is concentrated in the education vertical. The majority of our sales in education is concentrated in both public and private K-12 institutions. This vertical is characterized by long sales cycles and often requires additional sales efforts. In addition, this vertical typically operates on limited budgets, and depends on annual budget approvals, which add additional uncertainty to the sales cycle. For example, the U.S. federal government is providing supplemental funding to local school districts in conjunction with its E-Rate initiative to assist districts to upgrade their technical infrastructure, including Wi-Fi infrastructure. The announced incremental federal funding is significant and available over a five-year period, which began in the second half of 2015. However, this program, its eligibility criteria, the timing and specific amount of federal funding actually available and which Wi-Fi infrastructure and product sectors will benefit, are subject to federal program guidelines and funding appropriations, which can change from year-to-year. Corresponding funding appropriation by respective states and local districts is also uncertain and, even upon such appropriation, local districts must still then submit and have approved applications consistent with the final timing and eligibility requirements of the federal program. We also believe that the prospect of federal funding available each annual cycle continues to cause some K-12 institutions to delay or defer near-term transactions they might otherwise make during the cycle to purchase our products. For example, we believe that the availability of federal funding later in 2015 under the E-Rate program caused some K-12 institutions to defer to later in 2015 (and even into 2016) spending decisions we typically would have seen in the first several quarters of 2015. In addition, K-12 institutions otherwise prepared to place orders in 2015 may have deferred their decisions to coincide with preferred deployment schedules, further deferring purchasing decisions to 2016. We believe these amplified the historical sequential decline in product revenue we previously experienced from the fourth quarter into the first quarter and shifted spending from the first half of our fiscal 2015 into the second half of the year and into early fiscal 2016. In addition, the period in 2016 for districts to submit Form 471 funding requests was extended this year, compared to 2015, which could affect the timing of federal funding approvals and district purchases. It is also possible under the federal program for schools which have filed Form 471 forms specifying Aerohive products to cancel such awards prior to placing product orders, and to re-apply in 2016 under the program for a different or larger implementation, with new orders which may be with us or one of our competitors.

These delays and potential changes will continue to impact our revenue forecasts and create greater uncertainty regarding our operating performance for these periods. For example, we currently expect this could result in the sequential decline in our product revenue in our first quarter of fiscal 2016 to be greater than we have historically experienced, though moderately less than we experienced in our first quarter of fiscal 2015. These are specific examples of the many factors which add additional uncertainty to our future revenue from our education end-customers.

Our sales cycles often require significant time, effort and investment and are subject to risks beyond our control.

Our sales efforts can take several quarters, and involve educating our potential customers about the applications and benefits of our products, including the technical capabilities of our products and associated applications and services, and recruiting and developing our channel partners. In our newly developing sales territories, including those territories where we continue to respond to turn-over, we continue to experience slower-than-expected sales growth. As a result, we continue to invest in these territories, which may take significant time and effort in order to realize growth. Sales to the education vertical are an important channel for us, and can involve an extended sales cycle. In addition, sales to our enterprise customers may also involve an extended sales cycle, and often initial purchases are small. Purchases of our products are also frequently subject to our end-customers' budget constraints, multiple approvals, unplanned administrative processing and other risks and delays. Moreover, the evolving nature of the market may lead prospective end-customers to postpone their purchasing decisions pending resolution of wireless networking or other standards, or wait for adoption of technology developed by others. In addition, we pay our sales staff commissions upon receiving orders; however, we typically recognize revenue on products only after the products are shipped to end-customers, or until certain other terms of sales are satisfied. As a result, some of the cost of obtaining sales, including paying sales commissions, may occur in a fiscal period prior to the fiscal period in which we may recognize revenue from a sale, which may cause additional fluctuations in our operating results and cash flows and balances from quarter to quarter.

We need to develop new products and continue to make enhancements to our existing products to remain competitive in a rapidly changing market.

The technology and end-customer demands in the wireless networking market change rapidly, which requires us to continuously develop and release new products and product features and associated applications and services. We must continuously anticipate and adapt to our end-customers' needs and market trends, and continue to make investments to develop or acquire new products, applications and services that meet market demands, technology trends and regulatory requirements. If our competitors introduce new products, applications and services that compete with ours, we may be required to reposition our product offerings or introduce new products in response to such competitive pressure. If we fail to develop new products, product enhancements applications or services, or fail to effectively manage the transition of our end-customers to these new products, applications or services, or our end-customers or potential end-customers do not perceive our products, applications or services to have compelling technical advantages, our business and prospects could be adversely affected, particularly if our competitors are able to introduce solutions with increased functionality.

Developing our products is challenging and involves substantial commitment of resources and significant development risk. Each phase in our product development presents serious risks of failure, rework or delay, any one of which could impact the timing and cost-effective development of products, and each of which could affect our ability to take advantage of a business opportunity or could jeopardize end-customer acceptance of the product. We have experienced in the past and may in the future experience design, manufacturing, marketing and other difficulties that could delay or prevent the development, introduction or marketing of new products and enhancements. For example, we are currently developing the next versions of our Wi-Fi hardware, including our .11ac "Wave 2" products and our HiveManager NG cloud services platform providing cloud-delivered network management applications and on-premises network management, as well as supporting data structures, analytics and APIs. We also recently announced programs to develop new data analytics services and API platforms. These are complex technical undertakings and subject to many variables and risks of delay. For example, we announced in August 2015 that our Wave 2 .11ac products, which we had expected to be commercially available in the second half of 2015, would not likely be available until early 2016. This delay was due to delays in the development and availability to us of a component part essential to our development and release of the product. In addition, the introduction of new or enhanced products requires that we carefully manage the transition from older products to minimize disruption in customer ordering practices, and ensure that new products can be timely delivered to meet our end-customers' demand and to limit inventory obsolescence. Further, after delivery of new products we may identify and must timely address performance issues as the products are used in the field in a particular environment or at scale which we could not replicate or did not anticipate during development. As a result, our end-customers may defer decisions to purchase our existing products in anticipation of our expected release of a next-generation product. For example, our end-customers who might otherwise make decisions in our first quarter of fiscal 2016 to purchase our existing products may determine to defer until later in 2016 in anticipation of our expected release of our Wave 2 products. This may particularly be true of our K-12 end-customers, who are more inclined to adopt new radio technologies quicker than enterprise customers who are more inclined to deploy more proven technologies and products. In addition, some competitors announced earlier in 2015 availability of their first Wave 2 products. Existing or potential customers considering our existing products or future availability of our Wave 2 products may elect instead to purchase competitor products currently or earlier available. We also may not correctly anticipate customer interest in or demand for our data analytics services of API platforms, or our customers may expect that we provide these additional services as part of our existing product support (and at no cost to them or incremental revenue to us). If we do not carefully manage the timing of our new products or product feature releases, and effectively support the new products and product feature releases, we could interfere with our end-customers' continued purchases of our legacy product offerings and disrupt the pricing environment for our new and legacy products, which could drive down our revenues and operating margins. As a result, we may not be successful in modifying our current products or introducing new products in a timely or appropriately responsive manner, or at all. If we fail to address these changes successfully, our business and operating results and prospects would be materially harmed.

Our gross margin will vary over time and may decline in the future.

Our gross margin was 66.8%, 67.4% and 66.7% for fiscal years 2015, 2014 and 2013, respectively. Our gross margin will vary over time, may be difficult to predict and may decline in future periods. Our gross margins also vary across our product lines and, therefore, a change in the mix of products our end-customers purchase would likely have a significant impact on our gross margins. We may face additional competition for these products, either by introduction of new products by new or existing competitors, or by our end-customers using lower-priced products, including our own, which are becoming increasingly more sophisticated.

The exchange rate of the U.S. dollar to foreign currencies has strengthened significantly of late, which may require us to reduce pricing for our products outside the United States in order to maintain sales and revenue performance, but as a result at lower gross margins for those products.

In addition, the market for wireless networking products is characterized by rapid innovation and declining average sales prices as products mature in the market place. Even if we are successful in launching new products, competition may continue to increase in the market segments in which we compete, which would likely result in increased pricing competition. To retain our average margins, we are required to continuously update our products and introduce new products and reduce our manufacturing and sales-related costs and expenses, and we could fail to accomplish this. In addition, the sales prices for our products and services may decline for a variety of reasons, including sales strategy, competitive pricing pressures, customer demand, discounts, a change in our mix of products and services, including seasonal changes in our end-customers' ordering practices, anticipation of the introduction of new products or services and decisions by end-customers to defer purchases, or promotional programs. For example, we may introduce new products or offerings at lower price points than competitive offerings or our own legacy offerings to help drive the adoption of our new products and this may adversely affect our revenues and operating margins. Larger competitors, such as Cisco/Meraki and Hewlett-Packard/Aruba, with significantly greater financial, sales and engineering resources and/or more diverse product and service offerings may reduce the price of their products or services that compete with ours or may bundle them with other products and services. If we do not similarly reduce our product manufacturing costs, our margins will decline. Alternatively, we would need to reduce our prices for such products or services in order to remain competitive, which would also cause our margins (and revenue) to decline. Any such declines in our gross margins or revenue could have an adverse impact on the value of our common stock.

As a result of being a public company, we need to further develop and maintain our internal control over financial reporting. If our internal control over financial reporting is not effective, it may adversely affect investor confidence in our company.

We are required, pursuant to Section 404 of the Sarbanes-Oxley Act, to furnish a report by management on, among other things, the effectiveness of our internal control over financial reporting as of December 31, 2015. This assessment will need to include a disclosure of any material weaknesses identified by our management in our internal control over financial reporting.

We continue to develop our system and documentation necessary to perform the evaluation needed to comply with Section 404. We may not be able to complete on an annual basis 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, we will be unable to assert that our internal controls are effective.

We cannot be certain that we will not discover material weaknesses or control deficiencies in the future. If our remediation efforts are not successful or other material weaknesses or control deficiencies occur in the future, we may be unable to report our financial results accurately or on a timely basis, which could cause our reported financial results to be materially misstated and result in the loss of investor confidence or delisting and cause the trading price of our common stock to decline. If we are unable to conclude that our internal control over financial reporting is effective or, if our independent registered public accounting firm is unable to express an opinion on the effectiveness of our internal controls when it is required to do so by the applicable rules, we could lose investor confidence in the accuracy and completeness of our financial reports, which could cause the price of our common stock to decline, and we may be subject to investigation or sanctions by the SEC.

We will be required to disclose changes made in our internal control and procedures on a quarterly basis. To comply with the requirements of being a public company, we may need to undertake various actions, such as implementing new internal controls and procedures and hiring accounting or internal audit staff. However, our independent registered public accounting firm is not required to report on the effectiveness of our internal control over financial reporting until the later of the year following our first annual report required to be filed with the SEC, or the date we are no longer an “emerging growth company,” as defined by the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. At such time, our independent registered public accounting firm may issue a report that is adverse in the event it is not satisfied with the level at which our controls are documented, designed or operating. Further our remediation efforts may not enable us to avoid a material weakness in the future.

Our products utilize cloud-managed solutions, and our future growth relies in significant part in continued demand for cloud-managed solutions and our ability to develop and deliver such services.

Most of our end-customers utilize our cloud-managed networking platform to access our applications through the Internet, rather than access our application through a physical device or virtual machine that our end-customers host on their premises. As our business grows, we must increase the capacity of our cloud-managed solutions and continue to develop new and innovative solutions that meet the needs of our end-customers. Demand for our cloud-managed solutions could decline if we are not able to offer sufficient capacity. Further, confidence in the security of cloud-managed solutions in general, or our platform in particular were to decline. In addition, a significant feature of our platform will be the ability to collect and analyze user data through applications specific to particular industry vertical and use cases. Regulatory changes relating to the use of end-customer data, including requirements relating to data privacy and security, or shifting societal norms regarding data privacy and security, could affect market demand for, and our ability to deploy, our platform. Moreover, although our end-customers do not immediately lose network functionality if cloud-connectivity fails, if our ability to deliver services through the cloud were interrupted repeatedly or for an extended period, our reputation could be damaged and confidence in our platform would likely decline, causing our revenue to decline.

We plan to target new industry verticals and geographies to diversify our end-customer base and expand our channel relationships, which could result in higher research and development and sales and marketing expenses, and if unsuccessful could reduce our operating margin.

Part of our strategy is to target new industry verticals and geographies. Currently, we focus a significant portion of our business on the education and retail verticals, and to a lesser extent healthcare, which may depend on developing new products targeted to such sectors. Specifically, we intend to invest in the development of data applications and analytic capabilities which we feel may be attractive to our customers, particularly in the retail vertical. In addition, we also plan to continue to expand to additional countries beyond those in which we currently operate. We also intend to develop new channel relationships to reach additional end-customers to further diversify our revenue base. Targeting new industry verticals and geographies and developing customized products, data applications and partnerships, including our channel partners, targeted to these industry verticals and geographies may be expensive, require us to attract, train, develop, integrate and retain qualified employees and key sales personnel, and increase our research and development costs, as well as our sales and marketing expenditures. We must also further develop and make more productive relationships with our channel partners and our channel partners' ability to effectively distribute our products, which requires specific investments and additional dedicated resources. We do not know if we will be successful in any of these efforts, or whether the level of success we achieve will justify the additional spending and specific investments and dedicated resources required. For example, we announced in April 2015 a new relationship with Dell Inc., whereby Dell will become a reseller of Aerohive's Wi-Fi and cloud services, and that the two companies expect to work together to execute their shared vision of cloud-managed IT to provide simplified and streamlined operations, configuration, monitoring and troubleshooting for customer networks, and in September 2015, we announced with Brocade and Juniper Networks collaborations that allow us to meet in the channel and co-sell a combined wired and wireless solutions to our end-customers. We also have an existing relationship with Apple, where certain of our Wi-Fi access point products can be purchased through Apple's online retail website or through Apple's U.S. education price list. To support these new relationships, we will need to identify and invest in additional and dedicated resources and, potentially, new product, service and support offerings, which could distract management's attention and divert existing resources from our current business. There is no assurance that these relationships will identify significant or new market opportunities or growth incremental to our existing business, if at all or at a level to justify our investments. If our channel strategy, or particular channel partner initiatives or investments, such as with Dell or others we may identify, are unsuccessful, our operating margin would be harmed, which could adversely affect the value of our common stock.

We base our inventory purchasing decisions on our forecasts of customers' demand, and if these forecasts are inaccurate our revenue, gross margin and liquidity could be harmed.

We place orders with our manufacturers based on our forecasts of our end-customers' and channel partners' demand. We base our forecasts on multiple assumptions, including sales forecasts, each of which may cause our estimates to be inaccurate, affecting our ability to fulfill demand for our products. When demand for our products increases significantly, we may not be able to meet demand on a timely basis, or we may incur additional expediting costs to assure we meet demand. If we underestimate demand, we may forego revenue opportunities, lose market share and damage our reputation and our relationship with our channel partners and our end-customer relationships. Conversely, if we overestimate demand, we may purchase more inventory than we are able to sell at any given time, or at all, which would increase our reserves and risk of potential write-offs.

Our value-added distributors' stock inventory of our products, and are entitled to limited stock rotation rights, which could cause us to accept the return of products and expose us to the risks of higher costs.

We have granted our value-added distributors, or VADs, limited stock rotation rights, which may require us to accept stock back from a VAD’s inventory. Typically, a VAD may return discontinued products purchased within the past 90 days, while the VAD’s right to return non-discontinued products is limited to a percentage of products sold to a VAD within the past 90 days. In each case, the VAD is required to purchase replacement product equal to the price of the returned product. Although we only recognize revenue upon shipment to the end-customer, if we are required to accept returns of obsolete or slower moving inventory, our costs would increase and our operating results could be harmed. If our forecasts were inaccurate we could have higher costs, lower revenue or otherwise suffer adverse financial consequences, including holding obsolete or slower moving inventory.

We outsource the manufacturing of our products to third parties, and we therefore do not have the ability to completely control quality over the manufacturing process. In addition, if our contract manufacturers refuse or are unable to manufacturer our products, we may be unable to qualify new manufacturers in a timely manner, which would result in our being unable to sell our products.

We outsource the manufacturing of our products to third-party original design manufacturers located in China and Taiwan. Finished products are then shipped to warehousing and delivery logistics centers in California and The Netherlands, where we perform quality inspection, conduct reliability testing and manage our inventory. We operate these logistics centers currently for all end-customer shipments, whether destined to locations in North, South and Central America, or the Americas, Europe, the Middle East and Africa, or EMEA, or Asia Pacific and Japan, or APAC.

Our reliance on these third-party manufacturers reduces our control over the manufacturing process and exposes us to risks, including reduced control over quality assurance, product costs, product supply and timing. Any manufacturing or shipping disruption by these third parties could severely impair our ability to fulfill orders. If we are unable to manage our relationships with these third parties effectively, or if these third parties suffer delay or suffer manufacturing 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 and quality purposes, our ability to ship products to our end-customers would be severely impaired and our reputation and our relationship with our VADs and end-customers would be seriously harmed. Additionally, labor unrest or disruption to trade or the expected movement of our product could delay delivery of our products by third parties, or by us to our channel partners and end-customers, which could significantly delay revenue or increase our costs significantly and in ways we cannot currently anticipate. Any natural disaster, political instability, labor disruption or foreign relationship crisis could also disrupt these relationships or delay delivery of our products.

We do not have long-term agreements with certain of our original design manufacturers. These manufacturers typically fulfill our supply requirements on the basis of individual orders. We also 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, our third-party manufacturers are not obligated to continue to fulfill our supply requirements, which could result on short notice to us of supply shortages and increases in the prices we are charged for manufacturing services. In addition, as a result of global financial market conditions, natural disasters, labor disruption or other causes, it is possible that any of our manufacturers could experience interruptions in production, cease operations or alter our current arrangements. If our manufacturers are unable or unwilling to continue manufacturing our products in required volumes, we will be required to identify one or more acceptable alternative manufacturers.

It is time-consuming and costly, and could be impractical, for us to begin to use new manufacturers, and changes in our third-party manufacturers may cause significant interruptions in supply if the new manufacturers have difficulty manufacturing products to our specification. We currently are consolidating our manufacturing and re-negotiating key contractual relationships. As a result, our ability to meet our scheduled product deliveries to our end-customers could be adversely affected, which could cause the loss of sales to existing or potential end-customers, delayed revenue or an increase in our costs. We also do not currently require all our manufacturers to maintain and demonstrate robust disaster recovery capabilities. Any production interruptions for any reason, such as due to contractual disagreements, natural disaster, epidemic, capacity shortages or quality problems, at one of our manufacturers would negatively affect sales of our product lines manufactured by that manufacturer and adversely affect our business and operating results. Our manufacturing partners purchase component parts for our products based on estimates we provide, which may not be accurate. In addition, our manufacturing partners purchase some of the components and technologies used in our products

from a single source or a limited number of sources. If our estimates were to be inaccurate, or if our manufacturing partners were to lose any of these sources as suppliers, we might incur additional transition costs, resulting in delays in the manufacturing and delivery of our products, excess or obsolete inventory, or the need to redesign our products.
Our manufacturing partners procure components and assemble our products based on our demand forecasts, which represent our estimates of future demand for our products. We base these estimates upon historical trends and the assessment of our sales and product management functions of end-customer demand and overall market conditions.
We rely on our manufacturing partners to select and source the component parts within our products. We do not choose or contract directly with the component parts providers and do not have manufacturing contracts that guarantee us any fixed access to such component parts, or at specific pricing. This absence of any relationship between us and the component suppliers or direct and long-term component supply contracts may increase the risk of issues relating to the quality, performance or operability of such component parts and our exposure to shortages of component availability and to price fluctuations related to the raw material inputs for such components, foreign exchange adjustments and other factors.
Moreover, we currently depend on a single source or limited number of sources for several components for our products. For example, each of our products typically incorporates third-party components that have no more than two suppliers. In some instances, we may have a sole-source for critical components, such as PCBA or semiconductor components. If our manufacturing partners were unable to obtain such components for any reason, they would be unable to manufacture such product. We have also entered into license agreements with some of our suppliers for technologies used in our products, and the termination of these agreements, which can generally be done on relatively short notice, could have a material adverse effect on our business. Termination of these agreements could also make technology used in or developed for our products available to our competitors. If any of those manufacturing agreements were terminated, we could experience significant supply disruptions and be required to redesign some of our products in order to incorporate technology from alternative sources, and any such termination of the agreement, disruption in supply and redesign of certain of our products could materially and adversely affect our business and operating results.
Because there are no other sources currently identified and qualified for certain of our components, if we lost any of these suppliers or licenses, we could be required to transition to a new supplier or licensor, which could increase our costs, result in delays in the manufacturing and delivery and increase in the cost of our products or cause us to carry excess or obsolete inventory. Poor quality in any of the components in our products, including especially those with limited or sole-sourcing, could also result in lost sales or lost sales opportunities. If the quality of the components does not meet our or our end-customers' requirements, if we are unable to obtain components from our existing suppliers on commercially reasonable terms, or if any of our limited solely sourced component suppliers ceases to remain in business or to continue to manufacture such components, we could be required to redesign our products in order to incorporate components or technologies from alternative sources. The resulting stoppage or delay in selling our products and the expense of securing and qualifying alternative sources or redesigning our products could result in significant manufacturing and development costs, delayed or lost sales opportunities and damage to customer relationships, which would adversely affect our reputation, business and operating results.
We rely upon third parties for the warehousing and delivery of our products, and we therefore have less control over these functions than we otherwise would.
We outsource the warehousing and delivery of all of our products to a third-party logistics provider for worldwide fulfillment. As a result of relying on a third party, we have reduced control over shipping and logistics. However, any shipping delays, disruptions or mismanagement by these third parties could severely impair our ability to fulfill orders. For example, at the end of our quarter ended March 31, 2015, our third party logistics provider was not able to ship product and, as a result, we were not able to take revenue in the quarter on all the orders that we had received and processed. We since transitioned to a new logistics provider and are working to develop integrated and consistent processes. If we are unable to have our products shipped in a timely manner, we may suffer reputational harm, and lose revenue.
We rely significantly on channel partners to sell and support our products, and the failure of this channel to be effective could materially reduce our revenue.

These channel partners consist of VADs and VARs. We believe that establishing and maintaining successful relationships with these channel partners is, and will continue to be, important to our financial success. Recruiting and retaining qualified channel partners and training them in our technology and product offerings require significant time and resources. Additionally, we need to recruit and develop different qualified channel partners for different geographic regions and markets. To develop and expand our channel, we must continue to scale and improve our processes and procedures that support our channel partners, including investment in systems and training. Additionally, we will increasingly focus our resources and attention on those channel partners best able to help us meet our growth expectations. As a result, the total number of our channel partners may over time not maintain current growth rates or may even decline.

Existing and future channel partners will only work with us if we are able to provide them with competitive products at prices and on terms that are attractive to them. If we fail to maintain the quality of our products or to update and enhance them, and at reasonable pricing, existing and future channel partners may elect to work instead with one or more of our competitors.
We sell to our channel partners typically under a contract with an initial term of one or three years, with one-year renewal terms based on compliance with our program requirements. Our contracts generally require payment by the channel partner to us within 30 to 45 calendar days of the date we issue an invoice for such sales. We typically do not have minimum purchase commitments from our channel partners, and our contracts with channel partners do not prohibit them from offering products or services that compete with ours, including products they currently offer or may develop in the future and incorporate into their own systems. Some of our competitors may have stronger relationships with our channel partners than we do and we have limited control, if any, as to whether those partners use our products, rather than our competitors' products, or whether they devote resources to market and support our competitors' products, rather than our offerings.
For example, we announced in April 2015 a new relationship with Dell Inc., whereby Dell will become a reseller of Aerohive's Wi-Fi and cloud services, and that the two companies expect to work together to execute their shared vision of cloud-managed IT to provide simplified and streamlined operations, configuration, monitoring and troubleshooting for customer networks, and in September 2015, we announced with Brocade and Juniper Networks collaborations that allow us to meet in the channel and co-sell a combined wired and wireless solutions to our end-customers. We also have an existing relationship with Apple, where certain of our Wi-Fi access point products can be purchased through Apple's online retail website. To support these new relationships, we are continuing to identify and invest in additional and dedicated resources and, potentially, new product, service and support offerings.
The reduction in or loss by these channel partners of sales of our products could materially reduce our revenue. If we fail to maintain relationships with our channel partners, fail to develop new relationships with other channel partners, including in new markets, fail to manage, train or incentivize existing channel partners effectively, fail to provide channel partners with competitive products on attractive terms, or if these channel partners are not successful in their sales efforts, our revenue may decrease and our operating results could suffer.
We may not successfully sell our products in new geographic regions or develop and manage new sales channels in accordance with our business plan.
We expect to continue to sell our products in new geographic markets where we do not have significant current business or existing territories where our business results may be uneven or opportunistic from quarter to quarter, as well as to target a broader customer base in existing or new territories and markets. To succeed in certain of these markets, we will need to develop and manage new sales channels and distribution arrangements, and attract, hire, train and retain sales personnel with relevant channel and distribution experience. We may need also to develop new product features or target new market segments, which could divert resources and attention from our existing products and target markets. In the past we have seen slower-than-expected growth in new and certain existing sales territories. Because we have limited experience in developing and managing such channels, we may not be successful in further penetrating certain geographic regions or reaching a broader customer base. Failure to develop or manage additional sales channels effectively would limit our ability to succeed in these markets and could adversely affect our ability to grow our business.
Our products are subject to U.S. export controls; where we fail to comply with these laws, we could suffer monetary or other penalties.
Our products are subject to U.S. export controls, specifically the Export Administration Regulations, and economic sanctions enforced by the Office of Foreign Assets Control. We incorporate standard encryption algorithms into our products, which, along with the underlying technology, we may export outside of the United States only with the required export authorizations, including by license, license exception or other appropriate government authorizations. Each of these authorizations may require us to file an encryption registration and classification request. Furthermore, U.S. export control laws and economic sanctions prohibit the shipment of certain products and services to countries, governments and persons targeted by U.S. sanctions. We take precautions to prevent our products and services from being exported in violation of these laws. However, in certain instances, we have shipped encryption products prior to

obtaining the required export authorizations and/or submitting the required requests, including a classification request and request for an encryption registration number. As a result, we previously filed a Voluntary Self Disclosure with the U.S. Department of Commerce's Bureau of Industry and Security concerning these violations. A repeat of these past instances could result in monetary or other penalties assessed against us. Additionally, even though we take precautions to ensure that our channel partners comply with all relevant regulations, any failure by our channel partners to comply with such regulations could have negative consequences for us, including reputational harm, government investigations and penalties.

Furthermore, various countries regulate the import of certain encryption technology and operation of our products, including through import permitting, certification and licensing requirements, and have enacted laws that could limit our ability to distribute our products or our end-customers' ability to operate our products in those countries, or could impose additional expense on us to meet these requirements as a condition to distribute our products. Encryption products and the underlying technology may also be subject to export control restrictions. Governmental regulation of encryption technology and regulation of imports or exports of encryption products, or our failure to obtain required import or export approval for our products, when applicable, could harm our international sales and adversely affect our revenue. Compliance with applicable regulatory laws and regulations regarding the export of our products, including with respect to new releases of our products, may create delays in the introduction of our products in international markets, prevent our end-customers with international operations from deploying our products throughout their globally distributed systems or, in some cases, prevent the export of our products to some countries altogether.

In addition, because our sales are made through channel partners, if these channel partners fail to obtain appropriate import, export or re-export licenses or authorizations, we may also be adversely affected. Obtaining the necessary authorizations, including any required license, for a particular sale may be time-consuming, is not guaranteed and may result in the delay or loss of sales opportunities. Changes in our products or changes in applicable export or import laws and regulations may also create delays in the introduction and sale of our products in international markets, prevent our end-customers with international operations from deploying our products or, in some cases, prevent the export or import of our products to certain countries, governments or persons altogether. Any change in export or import laws and regulations, shift in the enforcement or scope of existing laws and regulations, or change in the countries, governments, persons or technologies targeted by such laws and regulations, could also result in decreased use of our products, or in our decreased ability to export or sell our products to existing or potential end-customers with international operations. Any decreased use of our products or limitation on our ability to export or sell our products could adversely affect our business, financial condition and results of our operations.

U.S. export control laws and economic sanctions programs also prohibit the shipment of certain products and services to countries, governments and persons that are subject to U.S. economic embargoes and trade sanctions. If we or our channel partners ship products to those targets or third parties provide our products to these targets, we could be subject to government investigations, penalties and reputational harm. Furthermore, any new embargo or sanctions program, or any change in the countries, governments, persons or activities targeted by such programs, could result in decreased use of our products, or in our decreased ability to export or sell our products to existing or potential end-customers, which could adversely affect our business and our financial condition.

Regulations related to conflict minerals may cause us to incur additional expenses and could limit the supply and increase the costs of certain metals used in the manufacturing of our products.

As a public company, we are subject to the requirements under the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, or the Dodd-Frank Act, to diligence, disclose and annually report whether our products contain conflict minerals. The implementation of these requirements could adversely affect the sourcing, availability and pricing of the materials used in the manufacture of components used in our products. We have included additional costs to comply with the disclosure requirements, including costs related to conducting diligence procedures to determine the sources of conflict minerals that may be used in or necessary to the production of our products and, if applicable, potential changes to products, processes or sources of supply as a consequence of such verification activities and expect to incur additional costs in the future to comply with these disclosure requirements. However, we rely on our manufacturing partners to select and source the component parts within our products. We do not choose or contract directly with the component parts providers and do not have contracts with these component parts suppliers. This absence of any relationship between us and the component suppliers makes significantly more difficult our ability to determine and report whether our products contain conflict minerals. It is also possible that we may face reputational harm if we determine that certain of our products contain minerals not determined to be conflict-free or if we are unable to alter our products, processes or sources of supply to avoid use of such materials.

Our products incorporate complex technology and may contain defects or errors. We may become subject to warranty claims, product returns, product liability and product recalls as a result, any of which could cause harm to our reputation, impose costs and increase expenses, expose us to liability and adversely affect our business.

Our products incorporate complex technology and must support a wide variety of devices and new and complex applications in a variety of environments that use different wireless networking communication industry standards. Our products have contained, and may contain in the future, undetected defects or errors or may not perform as we expect in certain environments. We may discover some errors in our products only after a product has been installed and used by end-customers. These issues are most prevalent when we introduce new products into the market or, once introduced, when experiencing significant loads in actual use environments or at scale which we could not create or did not anticipate during development. We have delayed and may in the future delay the introduction of our new products due to such defects and errors. Since our products contain components that we purchase from third parties, we also expect our products to contain latent defects and errors from time to time related to those third-party components.

Defects and errors may also cause our products to be vulnerable to security attacks. The techniques used by computer hackers to access or sabotage networks are becoming increasingly sophisticated, change frequently and generally are not recognized until after they have been launched against a target. As we increasingly collect, store, analyze, use and transmit data, and provide data analytic solutions to our end-customers, these risks become more significant to us. Accordingly, our products and third-party security products may be unable to anticipate these techniques or provide a solution in time to protect our end-customers' networks. In addition, we might not be able to timely develop and provide updated products and software to our end-customers, thereby leaving our end-customers vulnerable to attacks. Finally, if our employees, or others who have access to end-customer data, were to misuse this information, our reputation would be harmed and we could be subject to claims for damages.
Real or perceived defects or errors in our products could result in claims to return product or that we reimburse losses that our end-customers sustain and we may be required, or may choose for customer relations or other reasons, to expend additional resources in order to help correct the problem, including incurring additional warranty and repair costs, process management costs and costs associated with remanufacturing our inventory. We typically offer a limited warranty on our Wi-Fi access points for a period of five years from the date we discontinue sale of the product. We typically offer a limited warranty on our other hardware products for a one-year period. We also provide certain service commitment guarantees for our cloud-managed platform, pursuant to which our end-customers may receive service credits in connection with service outages. Liability limitations in our standard terms and conditions of sale may not be enforceable under some circumstances or may not fully or effectively protect us from claims and related liabilities and costs. In addition, regardless of the party at fault, we may choose to correct errors of these kinds which would divert the attention of our engineering personnel from our product development efforts, damage our reputation and the reputation of our products, cause significant customer relations problems and can result in product liability claims. We do not maintain insurance which would adequately protect against certain of these types of claims associated with the use of our products. Even where claims ultimately are unsuccessful we may have to expend funds in connection with litigation and divert management's time and other resources. We also may incur costs and expenses relating to a recall of one or more of our products. The process of identifying and recalling products that have been widely distributed may be lengthy and require significant resources, and we may incur significant replacement costs, contract damage claims from our end-customers and channel partners and significant harm to our reputation. The occurrence of any of these problems could result in the delay or loss of market acceptance of our products and could adversely impact our business, operating results and financial condition.
The loss of key personnel or an inability to attract, retain and motivate qualified personnel may impair our ability to expand our business.
Our success is substantially dependent upon the continued service and performance of our senior management team and other key personnel, including David K. Flynn, who is our Chief Executive Officer, John Ritchie, who recently joined as our Senior Vice President, Chief Financial Officer, David Greene, who is our Senior Vice President, Chief Marketing Officer, Raphael Gernez, who is our Senior Vice President, Operations, Efstathios Papaefstathiou, who is our Senior Vice President, Engineering, and Tom Wilburn, who is our Senior Vice President, Worldwide Field Operations. Our employees, including our senior management team, are at-will employees, and therefore may terminate employment with us at any time with no advance notice. For example, in April, 2015, we announced that Tom Wilburn had joined our company as our Senior Vice President, Worldwide Field Operations. In August 2015, we announced that John Ritchie had joined us as our Senior Vice President, Chief Financial Officer. The loss of any members of our senior management team or other key personnel, or the failure to attract replacement personnel, as needed, or the transition of newly hired senior management and changes they may make to our operations could have a materially adverse effect on our operations and could lead to higher labor costs, and involve significant time and costs in finding replacements, and potentially the use of less-qualified personnel. This may significantly delay or prevent the achievement of our business objectives. In addition, if any of our executives or other key employees were to join a competitor or form a competing company, we could lose customers, suppliers, know-how and key personnel

and our business and product strategies and capabilities could be at risk and subject to disclosure, including to our competitors.

Our future success also depends on our ability to continue to attract, integrate and retain highly skilled personnel, especially skilled sales and engineering employees. We continue to experience higher than normal turn-over, especially amongst our sales and engineering personnel, which could have an adverse effect on our revenue. Competition for highly skilled personnel is frequently intense, especially in Silicon Valley, where we maintain our headquarters and a substantial operating and sales presence, and Hangzhou China, where we currently maintain our principal research presence and highly skilled product development and engineering personnel. Volatility or lack of performance in our stock price may also affect our ability to attract and retain our key employees. Many of our employees have become, or will soon become, vested in a substantial amount of stock or number of stock options. Our employees may be more likely to leave us if the shares they own or the shares underlying their vested options have significantly appreciated in value relative to the original purchase or exercise prices, and if the exercise prices of the options that they hold are significantly above the market price of our common stock the options to purchase such shares will have little or no retention value. Further, our employees' ability to exercise those options and sell their stock in a public market may result in a higher than normal turnover rate. The lack of performance in our stock price may affect our ability to attract new employees or retain existing employees by decreasing the perceived value of any stock-based compensation we may offer or they may hold. Prolonged periods of low performance or volatility in our stock price could negatively impact our appeal as an employer, harm employee morale or increase employee turnover, including amongst our China and Silicon Valley-based employees. Any failure to successfully attract, integrate or retain qualified personnel to fulfill our current or future needs may negatively impact our growth. Also, to the extent we hire personnel from our competitors, we may be subject to allegations that these new hires have been improperly solicited, or that they have divulged to us proprietary or other confidential information of their former employers, or that their former employers own their inventions or other work product. This may expose us to significant liability and litigation risk.

Our ability to sell our products is highly dependent on the quality of our support offerings, and our failure to offer high quality support would have a material adverse effect on our sales and results of operations.

Once our products are deployed, our end-customers depend on our support organization and support provided by our channel partners to resolve any issues relating to our products. Our support delivery organization comprises employees in various geographic locations and an outside service provider, which provides more general support delivery. A high level of support is important for the successful marketing and sale of our products. If we do not effectively help our end-customers quickly resolve issues or provide effective ongoing support, it would adversely affect our ability to sell our products to existing end-customers as well as demand for continued support and renewal contracts, and could harm our reputation with existing and potential end-customers.

If our products do not interoperate with cellular networks and mobile devices, future sales of our products could be negatively affected.

Our products are designed to interoperate with cellular networks and mobile devices using wireless networking technology. These networks and devices have varied and complex specifications. To meet these requirements, we must continue to undertake development and testing efforts that require significant capital and employee resources. We may not accomplish these development efforts quickly or cost-effectively, or at all. If our products do not interoperate effectively, orders for our products could be delayed or cancelled, which would harm our revenue, gross margins and our reputation, potentially resulting in the loss of existing and potential end-customers. The failure of our products to interoperate effectively with cellular networks or mobile devices may result in significant warranty, support and repair costs, divert the attention of our engineering personnel from our product development efforts and cause significant customer and end-customer relations problems. In addition, our end-customers may require our products to comply with new and rapidly evolving security or other certifications and standards. If our products are late in achieving or fail to achieve compliance with these certifications and standards, or our competitors achieve compliance with these certifications and standards, such end-customers may not choose to purchase our products, which would harm our business, operating results and financial condition.

We are subject to complex and evolving U.S. and foreign laws and regulations regarding privacy, data protection and other matters and violations of these complex and dynamic laws, rules and regulations may result in claims, changes to our business practices, monetary penalties, increased costs of operations, and/or other harms to our business.

A wide variety of provincial, state, national and international laws and regulations apply to the collection, use, retention, protection, disclosure, transfer and other processing of data, including personal data. Foreign data protection, privacy and other laws and regulations are often more restrictive than those in the United States. These data protection and privacy-related laws and regulations are varied, evolving, can be subject to significant change, may be augmented or replaced by new or additional laws and regulations, and may result in ever-increasing regulatory and public scrutiny and escalating levels of enforcement and sanctions. The European Union, for example, has adopted various directives regulating data protection, privacy and security and the collection, storage, analysis, use and transmission of content using the Internet involving European Union residents, including those directives known as the Data Protection Directive, the E-Privacy Directive, and the Privacy and Electronic Communications Directive. The European Union may adopt similar directives in the future.

The European Union model has been replicated substantially or in part in various jurisdictions outside the U.S., including in certain Asia-Pacific Economic Cooperation countries. Changes in European data protection regulations, including the proposed General Data Protection Regulation, or GDPR, may also introduce new or additional operational requirements for companies that receive personal data, which may differ from than those currently in effect in the European Union which may also include significant additional compliance requirements and increased penalties for non-compliance. Further, some countries may require separate and local storage and processing of data that could limit certain of our product applications and solutions and increase the cost and complexity of selling our solutions or maintaining our business operations in those jurisdictions. California has also introduced broad rules, which may or may not anticipate and be consistent with rules expected to be adopted by our federal government. The introduction of new data platforms, applications and solutions or expansion of our activities in certain jurisdictions may subject us to additional laws and regulations. For instance, participation in the federal E-Rate funding program may subject us to additional privacy and data use restrictions under U.S. federal, state, and local laws and regulations relating to the processing of data relating to students or children.

The application and interpretation of these laws and regulations are often uncertain, particularly in the new and rapidly evolving industry in which we operate, and these laws and regulations may be interpreted and applied inconsistently from within a country or country to country, and inconsistently with our current policies and practices, and may be contradictory with each other. Additionally, various federal, state, and foreign regulatory or other governmental bodies may issue rulings that invalidate prior laws, regulations, or legal frameworks in manners that may adversely impact our business. For example, the European Court of Justice in October 2015 issued a ruling immediately invalidating the U.S.-E.U. Safe Harbor Framework, which facilitated personal data transfers to the U.S. in compliance with applicable European Union data protection laws. While we do not rely upon the U.S.-E.U. Framework for our transfer of European Union personal data to the U.S., there is significant regulatory uncertainty surrounding the future of data transfers from the European Union to the U.S. In addition to government regulation, privacy advocacy and industry groups have adopted and are considering the adoption of various self-regulatory standards and codes of conduct that, if applied to our, our customers' or our end-customers' businesses, may place additional burdens on us and our customers and end-customers, which may further reduce demand for our products, data platforms, applications and solutions and harm our business.

While we work to comply with all applicable privacy and data protection laws, regulations, standards, and codes of conduct, as well as our own privacy policies and contractual commitments to the extent possible, any failure by us to comply with these could result in enforcement actions against us, including fines, imprisonment of company officials and public censure, claims for damages by end-customers and other affected individuals, demands that we modify or cease existing practices, damage to our reputation and loss of goodwill (both in relation to existing and prospective end-customers), any of which could have a material adverse effect on our operations, financial performance and business. Privacy and data protection regulators within the United States, the European Union and other jurisdictions have the power to fine non-compliant organizations significant amounts and seek injunctive relief, including the cessation of certain data processing activities. There are proposals to increase the maximum level of fines that European Union regulators may impose to the greater of €100 million or 5% of a company's worldwide annual sales. Such fines are in addition to the rights of individuals to sue for damages in respect of any data privacy breach which has caused them to suffer loss. Such actions against our partners, including third-party providers of data analytics services, could also affect our operating performance, including demand for our products and cloud-managed solutions and, if these or other third-party vendors violate applicable laws or our policies, such violations may also put our customers' information at risk and could in turn have a material and adverse effect on our business. Additionally, there is a risk that failures in systems designed to protect private, personal or proprietary data held by us will allow such data to be disclosed to or seen by others, resulting in potential regulatory investigations, enforcement actions, or penalties, remediation obligations and/or private litigation by parties whose data were improperly disclosed. There is also a risk that we could be found to have failed to comply with U.S. or foreign laws or regulations regarding the collection, consent, handling, transfer, or disposal of such privacy, personal or proprietary data, which could subject us to fines or other sanctions, as well as adverse reputational impact.

Evolving and changing privacy and data protection laws, regulations and societal norms, including evolving and changing definitions of personal data and personal information, within the United States, European Union, and elsewhere, especially relating to classification of IP addresses, MAC addresses, machine identification, location and tracking, data analytics and other information, may limit or inhibit our ability to operate or expand our business, including limiting our product and data application development and strategic partnerships that may involve the collection, storage, analysis use and transmission of end-user data. Even the perception of privacy concerns, failures to secure data, or inadequate data protection, whether valid and whether owing to any action or inaction on our part, may harm our reputation and inhibit adoption of our products, applications and services by current and future end-customers.

Our international operations expose us to additional business risks and failure to manage these risks may adversely affect our international revenue.

We derive a significant portion of our revenue from end-customers and channel partners outside the United States. For fiscal years 2015 and 2014, we attributed 38% and 40% of our revenue to our international end-customers and channel partners. As of December 31, 2015, approximately 45% of our full-time employees were located outside of North America, with 28% located in China. We expect that our international activities will be dynamic over the foreseeable future as we continue to pursue opportunities in international markets, which will require significant management attention and financial resources.

Given the extent of our international operations, we are subject to other inherent risks and our future results could be adversely affected by a number of factors, including:

- tariffs and trade barriers, export regulations and other regulatory or contractual limitations, such as import, technical and other certification requirements, on our ability to sell or develop our products in certain foreign markets;
- regulatory requirements or preferences for domestic products, which could reduce demand for our products;
- differing technical standards, existing or future regulatory and certification requirements and required product features and functionality;
- management communication and integration problems related to entering new markets with different languages, cultures and political systems;
- difficulties in enforcing contracts and collecting accounts receivable, and longer payment cycles, especially in emerging markets;
- heightened risks of unfair competition or corrupt business practices in certain geographies and of improper or fraudulent sales arrangements that may impact financial results and result in restatements of, and irregularities in, our financial statements;
- difficulties and costs of staffing and managing foreign operations, and retaining key personnel;
- differing labor standards;
- the uncertainty of protection for our intellectual property rights and the enforceability of our rights and third-party rights in some countries;
- potentially adverse tax consequences, including regulatory requirements regarding our ability to repatriate profits to the United States;
- added legal compliance obligations and complexity, including complying with varying local labor, compensation and tax and securities laws as well as specific and evolving local requirements regarding data protection;
- foreign currency exchange risk;
- the increased cost of terminating employees in some countries; and
- political and economic instability and terrorism.

To the extent we continue to expand our business globally, our success will depend, in large part, on our ability to effectively anticipate and manage these and other risks and expenses associated with our international operations. Our failure to manage any of these risks successfully could harm our international operations and reduce our international sales, and business generally, adversely affecting our business, operating results and financial condition.

Our operations in certain emerging markets expose us to political, economic and regulatory risks.

Our growth strategy depends in part on our ability to expand our operations in emerging markets, including Asia Pacific, the Middle East and Africa, and Latin America. However, some emerging markets have greater political, economic and currency volatility, and greater vulnerability to infrastructure and labor disruptions than more established markets. In many countries outside of the United States, particularly those with emerging economies, it may be common for others to engage in business practices prohibited by laws and regulations with extraterritorial reach, such as the U.S. Foreign Corrupt Practices Act, or FCPA, the U.K. Bribery Act, or other local anti-bribery laws. These laws generally prohibit companies and their employees, contractors or agents from making improper payments to government officials, including in connection with obtaining permits or engaging in other actions necessary to do business. Failure to comply with these laws could subject us to civil and criminal penalties that could materially and adversely affect our reputation, financial condition and results of operations.

For example, under the FCPA, U.S. companies may be held liable for the corrupt actions taken by employees, strategic or local partners, or other representatives. Under the FCPA, we and our channel partners are also required to maintain accurate books and records and a system of internal accounting controls. As such, if we or our intermediaries fail to comply with the requirements of the FCPA or similar legislation outside the United States, governmental authorities in the United States and elsewhere could seek to impose civil or criminal fines and penalties, which could have a material adverse effect on our business, operating results and financial conditions. While our employee handbook and other policies prohibit our employees from engaging in corrupt conduct, we do not yet have in place compliance measures and training to require both our employees and our third-party intermediaries to comply with the FCPA and similar anticorruption laws.

Establishing operations and distribution partners in these emerging markets may also require complex legal arrangements and operations to deliver services on global contracts for our end-customers. Because of our limited experience with international operations and developing and managing sales and distribution channels in international markets, our international expansion efforts may not be successful. Additionally, we have established operations in locations remote from our more developed business centers. As a result, we are subject to heightened risks inherent in conducting business internationally, including the following:

- failure to comply with local regulations or restrictions;
- enactment of legislation, regulation or restriction, whether by the United States or in the foreign countries, including unfavorable labor regulations, tax policies or economic sanctions (such as potential economic sanctions arising from political disputes), and currency controls or restrictions on the transfer of funds;
- enforcement of legal rights or recognition of commercial procedures by regulatory or judicial authorities in a manner in which we are not accustomed or would not reasonably expect;
- differing technical and environmental standards, data protection and telecommunications regulations and certification requirements, which could prevent the import, sale or use of our products or SaaS offerings in such countries;
- difficulties and costs associated with staffing and managing foreign operations;
- potentially longer payment cycles and greater difficulty collecting accounts receivable;
- the need to adapt and localize our services for specific countries, including conducting business and providing services in local languages;
- reliance on third parties over which we have limited control, such as our VARs, VADs, or their resellers or agents for marketing and reselling our products and solutions;
- availability of reliable broadband connectivity and wide area networks in targeted areas for expansion;
- difficulties in understanding and complying with local laws, regulations, and customs in foreign jurisdictions or unanticipated changes in such laws;
- application of or changes in anti-bribery laws, such as the FCPA and UK Bribery Act, which may disrupt our staffing or ability to manage our foreign operations;
- changes in political and economic conditions leading to changes in the business environment in which we operate, as well as changes in foreign currency exchange rates;
- sanctions restricting local commercial activity, including retaliatory actions by local governments; and
- natural disasters, pandemics or international conflict, including terrorist acts or political disputes, which could interrupt our operations or endanger our personnel.

In addition, our competitors may also expand their operations in these markets or others we may also target, and low-cost local manufacturers may also expand and improve products and their production capacities, thus increasing competition in these emerging markets. Our success in emerging markets is important to our growth strategy. If we cannot successfully increase our business in emerging markets and manage associated political, economic, regulatory and currency volatility, our product sales, financial condition and results of operations could be materially and adversely affected.

We could be subject to additional income tax liabilities.

We are subject to income taxes in the United States and numerous foreign jurisdictions. We use significant judgment in evaluating our worldwide provision for income taxes, which could be adversely affected by several factors, many of which are outside our control. During the ordinary course of business, there are many transactions for which the ultimate tax determination is uncertain. For example, our effective tax rates could be adversely affected by earnings being lower than we anticipate in countries that have lower statutory rates and higher than we anticipate in countries that have higher statutory rates, by changes in foreign currency exchange rates, by changes in the valuation of our deferred tax assets and liabilities, or by changes in the relevant tax, accounting and other laws, regulations, principles and interpretations, including possible changes to the U.S. taxation of earnings of our foreign subsidiaries, the deductibility of expenses attributable to foreign income or the foreign tax credit rules. We are subject to audit in various jurisdictions, and such jurisdictions may assess additional income tax against us as well as penalties and fines. As we operate in multiple taxing jurisdictions, the application of tax laws can be subject to diverging and sometimes conflicting interpretations by tax authorities of these jurisdictions. The time and expense necessary to defend and resolve an audit may be significant. Although we believe our tax estimates are reasonable, the final determination of tax audits and any related litigation could be materially different from our historical income tax provisions and accruals. The results of an audit or litigation could have a material effect on our operating results or cash flows in the period or periods for which that determination is made.

Our international operations and corporate structure subject us to potential adverse tax consequences.
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 intercompany relationships are subject to complex transfer pricing regulations administered by taxing authorities in various jurisdictions. The relevant taxing authorities may disagree with our determinations as to the income and expenses attributable to specific jurisdictions. If such a 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. We may not have adequate reserves to cover such a contingency.
In the future, we may reorganize our corporate structure or intercompany relationships, which would likely require us to incur expenses in the near term for which we may not realize related benefits, at all or within a reasonable period, to justify the expense. Changes in domestic and international tax laws, including proposed legislation to reform U.S. taxation of international business activities, may negatively impact our ability to effectively restructure, or reduce the benefits we expected from such corporate restructuring. Any such restructuring would likely involve sophisticated analysis, including analysis of U.S. and international tax regimes. Compliance with such laws and regulations may be difficult and subject our business to additional risks, costs and uncertainties.
Our ability to use our net operating losses to offset future taxable income may be subject to certain limitations; in addition, we may be unable to use a substantial part of our net operating losses if we don't attain profitability in an amount necessary to offset such losses.
In general, under Section 382 of the Internal Revenue Code of 1986, as amended, a corporation that undergoes an "ownership change" is subject to limitations on its ability to utilize its pre-change net operating losses, or NOLs, to offset future taxable income. Our existing NOLs may be subject to limitations arising from previous ownership changes, and if we undergo a future ownership change our ability to utilize NOLs could be further limited by Section 382. Future changes in our stock ownership, some of which are outside of our control, could result in a deemed ownership change under Section 382. Furthermore, we may be unable to use a substantial part of our NOLs due to regulatory changes, such as suspensions of the use of NOLs, or if we do not attain profitability in an amount sufficient to offset such losses. For example, our California state NOL carryforwards of $56.6 million as of December 31, 2015 begin to expire in 2016. For these reasons, we may not be able to utilize a material portion of the NOLs reflected on our balance sheet, even if we attain profitability at a later date.
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 results of operations.
We do not collect sales and use, value-added or similar taxes in all jurisdictions in which we have sales, based on our belief that such taxes are not applicable. 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, and we may be required to collect such taxes in the future. Such tax assessments, penalties and interest or future requirements could be significant and may adversely affect the results of our operations.
If we are unable to manage our growth and expand our operations successfully, our business and operating results will be harmed and our reputation may be damaged.
We have expanded our operations significantly since inception and anticipate that we may require further expansion to achieve our business objectives. For example, our revenue for fiscal years 2013, 2014 and 2015 was $107.1 million, $137.3 million and $151.7 million respectively, and our global headcount as of the end of fiscal years 2013, 2014 and 2015, was approximately 520, 570 and 620 employees, respectively. The growth and expansion of our business and product offerings places a continuous and significant strain on our management, operational and financial resources. Any such future growth would also add complexity to and require effective coordination throughout our organization. We must improve our infrastructure to manage our growth, which could involve significant costs and could, if not properly managed, harm our operating results.

To manage any future growth effectively, we must continue to improve and expand our information technology and financial and administrative infrastructure, our operating systems and administrative controls and our ability to manage headcount, capital and processes in an efficient manner. For example, we continue to evaluate upgrades to our existing business processes and systems to better manage licensing, renewals and order processing, and to transition to a global distribution platform. Such new processes and systems may significantly improve our transaction efficiency and ability to scale our revenue and operating performance, including through an ability to track, timely identify and manage increasing volumes of product, license and renewal opportunities and transactions. We may not be able to successfully implement improvements to these systems and processes in a timely or efficient manner, which could result in additional operating inefficiencies and lost business opportunities and associated revenue, and could cause our costs to increase more than planned. If we do increase our operating expenses in anticipation of the growth of our business and this growth does not meet our expectations, at all or sufficiently to justify the expense, our operating results may be negatively impacted. If we are unable to manage future expansion, our ability to develop and deliver high quality products and services and securely process increased transaction volumes could be harmed, which could damage our reputation and brand and impede expected growth, and any of which may have a material adverse effect on our business, operating results and financial condition.

Our business and operating results could be adversely affected by unfavorable economic and market conditions.

Our business depends on the overall demand for wireless network technology and on the economic health and general willingness of our current and prospective end-customers to purchase our products. The conditions in the United States and global economies are volatile and if they deteriorate, our business, operating results and financial condition may be harmed. In particular, we do not know whether spending on wireless network technology will increase or decrease in the future, or at what rate.

Investments in technology by educational institutions in particular could be related to budgetary constraints unrelated to overall economic conditions, or may be magnified by unfavorable economic conditions. The purchase of our products or willingness to replace existing infrastructure is discretionary and highly dependent on a perception of continued rapid growth in consumer usage of mobile devices and in many cases involve a significant commitment of capital and other resources. In addition, our small and medium enterprise end-customers may also be more sensitive to adverse economic conditions than other potential customers, which could amplify the adverse impact of a deterioration of economic conditions. Therefore, weak economic conditions, uncertain availability of government funding, or a reduction in capital spending would likely adversely impact our business, operating results and financial condition. A reduction in spending on wireless network technology could occur or persist even if economic conditions improve.

In addition, if interest rates rise or U.S. dollar foreign exchange rates weaken for our international end-customers and channel partners, overall demand for our products and services could decline and related capital spending may be reduced. For example, the exchange rate of the U.S. dollar to foreign currencies has strengthened significantly of late, which makes the price of our products outside the United States less competitive, reducing our sales or requiring us to lower pricing for our products outside the United States in order to maintain sales and revenue performance (thus also reducing our gross margins). Furthermore, any increase in worldwide commodity prices may result in higher component prices for us and increased manufacturing and shipping costs, both of which may negatively impact our financial results.

U.S. and global political, credit and financial market conditions may negatively impact or impair the value of our current portfolio of cash, cash equivalents and short-term investments, including U.S. treasury securities and U.S.-backed investment vehicles.

Our cash, cash equivalents and short-term investments were $92.3 million as of December 31, 2015, which we held as money market funds, U.S. treasury securities, commercial paper and investment-grade corporate debt with Moody's and S&P ratings of A-/A3 or better. As a result of the uncertain domestic and global political, credit and financial market conditions, investments in these types of financial instruments pose risks arising from liquidity and credit concerns. Any deterioration in the United States and global credit and financial markets is a possibility, which could cause losses or significant deterioration in the value of our cash, cash equivalents or possible investments. If any such losses or significant deteriorations occur, it may negatively impact or impair our current portfolio of cash, cash equivalents and possible investments, which may affect our ability to fund future obligations. Further, unless and until the current U.S. and global political, credit and financial market crisis has been sufficiently resolved, it may be difficult for us to liquidate our investments prior to their maturity without incurring a loss, which would have a material adverse effect on our business, operating results and financial condition.

System security risks, data security incidents and cyber-attacks could compromise our or our end-customers' information including proprietary information and end-customer information and disrupt our internal operations,

which could cause our business and reputation to suffer and adversely affect our stock price.
In the ordinary course of business, we store sensitive data, as well as our proprietary business information and that of our end-customers, suppliers and business partners. The secure maintenance of this information, and our ability to protect our network from interruption or damage from unauthorized entry, computer viruses or other events beyond our control, is critical to our operations, and business strategy, reputation and, ultimately, our success and value to our investors. While we believe we use certain proven applications designed for data security and integrity, we are in the process of developing an information security program. Despite the implementation of security measures, our infrastructure or systems may be vulnerable to hackers,

computer viruses, worms, other malicious software programs or similar disruptive problems caused by our customers, employees, consultants or other Internet users who attempt to invade public and private data networks.

Increasingly, companies are subject to a wide variety of attacks on their networks on an ongoing basis. Our information technology and infrastructure may be vulnerable to persistent threats, penetration or attacks by computer programmers and hackers, software bugs or other technical malfunctions, or other disruptions. Due to our business model and the location of some of our development centers, we have faced and are likely to face threats that target both our internal systems and our products and data analytic solutions, which, in turn, may threaten our end-customers' networks, devices, applications and data. In addition, our employees could breach our data security measures and misuse such data or other information, whether through error or misconduct. Any such data security incident, whether external or internal in origin, could compromise our networks, including our cloud-managed platform, creating system disruptions or slowdowns and exploiting security vulnerabilities of our products, and the information stored on our networks could be improperly accessed, publicly disclosed, lost or stolen, which could subject us to liability to our end-customers, suppliers, channel and business partners and others, and cause us reputational and financial harm. Additionally, an effective attack on our systems or products or data analytic solutions could disrupt their proper functioning, allow unauthorized access to sensitive, proprietary or confidential information of ours or of our end-customers, disrupt or temporarily interrupt customers' networking traffic, or cause other destructive outcomes, including the theft of information sufficient to engage in fraudulent financial transactions or compromise other sensitive information. Because the techniques used by computer programmers and hackers, many of whom are highly sophisticated and well-funded, to access or sabotage networks change frequently and generally are not recognized until after they are used, we may be unable to anticipate or immediately detect these techniques. This could delay our response or the effectiveness of our response and impede our sales, manufacturing, distribution or other critical functions and ability to limit our exposure to third-party claims and potential liability. If any of these types of data security incidents were to occur or to be believed to have occurred, or if we were to be unable to timely respond to protect sensitive data or other proprietary or non-public data, our relationships with our business partners and end-customers could be materially damaged, our reputation and brand could be materially harmed, use of our solutions could decrease, and affected end-customers or government authorities could initiate legal or regulatory action against us in connection with such incidents, which could cause us to incur significant expenses and liability or could result in orders, judgments, or consent decrees forcing us to modify our business practices. The risk that these types of events could seriously harm our business is likely to increase as we expand the number of web-based products and data analytic solutions we offer, and operate in more countries.

In addition, if an actual or perceived data security incident occurs in our network or in the network of an end-customer of one of our products and data analytic solutions (particularly our cloud-based offerings), regardless of whether the incident is attributable to our products and data analytic solutions, the market perception of the effectiveness of our products and data analytic solutions could be harmed. We may also be required to expend significant financial and operational resources in an effort to secure our systems and our and our customers’ data from security threats and hazards. Further, real or perceived defects or errors in our products and data analytic solutions (particularly in our cloud-based offerings, due to cloud-based offerings sometimes being perceived as being inherently less secure) could result in claims by channel partners and end-customers for losses that they sustain, including potentially losses resulting from data security incidents affecting our systems, our end-customers' networks and/or downtime of those networks. If channel partners or end-customers make these types of claims, we may be required, or may choose for customer relations or other reasons, to expend additional resources in order to help correct the problem, including warranty and repair costs, process management costs, and costs associated with re-manufacturing our inventory and to respond to and resolve litigation and regulatory claims. The economic costs to us to eliminate or alleviate cyber or other security problems, bugs, viruses, worms, malicious software systems and security vulnerabilities and claims could be significant and may be difficult to anticipate or measure because the damage may differ based on the identity and motive of the programmer or hacker, which may be difficult for us to identify.

Undetected software errors or flaws in our cloud platform could harm our reputation or decrease market acceptance of our solution, which would harm our operating results.

Our platform may contain undetected errors or defects when introduced or as we release new versions. We have experienced these errors or defects in the past in connection with new releases and solution upgrades, and we expect that errors or defects will be found from time to time in future releases after their commercial release. Since our end-customers may use our platform for security and compliance reasons, any errors, defects, disruptions in service or other performance problems may damage our end-customers' business and could hurt our reputation. If that occurs, we may incur significant costs, the attention of our key personnel could be diverted, our end-customers may delay or withhold payment to us or elect not to continue to use our products or renew our services, or defer further purchases, or other significant customer relations problems may arise. We may also be subject to government penalties and liability claims for damages related to errors or defects in our platform.

Our business is subject to the risks of earthquakes, fire, floods and other natural catastrophic events, and interruptions by man-made problems, such as network data-security incidents, computer viruses or terrorism.

Our corporate headquarters are located in Silicon Valley, and substantially all of our contract manufacturers are located in Asia, both regions known for seismic activity. A significant natural disaster, such as an earthquake, a fire or a flood, occurring near our headquarters, or near the facilities of our contract manufacturers, could have a material adverse impact on our business, operating results and financial condition. Despite the implementation of network security measures, our networks also may be vulnerable to computer viruses, break-ins, denial of service attacks, and other disruptions and data security incidents arising from unauthorized tampering with our systems or our products or our data analytic solutions or from internal or external threats. In addition, natural disasters, acts of terrorism or war could cause disruptions in our or our end-customers' or channel partners' businesses, our suppliers' and manufacturers' operations or the economy as a whole. We also rely on information technology systems to communicate among our workforce and with third parties. Any disruption to our communications, whether caused by a natural disaster or by manmade problems, such as power disruptions, could adversely affect our business. We do not have a formal disaster recovery plan or policy or incident response plan or comprehensive written information or data security plans in place and do not currently require that all our manufacturing partners have such plans or policies in place. To the extent that any such incidents or our failure to promptly or effectively respond result in delays or cancellations of orders or impede our suppliers' and/or our manufacturers' ability to timely deliver our products and product components, or the deployment of our products, our business, operating results and financial condition would be adversely affected. We do maintain what we believe are commercially reasonable levels of business interruption insurance. However, we cannot assure you that such insurance would adequately cover our losses in the event of a significant disruption in our business.

Our existing headquarters lease will expire in September 2016 and we may not be able to secure alternative space.

Our existing real estate leases for our headquarters in Sunnyvale, California expire in September 2016. In conjunction with exiting the facilities, we will incur lease termination and facility restoration expenses which could be significant in upcoming quarters in our fiscal 2016.

We believe we have secured a long-term lease for our new headquarters facility. However, the new lease and our occupancy are still subject to conditions outside of our control. If we are not able to occupy the new facility, at all or on our expected schedule, we may not be able to identify replacement facilities on our expected schedule or on economic terms attractive or comparable to our current lease terms. We expect to incur significant up-front costs under the new lease relating to facility improvements and our initial occupancy, as well as ongoing expenses in base rent and costs and restoration obligations passed through to us under the master lease and sublease agreements. These additional and potentially greater expenses could continue over an extended period and could have a continuing and potentially material impact of our earnings and cash flow. The new facility, and transitioning to a new facility, could also be very disruptive to our operations, which could impact our operating results at the time.

We may acquire other businesses or form partnerships or joint ventures that could require significant management attention, disrupt our business and dilute stockholder value.

We may make investments in complementary companies, products or technologies, or form partnerships or joint ventures with third parties. For example, in January 2016, we lent $1.5 million in cash in form of a promissory note issued by a privately held company which provides Wi-Fi services and applications, which note we may convert into preferred shares of the privately held company upon certain circumstances.

We have limited experience identifying, making investments in, purchasing and integrating third-party companies, technologies or other assets that could be complementary to our business or help advance our strategy, in particular, internationally. As a result, our ability as an organization to identify, invest in, acquire and integrate other companies, technologies or other assets 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 end-customers, investors and financial analysts. In addition, if we are unsuccessful at integrating such acquisitions, or the technologies associated with such investments or acquisitions, the business prospects, operating results and financials of the combined company could be adversely affected. Any integration process may require significant time and resources, and we may not be able to manage the process successfully. Cross-border transactions may involve complex regulatory, labor or government compliance requirements which we may not fully anticipate or which could impose ongoing cost and require significant management attention and resources. We may not successfully evaluate or utilize the acquired technology or personnel, or accurately forecast the financial impact of an acquisition, including accounting charges. We may have to pay cash, assume liabilities, 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 value of our common stock. The sale of equity or issuance of debt to finance any such investment or 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.

Our future capital needs are uncertain, and we may need to raise additional funds in the future. If we require additional funds in the future, those funds may not be available on acceptable terms, or at all.

We believe that our existing cash and cash equivalents will be sufficient to meet our anticipated working capital and capital expenditure needs for at least the next 12 months. We may, however, need to raise substantial additional capital in the future to:

- fund our operations;
- continue our research and development;
- develop and commercialize new products;
- invest in or acquire companies, in-licensed products or intellectual property; or
- expand sales and marketing activities.

Our future funding requirements will depend on many factors, including:

- market acceptance of our products and services;
- the cost of our research and development activities;
- refinancing, extending or replacing existing obligations, including our existing credit facilities and lease obligations as they mature or where earlier repayment may be required;
- the cost of defending and resolving, in litigation or otherwise, claims that we infringe third-party patents or violate other intellectual property rights;
- the cost and timing of establishing additional sales, marketing and distribution capabilities;
- the cost and timing of establishing additional technical support capabilities;
- the effect of competing technological and market developments;
- the market for different types of funding and overall economic conditions; and
- continued investments we may make to fund anticipated future growth.

We may require additional funds in the future, and we may not be able to obtain those funds on acceptable terms, or at all. If we raise additional funds by issuing equity securities, our stockholders may experience dilution. Debt financing, if available, may involve covenants restricting our operations or our ability to incur additional debt. Upon any liquidation, our debt lenders and other creditors would be repaid all interest and principal then-outstanding prior to the holders of our common stock receiving any distribution. Any debt or additional equity financing that we raise may contain terms that are not favorable to us or our stockholders.

If we do not have, or are not able to obtain, sufficient funds, we may have to reduce our cash burn rate, delay development or commercialization of our products or license to third parties the rights to commercialize products or technologies that we would otherwise seek to commercialize. If we raise additional funds through collaboration and licensing arrangements with third parties, it may be necessary to relinquish some rights to our technologies or our products, or to grant licenses on terms that are not favorable to us. If we are unable to generate sufficient cash flows or to raise adequate funds to finance our forecasted expenditures, we may have to liquidate some or all of our assets, or delay, reduce the scope of or eliminate some or all of our development programs. We also may have to reduce sales, marketing, engineering, customer support or other resources devoted to our products, or cease operations. Any of these actions could impede our ability to achieve our business objectives and harm our operating results.

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

As a public company, we are subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, or the Exchange Act, the Dodd-Frank Act, the listing requirements of the New York Stock Exchange, the Financial Industry Regulatory Authority, or FINRA, 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. The Exchange Act requires, among other things, that we file annual, quarterly and current reports with respect to our business and operating results.

30

Being a public company, and securities litigation arising from our initial public offering in March 2014, has increased our ongoing expenses in general and specifically the cost for us to obtain director and officer liability insurance at levels we deem commercially reasonable, and we have incurred higher costs and accepted higher retentions to obtain such coverage, compared to our prior program for director and officer liability insurance prior to being a public company. These factors could also make it more difficult for us to attract and retain qualified members of our board of directors, particularly to serve on its audit committee and compensation committee, and qualified executive officers.
As a result of disclosure of information in filings required by us as a public company, our business and financial condition will become more visible, which might result in threatened or actual litigation, including by competitors and other third parties. For example, we are currently defending a class action law suit asserting that statements we made in conjunction with our initial public offering in March 2014 were false or misleading, or failed to include material information. We continue to incur significant expenses to defend this action. If such action is successful, our business and operating results could be harmed, and even if we resolve the action in our favor, the action, and the time and resources necessary to resolve it, could continue to divert the resources of our management and harm our business and operating results.
Our debt obligations contain restrictions that impact our business and expose us to risks that could adversely affect our liquidity and financial conditions.
On June 21, 2012, we entered into a revolving credit facility with Silicon Valley Bank, which we refer to, as amended, as our revolving credit facility. As of December 31, 2015, we have drawn $20.0 million under this revolving credit facility.
Our obligations under the Silicon Valley Bank credit facility is secured by substantially all of our property, other than our intellectual property. The credit facility contains customary negative covenants that limits our ability to, among other things, incur additional indebtedness, grant liens, make investments, repurchase stock, pay dividends, transfer assets or engage in merger and acquisition activity, including merge or consolidate with a third party. The credit facility also requires us to maintain a liquidity ratio of not less than 1.25 to 1.00 and to demonstrate minimum cash balances and the absence of defined events of default in order to have access to the available borrowing. Our credit facility also contains customary affirmative covenants, including requirements to, among other things, deliver audited financial statements, and it contains customary events of default, subject to customary cure periods for certain defaults, that include, among other things, non-payment defaults, covenant defaults, material judgment defaults, bankruptcy and insolvency defaults, cross-defaults to certain other material indebtedness, and defaults arising from inaccuracy of representations and warranties. The revolving credit facility also includes a default upon the occurrence of a material adverse change to our business.
If our cash balances or cash flows decline due to any of the factors described in this “Risk Factors” section or otherwise, if we breach covenants under our credit facility or if there occurs a material adverse change in our business, we could be prohibited from further borrowing under the credit facility, our interest rates on the outstanding borrowings could increase and our obligation to repay principal amounts could be accelerated. Our failure to pay interest and principal amounts when due or comply with covenants could cause a default under the credit facility. Any such default could have a material adverse effect on our liquidity and financial condition. In the event of a liquidation of our Company, the lender would be repaid all outstanding principal and interest prior to distribution of assets to other unsecured creditors. Our holders of common stock would receive a portion of any liquidation proceeds only if all of our creditors were first repaid in full.
Risks Related to Our Industry
We compete in highly competitive markets, and competitive pressures from existing and new companies may harm our business, revenue, growth rates and prospects. In addition, many of our current or potential competitors have longer operating histories, greater brand recognition, larger customer bases and significantly greater resources than we do, and we may lack sufficient financial or other resources to maintain or improve our competitive position.
The markets in which we compete are highly competitive, and we expect competition to increase in the future from established competitors and new market entrants. The markets are influenced by, among others, the following competitive factors:
- brand awareness and reputation;

- price and total cost of ownership;
- discounts and other incentives offered to resellers and channel partners;
- strength and scale of sales and marketing efforts, professional services and customer support;
- product features, reliability and performance;
- incumbency of the current provider, either for wireless or wired networking or other products;

- scalability of products;
- ability to integrate with other technology infrastructures; and
- breadth of product offerings.

Our main competitors include general networking infrastructure vendors, such as Cisco/Meraki and Hewlett-Packard/Aruba Networks, whose broad networking portfolios include enterprise mobility solutions they have developed or acquired or may acquire in the future. In addition, Cisco and Apple announced in August 2015 a collaboration to improve the performance and experience of Apple iOS-based products when used on Cisco networks and operating systems. Cisco and other vendors have also committed significant internal sales and marketing resources to increase their participation in the 2016 FCC's E-Rate funding program for K-12 schools. Such vendors have significant sales and engineering resources and, along with the relationships they have formed, can offer customers and resellers a broader or more compelling portfolio of products and platform solutions than we can offer, which some customers may prefer, and can use their broader offerings to provide additional financial and technical incentives for customers to purchase their products. We also compete with independent Wi-Fi vendors, such as Ruckus Wireless, who are primarily focused on wireless access products and may be a source of product innovation in the market. Such companies may expand their product offerings over time and, through such partnerships and acquisitions and with greater resources, are able more effectively and opportunistically to target emerging markets or market opportunities, becoming more difficult competitors for us. We expect competition to intensify in the future as companies introduce new products into our markets, consolidate or broaden their product offerings or from partnerships of collaborations, including amongst our competitors and partners, which expand the breadth and compatibility of their product offerings. Ruckus announced in 2015, that they are developing access point products and applications intended for the enterprise, a market in which we currently compete. This competition could result in increased pricing pressure, reduced profit margins, increased sales and marketing expenses, and failure to increase, or the loss of, our market share, any of which would likely seriously harm our business, operating results or financial condition. If we do not keep pace with product and technology advances, there could be a material and adverse effect on our competitive position, revenue and prospects for growth.

A number of our current or potential competitors have longer operating histories, greater name recognition, larger customer bases, more resellers, and significantly greater financial, technical, sales, marketing and other resources. Our competitors may be better able to anticipate, influence or adapt more quickly to new or emerging technologies and changes in customer requirements, devote greater resources to the promotion and sale of their products and services, initiate or withstand substantial price competition, take advantage of acquisitions or other opportunities more readily and develop and expand their product and service offerings more quickly than we can. In addition, certain of our competitors may be able to leverage their relationships with customers based on other products or incorporate functionality into existing products to gain business in a manner that discourages customers from purchasing our products, including through selling at low or even negative margins, product bundling, or closed technology platforms. Our competitors may also be able to offer a broader integrated product platform, or across platforms through partnerships, bringing together a unified product, security and applications offering. Potential end-customers may prefer to purchase all of their equipment from a single provider, or may prefer to purchase wireless and wired networking products from an existing supplier rather than a new supplier, regardless of product performance or features.

We expect increased competition from our current competitors, as well as other established and emerging companies, to the extent our markets continue to develop and expand. Conditions in our markets could change rapidly and significantly as a result of technological advancements or other factors. These pressures could materially adversely affect our business, operating results and financial condition.

Industry consolidation and strategic partnerships lead to increased competition and may harm our operating results.

There has been a trend toward industry consolidation in our markets for several years as companies attempt to strengthen or hold their market positions in an evolving industry, and as companies are acquired or are unable to continue operations. Some of our competitors have made acquisitions or entered into partnerships or other strategic relationships to offer a more comprehensive solution than they individually had offered. For example, in November 2012, Cisco Systems acquired Meraki Networks. In 2014, Juniper Networks announced that it was exiting its wireless networking business as part of a strategic partnership with Aruba Networks. In April 2014, Zebra Technologies announced that it would buy the enterprise business of Motorola Solutions. In March 2015, Hewlett-Packard announced that it would acquire Aruba Networks. In July 2015, Fortinet, Inc. completed its acquisition of Meru Networks. In addition, Cisco and Apple announced in August 2015 a collaboration to improve the performance and experience of Apple iOS-based products when used on Cisco networks and operating systems. In October 2015, Ruckus announced its acquisition of CloudPath Networks, a provider of Wi-Fi onboarding technology. Such or similar consolidation or strategic partnerships may continue in the future. The companies or alliances resulting from these possible consolidations may create more compelling or bundled or integrated product platforms, bringing together unified product, security and application offerings, as well as being able to offer greater pricing flexibility, making it

more difficult for us to compete effectively, including on the basis of price, sales and marketing programs, channel coverage, technology or product functionality. Continued industry consolidation may adversely impact customers' perceptions of the viability of smaller and even medium-sized technology companies such as ourselves and, consequently, customers' willingness to purchase from us. Companies that are our strategic alliance or channel partners in some areas of our business may acquire or form alliances with our competitors, thereby reducing their business with us. We believe that industry consolidation may result in stronger competitors, with more efficient cost structures that are better able to compete as sole-source vendors for our end-customers. This could lead to more variability in our operating results and could have a material adverse effect on our business, operating results and financial condition.
Demand for our products and services depends in part on the continued growth of the industries in which we participate, and the failure of these industries to expand or the timing of their transactions could harm our operating results.
We currently target K-12 and higher education, retail, distributed enterprise and, to a lesser extent, healthcare end-customers. We sell into verticals such as finance, manufacturing, utilities, telecom, state and local government, transportation, legal, accounting, architecture, engineering and construction. In the event any of the specific sectors we target fails to expend on wireless networking, our operating results could be harmed. For example, the education sector is faced with limited resources to spend on technology purchases. In North America, the U.S. government's E-Rate program starting on July 1, 2015 is expected to provide a significant portion over the next several years of the funding used by schools to purchase our solutions. If this sector does not continue to expand expenditures on technology in general, and wireless networking in particular, our business could be harmed. If the E-Rate program is discontinued or receives a lower level of funding than we expect, or the share of funding our end-customers secure or direct toward purchasing our products is lower than we expect, our business could also be harmed. For example, Cisco, Ruckus and other vendors have also committed significant internal sales and marketing resources to increase their participation in the 2016 FCC's E-Rate funding program for K-12 schools. In addition, purchasing decisions by schools may depend on the availability or expectation of funding, including the timing and availability of funding for schools under the FCC's E-Rate program. For example, in addition to our normal seasonality, we saw schools defer purchases to later 2015 (and into 2016), in anticipation of the availability of such funding and due to decisions to delay product deployment, including to accommodate school schedules. It is also possible under the federal program for schools which have filed Form 471 forms specifying awards for Aerohive products to cancel such awards prior to placing orders, and to re-apply in 2016 under the program for a different or larger implementation, which new order may be with us or one of our competitors. We believe such deferrals and delays caused increased seasonal variations in demand during our fiscal 2015 for our products and services in the education vertical, making more difficult our ability to forecast our operating performance and achieve revenue and other operating results based on those forecasts. The sales results for our first fiscal quarter 2015 were below expectations, primarily due to a pause in demand in U.S education business due to such various aspects and timing of the Federal E-Rate program. We also saw K-12 spending shift from the first half of the year into the second half of the year, and into our fiscal 2016. In addition, the period in 2016 for districts to submit Form 471 funding requests was extended this year, compared to 2015, which could affect the timing of federal funding approvals and district purchases. We believe such deferrals, delays and possible cancellations will continue during our fiscal 2016, as we expect that during the 2016 annual E-Rate funding cycle certain end customers in the education vertical could decide further to delay purchasing and decisions to deploy their networks, which could also defer their purchasing decisions later into 2016. We expect our historical seasonality to continue, but to be amplified by the availability of project funding and timing of such funding under the E-Rate program. We currently expect this could result in the sequential decline in our product revenue in our first quarter of fiscal 2016 to be greater than we have historically experienced, though moderately less than we experienced in our first quarter of fiscal 2015.
If functionality similar to that offered by our products is incorporated into existing network infrastructure products, enterprises may decide against adding our products to their network, which would have an adverse effect on our business.
Large, well-established providers of networking equipment may continue to introduce features that compete with our products, either in stand-alone products or as additional features or applications in their network platforms. For

example, several of our larger competitors may be better able to integrate into a single platform a broader product, security and applications offering. The inclusion of, or the announcement of an intent to include, functionality perceived to be similar to that offered by our platform may have an adverse effect on our ability to market and sell our products. Furthermore, even if the functionality offered by these providers is more limited or less cost-effective than our platform, end-customers may elect to accept such products in lieu of adding platforms from an additional vendor such as ourselves. Many enterprises have invested substantial personnel and financial resources to design and operate their networks and have established deep relationships with other providers of networking products, which may make them reluctant to add new components to their networks, particularly from other vendors such as ourselves. In addition, an enterprise's existing vendors or new vendors with a broad product offering may be able to offer concessions that we are not able to match. If enterprises are reluctant to add new vendors or otherwise decide to work with their existing vendors, our ability to maintain or improve our market share, our financial condition and operating results will be adversely affected.

We rely on revenue from subscription and services that may decline. Because we recognize revenue from subscriptions and services over the term of the relevant service period, downturns or upturns in sales are not immediately reflected in full in our operating results.
Software subscription and services revenue, consisting of sales of new or renewal subscription and support and maintenance contracts, accounts for a significant portion of our revenue, comprising of 9%, 12% and 17% of total revenue for fiscal 2013, 2014 and 2015, respectively. Service revenue might decline and fluctuate as a result of a number of factors, including end-customers' level of satisfaction with our offerings, the prices, pricing and changes in the scope of our offerings, the prices of products and services offered by our competitors and reductions in our end-customers' spending levels. We are developing and implementing systems to enable us better to track and timely identify renewal opportunities. If our sales of new or renewal subscription and support and maintenance contracts decline, or we are not able to manage efficiently increased support transaction volumes, including renewals, our revenue and revenue growth may decline and our business will suffer. In addition, we currently recognize service revenue ratably over the term of the relevant service period, which is typically one, three or five years. As a result, much of the service revenue we report each fiscal quarter is the recognition of deferred revenue from service contracts entered into during previous fiscal quarters. Consequently, a decline in new or renewed subscription or support and maintenance contracts in any one fiscal quarter will not be fully reflected in revenue in that fiscal quarter but will negatively affect our revenue in future fiscal quarters. Accordingly, the effect of significant downturns in new or renewed sales of our subscriptions or support and maintenance is not reflected in full in our operating results until future periods. Also, it is difficult for us to rapidly increase our services revenue through additional service sales in any period, as revenue from new and renewal service contracts must be recognized over the applicable service period. Furthermore, any increase in the average term of services contracts would result in revenue for services contracts being recognized over longer periods of time and the associated revenue we recognize could be lower in any particular quarter.
If we fail to comply with environmental requirements, our business, financial condition, operating results, and reputation could be adversely affected.
We are subject to various local, state, federal, and international environmental laws and regulations, including laws governing the hazardous material content of our products and laws relating to the collection of and recycling of electrical and electronic equipment. Examples of these laws and regulations include the European Union Restriction on the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Directive (RoHS), and the European Union Waste Electrical and Electronic Equipment Directive (WEEE Directive), as well as the implementing legislation of the European Union member states. Similar laws and regulations have been passed or are pending in China, South Korea, Norway, and Japan and may be enacted in other regions in which currently or expect to operate, including in the United States, and we are, or may in the future be, subject to these laws and regulations.
The RoHS and the similar laws of other jurisdictions limit the content of certain hazardous materials, such as lead, mercury and cadmium in the manufacture of electrical equipment, including our products. Currently, our products comply with the EU RoHS requirements. However, if there are changes to these or other laws (or their interpretation) or other jurisdictions pass new similar laws or requirements, we may be required to reengineer our products to use components compatible with these regulations. This reengineering and component substitution could result in additional costs to us or disrupt our operations or logistics or delay our ability to sell our products.
The WEEE Directive requires electronic goods producers to register as a WEEE producer and be responsible for the collection, recycling, and treatment of such products. Changes in interpretation of the directive may cause us to have additional regulatory requirements to meet in the future in order to comply with this directive, or with any similar laws adopted in other jurisdictions.
We are also subject to environmental laws and regulations governing the management of hazardous materials, which we use in small quantities in our engineering labs. Our failure to comply with past, present, and future similar laws could result in reduced sales of our products, substantial product inventory write-offs, reputational damage, costs, penalties, third party property damage, and other sanctions, any of which could harm our business and financial condition. We also expect that our products will be affected by new environmental laws and regulations on an ongoing basis, imposing greater compliance costs, and increasing risks and penalties associated with violations, which could

harm our business. To date, our expenditures for environmental compliance have not had a material impact on our results of operations or cash flows, and although we cannot predict the future impact of such laws or regulations, they will likely result in additional costs and may increase penalties associated with violations or require us to change the content of our products or how they are manufactured, which could have a material adverse effect on our business, operating results, and financial condition.

New regulations or standards or changes in existing regulations or standards in the United States or internationally related to our products may result in unanticipated costs or liabilities, which could have a material adverse effect on our business, results of operations and future sales, and could place additional burdens on the operations of our business.

Our products are subject to governmental regulations in a variety of jurisdictions. In order to achieve and maintain market acceptance, our products must continue to comply with these regulations as well as a significant number of industry standards. In the United States, our products must comply with various regulations defined by the Federal Communications Commission, or FCC, Underwriters Laboratories and others. We must also comply with similar international regulations in order for our products to be certified for use in such countries. For example, our wireless communication products operate through the transmission of radio signals and radio emissions are subject to regulation in the United States and in other countries in which we do business. In the United States, various federal agencies, including the Center for Devices and Radiological Health of the Food and Drug Administration, the FCC and various state agencies have promulgated regulations that concern the use of radio/electromagnetic emissions standards. Member countries of the European Union and individual countries in the Asia Pacific region have enacted similar standards concerning electrical safety and electromagnetic compatibility and emissions and chemical substances and use standards. In addition, our data analytics solutions, and the manner in which we collect, store, analyze, use or transmit end-customer data, increasingly may be subject to regulation under the Federal Trade Commission.

As these regulations and standards evolve, and if new regulations or standards are implemented, we will be required to modify our products or develop and support new versions of our products, or change the manner in which we collect, store, analyze, use or transmit end-customer data, and our compliance with these regulations and standards may become more burdensome and require significant investments. The failure of our products to comply, or delays in compliance, with the various existing and evolving industry regulations and standards could prevent or delay introduction of our products, which could harm our business. End-customer uncertainty regarding future policies may also affect demand for communications products, including our products. Moreover, channel partners or end-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 to address these requirements and any regulatory changes may have a material adverse effect on our business, operating results and financial condition.

Risks Related to Our Intellectual Property

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

We protect our proprietary information and technology through licensing agreements, third-party nondisclosure agreements and other contractual provisions, as well as through patent, trademark, copyright and trade secret laws in the United States and similar laws in other countries. We do not know whether these protections will be available in all cases or will be adequate to prevent our competitors from copying, reverse engineering or otherwise obtaining and using our technology, proprietary rights or products. The laws of some foreign countries, including countries in which our products are sold, used or manufactured, are in many cases not as protective of intellectual property rights as those in the United States, and mechanisms for enforcement of intellectual property rights may be inadequate. In addition, third parties may seek to challenge, invalidate or circumvent our patents, trademarks, copyrights and trade secrets, or applications for any of the foregoing. Our competitors may independently develop technologies that are substantially equivalent or superior to our technology or design around our proprietary rights. We have focused patent, trademark, copyright and trade secret protection primarily in the United States. As a result, we may not have sufficient protection of our intellectual property in all countries where infringement may occur. In each case, our ability to compete or offer our products for sale could be significantly impaired.

To prevent substantial unauthorized use of our intellectual property rights, it may be necessary to prosecute actions for infringement and/or misappropriation of our proprietary rights against third parties. We currently have a limited portfolio of issued patents compared to our larger competitors and, therefore, may not be able to effectively utilize our intellectual property portfolio to assert against third parties. Any such action could result in significant costs and diversion of our resources and management’s attention and, in any case, we could fail to be successful in any such action. Furthermore, many of our current and potential competitors have the ability to dedicate substantially greater resources to enforce their 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.

Claims by others that we infringe their intellectual property rights could harm our business.

Companies that sell products, as well as non-operating patent holding companies, in the wireless networking industry are often aggressive in protecting intellectual property rights and perceived rights, which has resulted in protracted and expensive litigation for some companies. In addition, non-operating entities have been increasingly aggressive in asserting intellectual property rights and perceived rights against operating companies in the Wi-Fi and networking industry, including ourselves. We currently are subject to claims and litigation by third parties that we infringe their intellectual property rights.

As our business expands and the number of products and competitors in our market increases and overlaps occur, we expect that infringement claims may increase in number and significance. Any claims or proceedings against us, whether meritorious, will be time-consuming, result in costly litigation, require significant amounts of management time or result in the diversion of significant operational resources, any of which could materially and adversely affect our business and operating results.

Intellectual property lawsuits are subject to inherent uncertainties due to the complexity of the technical issues involved, and we cannot be certain that we will be successful in defending ourselves against intellectual property claims. Our limited portfolio of issued patents may not provide defenses or counterclaims in response to patent infringement claims or litigation brought against us by third party competitors. Further, where non-operating entities or other adverse patent owners who have no relevant products or revenue bring such claims or litigation our potential patents provide no deterrence or competitive risk. In any case, many potential litigants have the capability to dedicate substantially greater resources to enforce their intellectual property rights and to defend claims than we could against them. Furthermore, a successful claimant could secure a judgment that requires us to pay substantial damages or prevents us from distributing certain products or performing certain services. We might also be required to seek a license and pay royalties for the use of such intellectual property, which may not be available on commercially acceptable terms, or at all. Alternatively, we may be required to develop non-infringing technology, which could require significant effort and expense and may ultimately not be successful.

See Part II, Item 1 “Legal Proceedings." for a discussion of the intellectual property litigation in which we are currently involved.

Our use of open source software could impose limitations on our ability to commercialize our products.

Our products utilize software modules licensed to us by third-party authors under open source licenses, including as incorporated into software we receive from third party commercial software vendors. 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 support, updates, warranties, or other contractual protections regarding infringement claims or the quality of the code. Furthermore, 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 other unanticipated conditions or restrictions on our ability to commercialize our products. In addition, some open source licenses require the licensee, under certain circumstances, to make available source code for modifications or derivative works the licensee creates based upon such open source software, and to allow further modification and distribution of such works. As a result, if we combine our proprietary software with open source software or modify such software in a certain manner, we could be required to release certain source code we authored under license terms that freely permit third parties, including our competitors, to further modify, use and distribute our software. In some instances, this could allow our competitors to create similar products with lower development effort and time, create security vulnerabilities in our products, and ultimately result in a loss of product sales for us. Further, if we are held to have breached or otherwise failed to comply with the terms of an open source software license, we could be required to pay damages, seek licenses from third parties to continue offering our products, re-engineer our products, or discontinue the sale of our products if re-engineering could not be accomplished on a timely basis.

We will continue to review of our usage of open source software in our products, and an analysis of the impact, if any, of such usage on our products and business. We may not be able to identify all of the risks regarding our use of open source software and what steps, if any, we may need to take to come into compliance with applicable license terms. Moreover, our implementation of tools and policies designed to monitor our use of open source software in our products may not be adequate or entirely effective in all instances. Depending on our determination of the impact on our business of compliance with applicable open source licenses license requirements, we could be required to re-engineer certain aspects of our products and/or seek licenses from third parties. Until we have completed our analysis, we will not know the extent of such re-engineering efforts, if any, or if and on what terms such licenses could be available.

We rely on the availability of third-party licenses. If these licenses are available to us only on less favorable terms or not at all in the future, our business and operating results would be harmed.

We have incorporated third-party licensed technology and intellectual property rights into our products. It may be necessary in the future to renew licenses relating to various aspects of these products or to seek additional licenses for existing or new products. These necessary licenses could be unavailable to us on acceptable terms, or at all. The inability to obtain certain licenses or other rights, or to obtain those licenses or rights on favorable terms, or the need to engage in litigation regarding these matters, could result in delays in product releases until such time, if ever, as we can identify, license or develop equivalent technology and integrate such technology into our products, which might have a material adverse effect on our business, operating results and financial condition. Moreover, the inclusion in our products of intellectual property licensed from third parties on a nonexclusive basis could limit our ability to protect our proprietary rights in our products.

Risks Related to Ownership of Our Common Stock

We have experienced significant volatility in the price of our common stock, and you could lose all or part of your investment.

The trading price of our common stock has fluctuated substantially. From the date of our initial public offering in March 2014 through December 31, 2015, the high and low trading price for our common stock as reported by the New York Stock Exchange ranged between a high of $12.23 and a low of $3.43. The trading price of our common stock depends on a number of factors, including those described in this “Risk Factors” section, many of which are beyond our control and may not be related to our operating performance. These fluctuations could cause you to lose all or part of your investment in our common stock, since you might not be able to sell your shares at or above the price you paid. Factors that could cause fluctuations in the trading price of our common stock include the following:

- price and volume fluctuations in the overall stock market from time to time;
- volatility in the market prices and trading volumes of high technology stocks;
- changes in operating performance and stock market valuations of other technology companies generally, or those in our industry in particular;
- sales of shares of our common stock by us or our stockholders, including through secondary offerings we may initiate to generate cash to fund our ongoing operations;
- failure of financial analysts to maintain coverage of us, changes in financial estimates by any analysts who follow our company, or our failure to meet these estimates or the expectations of our investors;
- the financial projections we may provide to the public, any changes in those projections or our failure to meet those projections;
- announcements by us or our competitors of new products or new or terminated significant contracts, commercial relationships or capital commitments, or of delays in our product offerings;
- public analyst or investor reaction to our press releases, other public announcements and filings with the Securities and Exchange Commission;
- rumors and market speculation involving us or other companies in our industry;
- investor reaction to announcements we may make concerning our operations, business initiatives or operating performance;
- actual or anticipated changes in our results of operations or fluctuations in our operating results, including any actual or perceived slowing in our rate of growth or ability to achieve profitability at all or on a schedule expected by our investors or industry analysts;
- actual or anticipated developments in our business or our competitors’ businesses or the competitive landscape generally;
- litigation involving us, our industry or both, or investigations by regulators into our operations or those of our competitors;
- developments or disputes concerning our intellectual property or our products, or third-party proprietary rights;
- announced or completed investments in or acquisitions of businesses or technologies by us or our competitors, and the performance of such investments or acquisitions;
- announced partnerships by us or our competitors and the performance of such partnerships;
- declines in our operating, margin or revenue growth or customer acquisition rates;
- new laws or regulations or new interpretations of existing laws or regulations applicable to our business;
- changes in accounting standards, policies, guidelines, interpretations or principles;
- changes in our senior management or our board of directors;
- general economic conditions and slow or negative growth of our markets; and

37

- other events or factors, including those resulting from war, incidents of terrorism or responses to these events.

The stock market in general, and the market for technology companies in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of those companies. Broad market and industry factors may seriously affect the market price of our common stock, regardless of our actual operating performance. In addition, in the past, following periods of volatility in the overall market and the market prices of particular companies' securities, securities class action litigations have often been instituted against these companies. For example, on October 13, 2014, we issued a press release announcing our preliminary results for the third quarter ended September 30, 2014, which were below our previously stated guidance primarily due to weaker than expected order volume. Similarly, on February 11, 2015, we provided a guidance range for revenue for our first quarter ending March 31, 2015, which range was below the estimates of financial analysts at that time. If, such as in these instances, our revenue or operating results, or the rate of growth of our revenue or operating results, fall below the expectations of our investors or financial analysts, or below any forecasts or guidance we may provide to the market, or if the forecasts we provide to the market are below the expectations of analysts or investors, the price of our common stock could decline substantially. Such a stock price decline could occur and result in litigation against us even when we have met our own or other publicly stated revenue or earnings forecasts, and substantial costs and a diversion of our management's attention and resources.

Insiders continue to have substantial control over us and will be able to influence corporate matters.

Our directors and executive officers and stockholders holding more than 5% of our capital stock and their affiliates, excluding stockholders and affiliates holding between 5% and 10% of our capital stock not affiliated with any of our officers or directors, and do not possess any other indicia of control with respect to our company, beneficially own, in the aggregate, approximately 67.4% of our outstanding common stock based on the number of shares outstanding as of December 31, 2015. As a result, these stockholders are able to exercise significant influence over all matters requiring stockholder approval, including the election of directors, and approval of significant corporate transactions, such as a merger or other sale of our company or its assets. This concentration of ownership could limit our stockholders' ability to influence corporate matters and may have the effect of delaying or preventing a third party from acquiring control over us.

Certain provisions in our charter documents and under Delaware law could limit attempts by our stockholders to replace or remove members of our board of directors or current management and may adversely affect the market price of our common stock.

Provisions in our certificate of incorporation and bylaws may have the effect of delaying or preventing a change of control or changes in our board of directors or management. These provisions include the following:

- our Board has the right to elect directors to fill a vacancy created by the expansion of the Board or the resignation, death or removal of a director, which prevents stockholders from being able to fill vacancies on our Board;
- our stockholders may not act by written consent or call special stockholders' meetings; as a result, a holder or holders controlling a majority of our capital stock would not be able to take certain actions other than at annual stockholders' meetings or special stockholders' meetings called by the Board, the chair of the Board, the chief executive officer or the president;
- our directors may only be removed for cause, which would delay the replacement of a majority of our Board;
- our Board is staggered in three tiers, with directors serving for three years, which could impede an acquiror from rapidly replacing our existing directors with its own slate of directors;
- our certificate of incorporation prohibits cumulative voting in the election of directors, which limits the ability of minority stockholders to elect director candidates;
- stockholders must provide advance notice and additional disclosures in order to nominate individuals for election to our Board or to propose matters that can be acted upon at a stockholders' meeting, which may discourage or deter a potential acquiror from conducting a solicitation of proxies to elect the acquiror's own slate of directors or otherwise attempting to obtain control of our company; and
- our Board may issue, without stockholder approval, shares of undesignated preferred stock; the ability to issue undesignated preferred stock makes it possible for our Board to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to acquire us.

As a Delaware corporation, we are also subject to certain Delaware anti-takeover provisions. For example, under Delaware law, a corporation may not engage in a business combination with any holder of 15% or more of its capital stock unless the holder has held the stock for three years or, among other things, the Board has approved the transaction. Our Board could rely on Delaware law to prevent or delay an acquisition of us.

Our directors are entitled to accelerated vesting of their equity awards pursuant to the terms of their service arrangements upon a change of control of our company, and our executive officers in the event their employment is actually or constructively terminated in the context of a change of control. In addition to the arrangements currently in place with some of our executive officers, we may enter into similar arrangements in the future with other officers. Such arrangements could delay or discourage a potential acquisition of our company.

If financial or industry analysts do not publish research or reports about our business, or if they issue an adverse or misleading opinion regarding our common stock, our stock price and trading volume could decline.

The trading market for our common stock is influenced by the research and reports that industry or financial analysts publish about us, our business, our competitors' business or our industry. We do not control these analysts or the content and opinions included in their reports. As a recently public company, we may be slow to attract research coverage and the analysts who publish information about our common stock will have had relatively little experience with our company, which could affect their ability to accurately forecast our results and make it more likely that we fail to meet their estimates. In the event we obtain industry or financial analyst coverage, if any of the analysts who cover us issues an adverse or misleading opinion regarding our stock price, our stock price would likely decline. If one or more of these analysts cease coverage of our company or fail to publish reports on us regularly, we could lose visibility in the financial markets, which in turn could cause our stock price or trading volume to decline.

We believe our long-term value as a company will be greater if we focus on growth.

Part of our business strategy is to focus on our long-term growth. As a result, it may take longer to achieve and sustain profitability and, once achieved, our profitability may be lower in the near term than it would be if our strategy was to maximize short-term profitability. Our use of cash could also be greater and extend over a longer period as we make investments in areas of our operations, such as sales, marketing and research and development, which we feel may promote growth and profitability over the long term. Expenditures on expanding our research and development and, sales and marketing efforts, infrastructure and other such investments may not ultimately grow our business or cause long-term profitability. If we are ultimately unable to achieve profitability, at all or on a schedule or at the level anticipated by analysts and our stockholders, our stock price may decline. Conversely, our efforts to achieve profitability could cause us to reduce hiring and other investments, which could limit our product development and efforts to improve sales execution, and create organizational strain, including within our sales engineering and support organizations.

We recently announced a share repurchase program, but we cannot guarantee that in fact that our repurchase of shares will enhance long-term stockholder value. Our share repurchases could also increase the volatility of the price of our common stock and could diminish our cash reserves.

In February 2016, our board of directors authorized a stock repurchase program. Under the program, we are authorized to repurchase shares of our common stock for an aggregate purchase price of up to $10 million. Although our board of directors authorized the program, we are not obligated to repurchase any minimum or specific number or dollar amount of shares. In addition, we may suspend or terminate the program at any time before its expiration as of June 30, 2017. Under the program, we may purchase shares of our stock from time to time, in the open market or through private transactions, subject to market condition, in compliance with applicable state and federal securities laws. However, the timing and number of our share repurchases, if any, will depend upon several factors, including market and business conditions, the trading price of our common stock and the nature of other investment opportunities available to us. We may also choose to defer or limit repurchases given other uses of our cash or our desire to preserve cash balances. In addition, our repurchases of common stock could affect the market price of our common stock or increase its volatility. For example, the existence of a share repurchase program could cause our share price to be higher than it would be in the absence of such a program and could potentially reduce the market liquidity for our stock. Additionally, our repurchase program could diminish our cash reserves, which may impact our ability to finance future growth and to pursue possible future strategic opportunities and acquisitions. We also cannot assure that any share repurchases will enhance stockholder value because the market price of our common stock may decline below the levels at which we repurchase our stock, and short-term stock price fluctuations could reduce the program's effectiveness.

We do not intend to pay dividends and under our loan agreements with our lenders we are not permitted to pay dividends. As a result, your ability to achieve a return on your investment will depend on appreciation in the price of our common stock.

Pursuant to our revolving credit facility, we are restricted from paying dividends while this facility is in place. Moreover, we have never declared or paid any cash dividends on our common stock and do not intend to pay any cash dividends in the foreseeable future. We anticipate that we will retain all of our future earnings for use in the development of our business and for general corporate purposes. Any determination to pay dividends in the future will be at the discretion of our

Board. Accordingly, investors must rely on sales of their common stock after price appreciation, which may never occur, as the only way to realize any future gains on their investments.

We are an "Emerging Growth Company," and any decision on our part to comply only with certain reduced disclosure requirements applicable to Emerging Growth Companies could make our common stock less attractive to investors.

We are an "emerging growth company," as defined in the Jumpstart Our Business Startups Act enacted in April 2012, and, for as long as we continue to be an "emerging growth company," we may choose to take advantage of exemptions from various reporting or compliance requirements applicable to other public companies but not to "emerging growth companies," including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. We could be an "emerging growth company" for up to five years after the completion of the IPO, although if the market value of our common stock that is held by non-affiliates exceeds $700 million as of any June 30 before that time or if we have total annual gross revenue of $1 billion or more during any fiscal year before that time, we would cease to be an "emerging growth company" as of the end of that fiscal year. If we issue more than $1 billion in non-convertible debt in a three-year period we would cease to be an "emerging growth company" immediately. We cannot predict if investors will find our common stock less attractive if we choose to rely on these exemptions. If some investors find our common stock less attractive as a result of any choices to reduce future disclosure, there may be a less active trading market for our common stock and our stock price may be more volatile.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

As of December 31, 2015, we leased approximately 135,000 square feet of space in our domestic and international locations. Approximately 60% of our leased properties are located in the United States and are primarily located in Sunnyvale, California, which is where our corporate headquarters are located. Our international locations, which comprise approximately 40% of all our properties, are mainly located in China, the Netherlands and the United Kingdom. Our international properties are primarily used for customer service centers, sales offices and research and development facilities. Our current office leases for our headquarters facilities in Sunnyvale, California will expire in September 2016. See Note 6, Commitments and Contingencies, of the Notes to Consolidated Financial Statements for information regarding our lease obligations. We believe we have secured a long-term lease for our new headquarters facility, the lease, which we expect will be suitable and adequate to meet our current needs. However, the lease and our occupancy are still subject to conditions outside of our control. If we are successful in securing and occupying this new facility, we expect to incur significant up-front costs under the new lease relating to facility improvements and our initial occupancy, as well as ongoing expenses in base rent and costs and restoration obligations passed through to us under the master lease and sublease agreements.

We intend to add new facilities or expand existing facilities as necessary. As we add employees and support new geographic markets, we also intend to add new facilities. We believe that suitable additional or alternative space will be available as needed to accommodate ongoing operations and any such growth. However, such additional or alternative facilities may impose additional expenses on our ongoing operations.

ITEM 3. LEGAL PROCEEDINGS

The Company may be subject to legal proceedings and litigation arising in the ordinary course of business. The Company will record a liability when it believes that it is both probable that a loss has been incurred and the amount can be reasonably estimated. The Company expects to periodically evaluate developments in its legal matters that could affect the amount of liability that it has previously accrued, if any, and make adjustments as appropriate. Significant judgment is required to determine both likelihood of there being, and the estimated amount of, a loss related to such matters, and the Company's judgment may be incorrect. The outcome of any proceeding is not determinable in advance. Until the final resolution of any such matters for which the Company may be required to accrue, there may be an exposure to loss in excess of the amount accrued and such excess amount could be significant.

The Company is currently in separate litigations with AirTight Networks, Linex Technologies and Chrimar Systems, each of which alleges that the Company infringes certain patents.

40

AirTight Networks, or AirTight, has alleged that the Company's products infringe U.S. Patent #7,339,914, or the '914 Patent. On January 23, 2013, in light of AirTight's allegations, the Company filed in the U.S. District Court, Northern District of California, a Complaint for Declaratory Judgment against AirTight asserting that the Company's products do not infringe the '914 Patent and that the '914 Patent is, in any case, invalid and not enforceable. AirTight filed a separate action asserting infringement of the '914 Patent by some or all of the Company's products, which has been related to the Company's initial action for declaratory judgment. Both of the related court actions are currently stayed based on pending re-examination, which the Company initiated with the U.S. Patent and Trademark Office, or PTO, regarding the '914 Patent. All claims are currently rejected and Airtight has appealed the final rejection of all claims of the '914 Patent.

Linex Technologies, or Linex, filed on March 19, 2013 a Complaint in the U.S. District Court, Southern District of Florida asserting that some or all of the Company's products infringe U.S. Patents #6,493,377, or the '377 Patent, and #7,167,503, or the '503 Patent. The Company filed an answer and counterclaims for declaratory judgment against Linex asserting that the Company's products do not infringe the '377 and '503 Patents, and that the '377 and '503 Patents are, in any case, invalid and not enforceable. The Company separately filed with the PTO petitions to initiate reexamination of the '377 and '503 Patents, which petitions the PTO granted. In the PTO reexaminations, all claims under the '377 Patent are currently rejected and Linex has appealed the final rejections of the claims, and the petition regarding the claims subject to the '503 Patent is still pending. The case before the U.S. District Court, Southern District of Florida is currently stayed pending the reexamination.

Chrimar Systems, or Chrimar, filed in July 2015 a complaint in the U.S. District Court, Eastern District of Texas, asserting that certain of the Company's products which utilize Power over Ethernet (PoE) functionality infringe United States Patent Nos. 8,155,012, 8,942,107, 8,902,760 and 9,019,838. The complainant has since also named one of the Company's customers as a co-defendant and, in at least one instance, filed a separate action against a channel partner based on that partner's sale of Company products. The Company continues to evaluate the allegations and its possible obligations to the Company's customer and partners under written indemnification commitments.

The Company is also currently in litigation asserting claims under federal securities laws.

In June 2015, a class action complaint was filed in the Superior Court of the State of California, County of San Mateo, against the Company and certain of its current and former officers and directors. This action was subsequently related and consolidated with two identical, follow-on complaints and is captioned Hunter v. Aerohive Networks, Inc., et al., Shareholder Litigation, Master File No. 534070. The consolidated complaint alleges claims under federal securities laws that the Registration Statement which the Company filed with the Securities and Exchange Commission on Form S-1 in connection with its initial public offering in March 2014 contained false and/or misleading statements or omissions. The consolidated action also names as defendants the investment firms who underwrote the Company's initial public offering.

The consolidated complaint alleges that the Registration Statement failed to disclose, among other things, product deficiencies, poor sales, and a decline in sales-related personnel. The complaint additionally alleges that the Company improperly recognized revenue, including by booking certain sales with rights of return. The consolidated complaint seeks unspecified compensatory damages and other relief. The Company is advancing certain defense costs with respect to individual defendants, including the underwriting investment firms, under written indemnification agreements.

The Company intends to defend these lawsuits vigorously.

The Company is not able to predict or estimate any range of reasonably possible loss related to these lawsuits. If these matters have an adverse outcome, they may have an impact on the Company's financial position, results of operations or cash flows.

In October 2015, we resolved the pending lawsuit brought by JSDQ Mesh Technologies LLC, filed in June 2015 in the U.S. District Court, District of Delaware, asserting that certain of our products which utilize a so-called wireless mesh transmission feature infringe United States Patent Nos. 7,286,828, 7,916,648, RE43,675 and RE44,607. The complaint also named one of our customers as a co-defendant. Our settlement payment regarding this matter was not material.

Export Compliance

Our products are subject to U.S. export controls, specifically the Export Administration Regulations, and economic sanctions enforced by the Office of Foreign Assets Control. We incorporate standard encryption algorithms into our products, which, along with the underlying technology may be exported outside of the United States only with the required export authorizations, including by license, license exception or other appropriate government authorizations. Each of these authorizations may require the filing of an encryption registration and classification request. Furthermore, U.S. export control

41

and trade laws and economic sanctions prohibit the shipment of certain products and services to certain countries, as well as governments and persons targeted by U.S. sanctions. We take precautions to prevent our products and services from being exported in violation of these laws. However, in certain instances we shipped encryption products prior to obtaining the required export authorizations and/or submitting the required requests, including a classification request and request for an encryption registration number. As a result, we filed in June 2013 a Voluntary Self Disclosure with the U.S. Department of Commerce’s Bureau of Industry and Security, or BIS, concerning these violations. BIS closed out this disclosure with a warning letter in May 2014. No penalties were assessed. Similar future instances could result in monetary penalties or other penalties assessed against us. Additionally, even though we take precautions to ensure that our channel partners comply with all relevant regulations, any failure by our channel partners to comply with such regulations could have negative consequences for us, including reputational harm, government investigations, and assessments of penalties against us.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS, AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Information

Our common stock, $0.001 par value per share, has been trading on the New York Stock Exchange since March 28, 2014, under the symbol “HIVE.”

Holders of Record

As of December 31, 2015, there were approximately 28 holders of record of our common stock. Because many of our shares of common stock are held by brokers and other institutions on behalf of stockholders, we are unable to estimate the total number of stockholders represented by these record holders.

Price Range of Our Common Stock

The following table sets forth the reported high and low sales prices of our common stock, as quoted on the New York Stock Exchange:

	High	Low
Year Ended December 31, 2014		
Second Quarter	$12.23	$8.00
Third Quarter	$10.07	$7.43
Fourth Quarter	$8.13	$3.91
Year Ended December 31, 2015		
First Quarter	$4.90	$3.43
Second Quarter	$8.35	$4.35
Third Quarter	$8.10	$5.43
Fourth Quarter	$7.48	$4.98

Stock Performance Graph

The following graph compares, for the period ending December 31, 2015, the cumulative total stockholder return for our common stock, the NYSE Composite Index and the NYSE Arca Tech 100 Index. The graph assumes that $100 was invested on March 28, 2014 in each of our common stock, the NYSE Composite Index and the NYSE Arca Tech 100 Index and assumes reinvestment of any dividends. The stock price performance on the following graph is not necessarily indicative of future price performance of our stock. This performance graph shall not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or the Exchange Act, or incorporated by reference into any of our filings under the Exchange Act or the Securities Act of 1933, as amended, except as shall be expressly set forth by specific reference in such filing.

Dividend Policy

We have never declared or paid cash dividends on our common stock. Our various credit facilities currently restrict our ability to pay dividends while these facilities remain outstanding. We currently intend to retain all available funds and any future earnings for use in the operation of our business and do not anticipate paying any dividends on our common stock in the foreseeable future. Any future determination to declare dividends will be made at the discretion of our board of directors, in accordance with applicable law, will require the approval of certain of our lenders and will depend on our financial condition, operating results, capital requirements, general business conditions and other factors that our Board may deem relevant.

Use of Proceeds

On March 27, 2014, our Registration Statement on Form S-1 was declared effective by the SEC for our IPO of common stock. We started trading on the New York Stock Exchange on March 28, 2014, and the transaction formally closed on April 2, 2014. In conjunction with the IPO, we issued 8,625,000 shares of common stock, including exercise of the underwriters’ option to purchase an additional 1,125,000 shares, at an offering price of $10.00 per share, for aggregate net proceeds of $80.2 million, after deducting the underwriters' discounts and commissions.

We have invested the net offering proceeds in money market funds, U.S. treasuries, corporate securities and commercial paper. There has been no material change in the planned use of proceeds from our IPO as described in our final prospectus filed with the SEC on March 28, 2014 pursuant to Rule 424(b).

ITEM 6. SELECTED CONSOLIDATED FINANCIAL DATA

The following selected historical financial data below should be read in conjunction with Item 7, “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” our financial statements, and the related notes appearing in Item 8, “Financial Statements and Supplementary Data,” of this Annual Report on Form 10-K to fully understand factors that may affect the comparability of the information presented below.

We derived the selected consolidated statement of operations data for the year ended December 31, 2015, 2014 and 2013, and the consolidated balance sheet data as of December 31, 2015 and 2014 from our audited consolidated financial statements included elsewhere in this report. We derived the selected consolidated statement of operations data for the year ended December 31, 2012 and 2011, and the consolidated balance sheet data as of December 31, 2013, 2012 and 2011 from audited financial statements not included in this report. Our historical results are not necessarily indicative of the results that may be expected in the future.

	Year Ended December 31,				
	2015	2014	2013	2012	2011
	(in thousands, except share and per share data)				
Consolidated Statements of Operations Data:					
Revenue:					
Product	$126,281	$120,507	$97,564	$66,631	$31,846
Software subscription and services	25,378	16,785	9,571	4,584	2,110
Total revenue	151,659	137,292	107,135	71,215	33,956
Cost of revenue[1]:					
Product	40,496	38,365	31,431	24,203	12,049
Software subscription and services	9,897	6,400	4,250	1,797	1,544
Total cost of revenue	50,393	44,765	35,681	26,000	13,593
Gross profit	101,266	92,527	71,454	45,215	20,363
Operating expenses:					
Research and development[1]	36,924	27,546	25,742	16,081	9,595
Sales and marketing[1]	83,066	72,364	57,773	42,765	22,396
General and administrative[1]	26,303	21,180	17,689	8,521	2,953
Total operating expenses	146,293	121,090	101,204	67,367	34,944
Operating loss	(45,027)	(28,563)	(29,750)	(22,152)	(14,581)
Interest income	108	37	15	10	17
Interest expense	(1,209)	(1,843)	(604)	(221)	(260)
Other income (expense), net	285	255	(2,462)	(2,036)	87
Loss before income taxes	(45,843)	(30,114)	(32,801)	(24,399)	(14,737)
Income tax provision	(352)	(441)	(426)	(339)	(64)
Net loss	$(46,195)	$(30,555)	$(33,227)	$(24,738)	$(14,801)
Net loss per share allocable to common stockholders, basic and diluted	$(0.98)	$(0.85)	$(4.84)	$(4.20)	$(2.87)
Weighted-average shares used in computing net loss per share allocable to common stockholders, basic and diluted	47,323,253	36,097,405	6,866,839	5,884,751	5,153,514

[1]Stock-based compensation expense included in the consolidated statements of operations data above was as follows:

	Year Ended December 31,				
	2015	2014	2013	2012	2011
	(in thousands)				
Cost of revenue	$902	$411	$64	$13	$29
Research and development	4,651	2,419	929	264	123
Sales and marketing	7,112	4,121	1,573	483	200
General and administrative	5,706	3,301	1,721	346	155
Total stock-based compensation expense	$18,371	$10,252	$4,287	$1,106	$507

	As of December 31,				
	2015	2014	2013	2012	2011
	(in thousands)				
Consolidated Balance Sheet Data:					
Cash and cash equivalents	$45,741	$98,044	$35,023	$29,585	$14,540
Short-term investments	46,593	—	—	—	—
Working capital	75,930	80,910	21,516	29,774	13,836
Total assets	140,914	144,254	69,857	54,873	27,215
Total deferred revenue	59,262	46,155	30,570	16,704	4,237
Total debt	20,000	19,752	19,624	10,000	799
Convertible preferred stock warrant liability[(1)]	—	—	3,903	3,352	1,490
Total stockholders' equity (deficit)[(1)]	34,193	58,155	(3,345)	11,555	12,333

[(1)]The outstanding convertible preferred stock converted to common shares following the close of the Company's initial public offering.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion and analysis of our financial condition and results of operations together with the consolidated financial statements and related notes that are included elsewhere in this report. This discussion contains forward-looking statements based upon current expectations that involve risks and uncertainties. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth under Item 1A, "Risk Factors" and in other parts of this report.

Overview

As a company, our goal is to be the leading independent cloud networking company, by delivering an open mobility platform that simplifies and transforms the connected experience through information, applications and insights. We have designed and developed a leading cloud-managed mobile networking platform that enables enterprises to deploy a mobile-centric network edge. Managing the network edge is becoming more complex because of the proliferation of mobile devices and the ways in which businesses use such devices. Increasingly, employees and clients are using Wi-Fi-enabled smartphones, tablets, laptops and other mobile devices instead of desktop computers for mission-critical business applications. The number and types of users continue to increase, as do the breadth of applications that users need to access on their mobile devices. As the difficulty and complexity of managing the network edge expands, our platform offers simplicity, scalability, and security.

We derive revenue by selling our hardware products and related software licenses or software subscription and services, which together comprise our cloud-managed networking platform. Our products include Wi-Fi access points, routers and switches required to build an edge-access network; a cloud services platform for centralized management, data collection and analytics; and applications that leverage the network to provide additional capabilities to the business and IT organization. Together, these products, service platforms and applications create a simple, scalable, and secure solution to deliver a better connected experience. Customers around the world, from Fortune 500 businesses to small schools, have chosen our products.

We sell our products and software subscription and services through our channel partners to our end-customers, who hold the licenses to use our products and our software subscription and services. We define end-customers as holding or having held licenses to our products and software subscription and services. When our end-customers purchase hardware products they are generally required to purchase for every hardware unit a software license for our unified management system, either as a perpetual license with PCS or as a SaaS license with a one-, three- or five-year term. Both our PCS and SaaS offerings include updates and upgrades of our software applications and our HiveOS operating system that are embedded in our hardware.

In fiscal 2015, we continued our year-over-year revenue growth. For fiscal years 2015, 2014 and 2013, our revenue was $151.7 million, $137.3 million and $107.1 million, respectively, representing year-over-year growth of 10% from fiscal 2014 to fiscal 2015 and 28% from fiscal 2013 to fiscal 2014. In fiscal years 2015, 2014 and 2013, our net losses were $46.2 million, $30.6 million and $33.2 million, respectively.

Prior to 2015, we experienced a seasonal sequential decrease in our product revenue in our first fiscal quarter, but a sequential increase in product revenue from our fiscal first to our second quarter. This has generally been due to annual budget cycles in the enterprise and spending seasonality in the education vertical. Given the buying cycle for K-12 schools in the

United States, the second quarter has usually been the strongest for our education vertical, which historically has driven this strong sequential growth in the second quarter. In addition, we typically see continued growth in our revenue to carry over from our second quarter to our third quarter. Prior to 2015, we also historically have seen a sequential increase in our fourth quarter from our third quarter total revenue due to end-of-year spending by enterprise customers, followed by a decline in revenue for the first quarter of the following fiscal year.

In fiscal 2015, our seasonal trend changed as compared to prior years due to the timing and availability of funding under the federal E-Rate program. E-Rate is the commonly used name for the Schools and Libraries Program of the Universal Service Fund, which is administered by the Universal Service Administrative Company (USAC) under the direction of the Federal Communications Commission (FCC). The program provides discounts to assist schools and libraries in the United States to obtain affordable telecommunications and Internet access. Under the E-Rate program, purchases made by schools before April 1, 2015 were not eligible for E-Rate funding. Direct E-Rate funding was not available before July 1, 2015 and in order to be eligible for funding they must also receive a Funding Commitment Decision Letter. Once funding is approved, end customers have until September 2016 to make their purchases. We believe that based on the availability of this federal funding end-customers in the education vertical deferred purchases until they secured E-Rate funding specifically. As a result, in 2015, E-Rate amplified the historical sequential decline in product revenue we previously experienced from the fourth quarter into the first quarter and shifted spending from the first half of the year into the second half of the year of 2015 and early 2016. As we look to 2016, we expect our seasonality to be similar to 2015, including a fourth quarter 2015 to first quarter 2016 decline in product revenue that we expect to be significantly greater than we saw in the first quarter of 2014, but moderate as compared with the sequential decline in the first quarter of 2015.

We primarily conduct business in three geographic regions: (1) Americas, (2) Europe, the Middle East and Africa, or EMEA, and (3) Asia Pacific, or APAC. From a geographic perspective, year-over-year revenue increased by 12% in the Americas and 13% in EMEA and decreased by 8% in APAC. For the fiscal year ended 2015, 64% of our total revenue was generated from Americas, 27% from EMEA and 9% from APAC.

We outsource the manufacturing of all of our products to contract manufacturers. We currently outsource the warehousing and delivery of our products to a third-party logistics provider for worldwide fulfillment, located in California and in the Netherlands.

We intend to continue to invest significant resources in the development of our innovative technologies and new product offerings, acquire new end-customers in new and existing geographies, and increase penetration within our existing end-customer base. We expect to continue to invest in our organization to meet the needs of our customers and to pursue opportunities in new and existing markets. In particular, we are investing to increase our sales capacity as well as our channel program.

Due to our continuing investments to grow our business, including internationally, in advance of and in preparation for, our expected increase in sales and expansion of our customer base, we are continuing to incur expenses in the near term. As a result, we may not be profitable for the foreseeable future and our use of cash over this period could also be greater and extend over a longer period as we make investments in areas of our operations, such as sales, marketing and research and product and channel partner development, which we feel may promote growth and profitability over the long term. We believe that over the long term, we will be able to leverage these investments in the form of a higher revenue growth rate compared to the growth rate of our operating expenses.

However, we may not in fact realize any long-term benefit from these investments.

Opportunities and Challenges

We believe that the growth of our business and our future success depends upon many factors, including our ability to continue to develop innovative technologies and timely provide new product offerings to the marketplace; continue to stabilize and improve performance of our sales function, increase our sales capacity and develop our channel partner program; acquire new end-customers, expand our end-customer base and increase penetration within our existing end-customer base (including through new product offerings); and at the same time demonstrate to our investors and financial analysts that we can achieve profitability within an acceptable timeline.

We operate in the highly competitive wired and wireless network access products market. This market continues to evolve and is characterized by rapid technological innovation. We will need to continue to innovate in order to achieve market adoption of our products and services. We have continued the expansion of our product portfolio, announcing HiveManager NG in April 2015. Over the last four quarters, approximately 75% of our end-customers and approximately 40% of our Wi-Fi access point products in operation were deployed using our public cloud platform. We also continue to invest to extend our product offering to include a family of ethernet switches and branch routers to complement our wireless offering and allow us to deliver a unified wired and wireless network edge.

In addition, our market is currently in the midst of an evolution in related wireless technology standards from 802.11n to the new 802.11ac standard, which uses new radio hardware to deliver substantially higher wireless performance. As these standards were being developed and finalized, we performed hardware and software development, both internally and with our original design manufacturers, or ODMs, to incorporate these standards into our product offerings. We also continue to develop new functionality in our product offerings to take advantage of the changes that these industry standards incorporated. Overall, our 802.11 ac products accounted for 74% of our Wi-Fi access point unit volume shipments in the quarter ended December 31, 2015.

In order to maintain a competitive position in this market, we continue to develop our next-generation “Wave 2” 802.11ac Wi-Fi access points to extend our portfolio and address higher-performance use cases. We currently expect our initial Wave 2 products to be available in early 2016, and that schedule will meet potential customer demand for these products (including demand in our important education vertical); however, this schedule will lag availability of the Wave 2 products some of our competitors have announced. Existing or potential customers may elect to not purchase our products or defer purchases they otherwise would make of our products in anticipation of competing Wave 2 products or of our Wave 2 802.11ac W-Fi access points.

We have developed a cloud services platform to provide network management and support additional value-added applications. HiveManager, our network management application, provides a single management interface that customers use to configure network policies, monitor and troubleshoot performance, manage access and security, and run reports on network operations. Our focus is to transition new and existing end customers to HiveManager NG and make our cloud services platform and applications available to customers in either a subscription public cloud or on-premises private cloud deployment.

When we introduce new product offerings, such as the release of the new version of our cloud services or new hardware platforms, we must effectively manage the timing of such releases to minimize the disruption to our existing product offerings and revenue streams. We must manage the orderly transition of our end-customers to these new products and services to reduce the amount of inventory for products that may become obsolete or slow moving due to our new product introductions and to limit the disruption to our end-customers’ ordering practices and the pricing environment for our legacy products and services. In addition, we also must monitor the performance of these products and provide additional support as they are adopted and first used in the field and performance issues are identified at scales of use greater than we may be able to create or anticipate during product development. We will need to continue to react and respond to these changes through innovation and improved execution in order for our business to succeed, and will incur related research and development and support expenses as we do it.

Our ability to develop and make more productive relationships with our solution and channel partners and our channel partners’ ability to effectively develop sales opportunities and distribute our products continues to be a key opportunity for us. For example, we announced in April 2015 a new relationship with Dell Inc., whereby Dell will become a reseller of Aerohive’s Wi-Fi and cloud services, and that the two companies expect to work together to execute their shared vision of cloud-managed IT to provide simplified and streamlined operations, configuration, monitoring and troubleshooting for customer networks, and in September 2015, we announced with Brocade and Juniper Networks collaborations that allow us to meet in the channel and co-sell a combined wired and wireless solutions to our end-customers. We also have an existing relationship with Apple, where certain of our Wi-Fi access point products can be purchased through Apple’s online retail website. To support these new relationships, we are continuing to identify and invest in additional and dedicated resources and, potentially, new product, service and support offerings.

Key Financial Metrics

We regularly review the following key financial metrics to evaluate growth trends in our business, measure our performance, identify trends affecting our business, formulate financial projections and make strategic decisions. Our key financial metrics include non-GAAP financial metrics. We discuss revenue under “Results of Operations.” We discuss cash used in operating activities, deferred revenue and non-GAAP financial measures immediately below the following table.

	Year Ended December 31,		
	2015	2014	2013
	(in thousands)		
Total revenue	$151,659	$137,292	$107,135
Total deferred revenue at period end	59,262	46,155	30,570
Cash used in operating activities	(4,957)	(8,748)	(12,380)

Cash used in operating activities. We monitor cash used in operating activities as a measure of our overall business performance. Our largest uses of cash from operating activities are for employee-related expenditures and purchases of products from our contract manufactures. Our primary source of cash flows from operating activities is cash receipts from our channel partners. Monitoring net cash used in operating activities enables us to analyze our financial performance without the non-cash effects of certain items such as depreciation, amortization, and stock-based compensation costs, thereby allowing us to better understand and manage the cash needs of our business.

Deferred Revenue. Our deferred revenue consists of amounts that have either been invoiced or prepaid but that have not yet been recognized as revenue as of the period end. We consider deferred revenue to be a key financial metric, because it represents a significant portion of the revenue that we expect to recognize in future periods. In addition, we monitor the change in our deferred revenue balance, which, taken together with revenue, is an indication of sales activity in a given period. The vast majority of our deferred revenue comprises future software subscription and services revenue, primarily for PCS and SaaS, which we recognize ratably over the service term. Of our deferred product revenue, the majority comprises hardware products that we have shipped to our VADs in advance of shipment to our end-customers. We have provided a tabular reconciliation below of current and non-current deferred revenue:

	As of December 31,		
	2015	2014	2013
	(in thousands)		
Product	$3,199	$3,886	$5,095
Software Subscription and Services	56,063	42,269	25,475
Total deferred revenue	59,262	46,155	30,570
Less: current portion of deferred revenue	27,893	22,014	15,915
Non-current portion of deferred revenue	$31,369	$24,141	$14,655

Non-GAAP financial measures. We regularly review non-GAAP financial measures because they are key measures used by our management and our board of directors to evaluate the business, measure performance, identify trends affecting the business, formulate financial projections and make strategic decisions.

We define non-GAAP financial measures to exclude share-based compensation, adjustment to internal-use software amortization, amortization of acquired intangibles, payroll taxes on certain stock-based compensation expense, one-time charges related to pending securities litigation, and the periodic fair value re-measurements related to convertible preferred stock warrants. We believe that the exclusion of certain expenses in calculating these non-GAAP financial measures can provide a useful measure for period-to-period comparisons of our core business. Accordingly, we believe that non-GAAP financial measures provide useful information to investors and others in understanding and evaluating our operating results in the same manner as does our management and our board of directors.

We have provided a tabular reconciliation of GAAP to non-GAAP measures:

	Year Ended December 31,		
	2015	2014	2013
	(in thousands)		
GAAP net loss	$(46,195)	$(30,555)	$(33,227)
Amortization of stock-based compensation related to internal-use software	105	—	—
Amortization of acquired intangible assets	—	149	162
Stock-based compensation - Cost of revenue	902	411	64
Stock-based compensation - Research and development	4,651	2,419	929
Stock-based compensation - Sales and marketing	7,112	4,121	1,573
Stock-based compensation - General and administrative	5,706	3,301	1,721
Payroll taxes on certain stock-based compensation expense	29	—	—
One-time charges related to pending securities litigation	784	—	—
Periodic re-measurement of convertible preferred stock warrants	—	(90)	2,225
Non-GAAP net loss	$(26,906)	$(20,244)	$(26,553)
Basic and diluted net loss per share on a Non-GAAP basis	$(0.57)	$(0.56)	$(3.87)
Weighted average shares used in computing non-GAAP basic and diluted net loss per share	47,323,253	36,097,405	6,866,839

Although investors frequently use non-GAAP financial measures in their evaluations of companies, these non-GAAP financial measures have limitations in that they do not reflect all of the amounts associated with our results of operations as determined in accordance with GAAP. Some of these limitations are:

- the non-GAAP measures do not consider the expense related to stock-based compensation, which is an ongoing expense for the Company;
- although amortization is a non-cash charge, the assets being amortized often will have to be replaced in the future, and non-GAAP gross profit, non-GAAP gross margin, non-GAAP operating loss, non-GAAP operating loss percentage, non-GAAP net loss, and non-GAAP loss per share do not reflect any cash requirement for such replacements;
- non-GAAP net loss and non-GAAP net loss per share do not reflect the periodic fair value re-measurements related to convertible preferred stock warrants;
- pending securities litigation may continue for an extended duration and excluding the associated expense does not reflect the impact on our ongoing operations over this period of the cash requirement to defend such litigation; and
- other companies, including companies in our industry, may calculate these non-GAAP financial measures differently, which reduces their usefulness as a comparative measure.

Because of these limitations, you should consider non-GAAP financial measures only together with other financial performance measures, including various cash flow metrics, net loss and other GAAP results.

Key Components of Our Results of Operations and Financial Condition

Revenue

We generate revenue from the sales of our products and services, and recognize revenue when persuasive evidence of an arrangement exists, delivery has occurred, the fee is fixed or determinable, and collectability is reasonably assured. Our total revenue comprises the following:

Product Revenue. Our product revenue consists of revenue from sales of our hardware products, which include wireless access points, branch routers, and switches, all of which are embedded with our proprietary operating system, HiveOS, and perpetual licenses of our unified network management system, HiveManager, and other software applications, as well as related accessories. We recognize product revenue at the time of shipment, provided that all other revenue recognition criteria have been met. For our VAD arrangements where we permit our VADs to stock inventory, we recognize revenue when our VADs have shipped the products to our end-customers (or to VARs that have identified end-customers), provided that all other revenue recognition criteria have been met.

Software Subscription and Services Revenue. Our software subscription and services revenue consists of revenue from sales of our software subscription and services offerings that we deliver over a specified term. These offerings primarily include PCS related to our perpetual software licenses and subscriptions to HiveManager and other software applications delivered as SaaS, including related customer support, and from subsequent renewals of those contracts. To benefit fully from potential contract renewals we plan to continue to invest in systems which track existing customer support commitments and renewal opportunities and provide offerings which continue to be attractive to our customers. Our PCS includes tiered maintenance and support services under renewable, fee-based maintenance and support contracts, which include technical support, bug fixes, access to priority hardware replacement services and unspecified upgrades on a when-and-if available basis. Our SaaS subscriptions include comparable maintenance and support services. The higher the percentage of our end-customers that purchase SaaS subscriptions, as opposed to HiveManager and PCS, the higher our software subscription and services revenue will be as a percentage of our total revenue. We recognize software subscription and services revenue ratably over the term of the contract, which is typically one, three or five years. As a result, our recognition of software subscription and services revenue lags our recognition of related product revenue.

Cost of Revenue

Our cost of revenue includes the following:

Cost of Product Revenue. Our cost of product revenue primarily includes manufacturing costs of our products payable to third-party manufacturers. Our cost of product revenue also includes personnel costs, including stock-based compensation, shipping costs, third-party logistics costs, provisions for excess and obsolete inventory, warranty and replacement costs, the depreciation and amortization of testing and imaging equipment, inbound license fees, certain allocated facilities and information technology infrastructure costs, and other expenses associated with logistics and quality control.

Cost of Software Subscription and Services Revenue. Our cost of software subscription and services revenue primarily includes personnel costs, including stock-based compensation, certain allocated facilities information technology infrastructure costs, costs associated with our provision of PCS and SaaS and datacenter costs. Our cost of software subscription and services revenue also includes amortization of our internally developed, next-generation cloud services platform, which we completed and launched in April 2015.

Gross Profit

Our gross profit has been and will continue to be affected by a variety of factors, including product shipment volumes, average sales prices of our products, discounts we offer to our VAR and VAD partners, the mix of revenue between products and software subscription and services, and the mix of hardware products sold, because our hardware products have varying gross margins depending on the product offering and the lifecycle of the product. Historically, our software subscription and services gross margin has been lower than our product gross margin; however, we expect our software subscription and services gross margin to increase over the long term because we expect our software subscription and services revenue to increase more quickly than our cost of software subscription and services revenue. We expect our gross margin to be volatile and may decrease in any given time in the event we experience additional competitive pricing pressure. For example, competitors such as Cisco Systems and Hewlett Packard (who recently acquired Aruba Networks) have significantly greater financial resources and could attempt to gain a competitive advantage over us by aggressively lowering prices. The continuing strength of the U.S. dollar relative to the currencies of the countries of our VADs or end-customer who purchase our products, or our contract manufacturers or the component suppliers to our contract manufacturers, may require us to reduce pricing for our products outside the United States in order to maintain sales and revenue performance, or raise the cost we must pay to our manufacturers for our products, resulting in either case in lower revenue and/or gross margins for those products. We also expect that our revenue and gross margin will fluctuate from period to period depending on the factors described above.

Operating Expenses

Our operating expenses include the following:

Research and Development. Our research and development expenses consist primarily of personnel costs, including bonuses, stock-based compensation, recruiting fees and travel expenses for employees engaged in research, design and development activities. Research and development expenses also include costs for prototype-related expenses, product certification, consulting services, depreciation and certain allocated facilities and information technology infrastructure costs. We believe that continued investment in research and development is important to attaining our strategic objectives. Over time, we expect our research and development expenses to continue to increase in absolute dollars for the foreseeable future as we continue to invest in the development of our products and services. Our research and development expenses may fluctuate as a percentage of our total revenue from period to period due to the seasonality of our total revenue and the timing and extent of our research and development expenses.

Sales and Marketing. Our sales and marketing expenses consist primarily of personnel costs, including commission costs, stock-based compensation, recruiting fees and travel expenses for employees engaged in sales and marketing activities. Commission expenses in any given period are based on completed contracts, which may not result in revenue in the same period in which we incur the expense. Sales and marketing expenses also include the cost of trade shows, marketing programs, promotional materials, demonstration equipment, consulting services, depreciation and certain allocated facilities and information technology infrastructure costs. Over time, we expect our sales and marketing expenses to continue to increase in absolute dollars as we increase the size of our sales and marketing organization, expand into new markets and further develop our channel program. Our sales and marketing expenses may fluctuate as a percentage of our total revenue from period to period due to the seasonality of our total revenue and the timing and extent of our sales and marketing expenses.

General and Administrative. Our general and administrative expenses consist primarily of personnel costs, including bonuses, stock-based compensation and travel expenses for our executive, finance, human resources, legal and operations employees, as well as compensation for our board of directors. General and administrative expenses also include fees for outside consulting, legal, audit, investor relations, and accounting service and insurance, as well as depreciation and certain allocated facilities and information technology infrastructure costs. As a public company we also have experienced increased litigation, relating both to intellectual property claims of others as well as securities claims brought by certain of our stockholders. Defending and resolving these claims, including under indemnity commitments we have made to third parties, has imposed new costs on us. Over time, we expect our general and administrative expenses to continue to increase in absolute dollars due to the additional legal, accounting, insurance, investor relations, information technology and other costs that we will continue to incur as a public company, as well as other costs associated with growing our business. Our general and administrative expenses may fluctuate as a percentage of our total revenue from period to period due to the seasonality of our total revenue and the timing and extent of our general and administrative expenses.

Interest Income

Our interest income primarily consists of interest earned on our cash and cash equivalent and short-term investments. We have invested our cash in money-market funds and other short-term, high quality investments. Historically, our interest income has not been material.

Interest Expense

Our interest expense consists primarily of interest on our indebtedness. See Note 5 of our consolidated financial statements included elsewhere in this Form 10-K for more information about our debt.

Other Income (Expense), Net

Our other income (expense), net historically consisted primarily of the impact of fair value adjustments for our convertible preferred stock warrants. Upon completion of our IPO in April 2014, all convertible preferred stock warrants automatically converted to common stock warrants and no longer require fair value remeasurement at each balance sheet date. Other income (expense), net also consists of gains and losses from foreign currency exchange transactions that historically has not been material.

Provision for Income Taxes

Our provision for income taxes consists primarily of foreign tax expense due to our cost-plus agreements with our foreign entities, which guarantee foreign entities a profit, and to a lesser extent federal and state income tax expense. As of December 31, 2015 and December 31, 2014, respectively, we maintained a valuation allowance against our domestic deferred tax assets, including net operating loss carryforwards and research and development and other tax credits. We expect our provision for income taxes to increase in absolute dollars in future periods.

Results of Operations

The following table sets forth our results of operations for the periods presented in dollars (in thousands):

	Year Ended December 31,		
	2015	2014	2013
Revenue:			
Product	$126,281	$120,507	$97,564
Software subscription and services	25,378	16,785	9,571
Total revenue	151,659	137,292	107,135
Cost of revenue[1]:			
Product	40,496	38,365	31,431
Software subscription and services	9,897	6,400	4,250
Total cost of revenue	50,393	44,765	35,681
Gross profit	101,266	92,527	71,454
Operating expenses:			
Research and development[1]	36,924	27,546	25,742
Sales and marketing[1]	83,066	72,364	57,773
General and administrative[1]	26,303	21,180	17,689
Operating loss	(45,027)	(28,563)	(29,750)
Interest income	108	37	15
Interest expense	(1,209)	(1,843)	(604)
Other income (expense), net	285	255	(2,462)
Loss before income taxes	(45,843)	(30,114)	(32,801)
Income tax provision	(352)	(441)	(426)
Net loss	$(46,195)	$(30,555)	$(33,227)

[1] Includes stock-based compensation as follows:

	Year Ended December 31,		
	2015	2014	2013
	(in thousands)		
Cost of revenue	$902	$411	$64
Research and development	4,651	2,419	929
Sales and marketing	7,112	4,121	1,573
General and administrative	5,706	3,301	1,721
Total stock-based compensation expense	$18,371	$10,252	$4,287

The following table sets forth our results of operations for the periods presented as a percentage of our total revenue:

	Year Ended December 31,		
	2015	2014	2013
Revenue:			
Product	83 %	88 %	91 %
Software subscription and services	17	12	9
Total revenue	100	100	100
Cost of revenue:			
Product	26	28	29
Software subscription and services	7	5	4
Total cost of revenue	33	33	33
Gross profit	67	67	67
Operating expenses:			
Research and development	24	21	24
Sales and marketing	55	53	54
General and administrative	17	15	17
Operating loss	(29)	(21)	(28)
Interest income	—	—	—
Interest expense	(1)	(1)	(1)
Other income (expense), net	—	—	(2)
Loss before income taxes	(30)	(22)	(31)
Income tax provision	—	—	—
Net loss	(30)%	(22)%	(31)%

54

Revenues

	Year Ended December 31,			2015 to 2014		2014 to 2013	
	2015	2014	2013	$ Change	% Change	$ Change	% Change
	(dollars in thousands)						
Revenues:							
Product	$126,281	$120,507	$97,564	$5,774	5 %	$22,943	24 %
Software subscription and services	25,378	16,785	9,571	8,593	51 %	7,214	75 %
Total revenue	$151,659	$137,292	$107,135	$14,367	10 %	$30,157	28 %
Percentage of revenues:							
Product	83 %	88 %	91 %				
Software subscription and services	17 %	12 %	9 %				
Total	100 %	100 %	100 %				

	Year Ended December 31,			2015 to 2014		2014 to 2013	
	2015	2014	2013	$ Change	% Change	$ Change	% Change
	(dollars in thousands)						
Revenue by geographic region:							
Americas	$97,811	$86,946	$69,796	$10,865	12 %	$17,150	25 %
EMEA	40,876	36,317	27,864	4,559	13 %	8,453	30 %
APAC	12,972	14,029	9,475	(1,057)	(8)%	4,554	48 %
Total revenue	$151,659	$137,292	$107,135	$14,367	10 %	$30,157	28 %
Percentage of revenue by geographic region:							
Americas	64 %	64 %	65 %				
EMEA	27 %	26 %	26 %				
APAC	9 %	10 %	9 %				
Total	100 %	100 %	100 %				

2015 Compared to 2014. Our total revenue increased $14.4 million, or 10% in fiscal 2015 as compared to fiscal 2014, due to the increasing demand for our products and software subscription and services offerings.

The increase in our product revenue was primarily the result of an aggregate increase in product unit shipments largely driven by sales of our intelligent Wi-Fi access points.

The increase in our software subscription and services revenue of $8.6 million in fiscal 2015 compared to the fiscal 2014, was primarily driven by the increase in sales of PCS and SaaS, including our HiveManager NG cloud management platform that was introduced in early 2015, in connection with increased sales of products and an increase in the number of our end-customers, and our recognition of deferred revenue in the period.

The Americas and EMEA accounted for the majority of our total revenue. Our total number of end-customers increased from approximately 19,000 as of December 31, 2014 to approximately 24,000 as of December 31, 2015.

2014 Compared to 2013. Our total revenue increased $30.2 million, or 28%, in fiscal 2014 as compared to fiscal 2013, due to the increasing demand for our products and software subscription and services offerings.

The increase in our product revenue was primarily the result of an aggregate increase in product unit shipments largely driven by sales of our intelligent Wi-Fi access points and our unified network management system, HiveManager.

The increase in our software subscription and services revenue of $7.2 million in fiscal 2014 compared to the fiscal 2013 was primarily driven by the increase in sales of PCS and SaaS in connection with increased sales of products and an increase in the number of our end-customers, and recognition of deferred revenue.

55

The Americas and EMEA accounted for the majority of the increase in our total revenue, and the increase of revenue in both regions was primarily due to increased demand for our products in these regions. Our total number of end-customers increased from over 13,000 as of December 31, 2013 to more than 19,000 as of December 31, 2014.

Cost of Revenues and Gross Margin

	Year Ended December 31,			2015 to 2014		2014 to 2013	
	2015	2014	2013	$ Change	% Change	$ Change	% Change
	(dollars in thousands)						
Cost of revenues:							
Product	$40,496	$38,365	$31,431	$2,131	6 %	$6,934	22 %
Software subscription and services	9,897	6,400	4,250	3,497	55 %	2,150	51 %
Total cost of revenues	$50,393	$44,765	$35,681	$5,628	13 %	$9,084	25 %
Gross margin:							
Product	67.9 %	68.2 %	67.8 %				
Software subscription and services	61.0 %	61.9 %	55.6 %				
Total gross margin	66.8 %	67.4 %	66.7 %				

2015 Compared to 2014. We primarily attribute the increase in our cost of product revenue to an increase in sales of our products. We primarily relate the increase in our cost of software subscription and services revenue to an increase in cloud operations and support personnel headcount as well as the amortization of our capitalized cloud service platform.

The decrease of our product gross margin was primarily due to the product mix. The decrease in our software subscription and services gross margin was primarily due to the amortization of our capitalized cloud service platform, offset by higher growth in our software subscription and services revenue than our related cost of delivering these software subscription and services.

2014 Compared to 2013. We primarily attribute the increase in our cost of product revenue to an increase in sales of our products. We primarily relate the increase in our cost of software subscription and services revenue to an increase in cloud operations and support personnel headcount and an increase in datacenter costs.

The increase in our product gross margin was primarily due to the continued improvement of cost efficiencies in our product design and supply chain management as well as efficiencies in the manufacturing costs.

The increase in our software subscription and services gross margin was primarily due to higher growth in our software subscription and services revenue than our related cost of delivering these software subscription and services.

Research and Development

	Year Ended December 31,			2015 to 2014		2014 to 2013	
	2015	2014	2013	$ Change	% Change	$ Change	% Change
	(dollars in thousands)						
Research and development	$36,924	$27,546	$25,742	$9,378	34 %	$1,804	7 %
% of revenue	24 %	21 %	24 %				

2015 Compared to 2014. The increase in our research and development expenses was primarily due to an increase of $4.8 million personnel and related costs, including stock-based compensation expense of $2.2 million, driven by our increased research and development headcount to support continued investment in our future product and service offerings, and a $3.0 million higher capitalized personnel and related costs, including wages, bonuses and stock-based compensation, for development of our cloud services platform in fiscal 2014. In April 2015, we completed and launched such cloud services platform and began to amortize the capitalized development costs as part of the cost of software subscription and services, over an estimated useful life of 5 years.

The remaining increase in our research and development expenses was mainly due to higher costs related to our research and development activities and certain allocated facilities. We expect our research and development costs to continue

56

to increase over time in absolute dollars, as we continue to invest in developing new products and new versions of our existing products.

2014 Compared to 2013. The increase in our research and development expenses was primarily due to the increase in personnel and related allocated costs of facilities and information technology infrastructure that were partially offset by the capitalized development costs for our SaaS offerings under development.
Compared with fiscal 2013, personnel and related costs increased $7.0 million, including bonuses and stock-based compensation expense of $2.9 million, as we increased our research and development headcount to support continued investment in our future product and service offerings. The increase in personnel and related costs was partially offset by $4.8 million in personnel and related costs, including wages, bonuses and stock-based compensation, capitalized for development of our cloud services platform, which we started to capitalize from December, 2013 and completed in the first half of fiscal 2015.
The remaining increase in our research and development expenses was mainly due to higher costs related to hardware prototype-related expenses, depreciation expenses and certain allocated facilities and information technology infrastructure costs.

Sales and Marketing

	Year Ended December 31,			2015 to 2014		2014 to 2013	
	2015	2014	2013	$ Change	% Change	$ Change	% Change
	(dollars in thousands)						
Sales and marketing	$83,066	$72,364	$57,773	$10,702	15 %	$14,591	25 %
% of revenue	55 %	53 %	54 %				

2015 Compared to 2014. The increase in our sales and marketing expenses was primarily due to increases in personnel and related costs of $9.9 million, including increased headcount, bonuses, stock-based compensation expense and higher commissions. Our sales and marketing expenses also increased due to higher marketing program expenses and increases in our other sales and marketing related activities. We expect that sales and marketing expenses will continue to increase over time in absolute dollars as we continue to add sales personnel and continue marketing programs.

2014 Compared to 2013. The increase in our sales and marketing expenses was primarily due to increases in personnel and related costs of $10.5 million, including increased headcount, bonuses, stock-based compensation expense and higher commissions. Our sales and marketing expenses also increased due to higher marketing program expenses of $1.6 million, and increases in our other sales and marketing related activities.

General and Administrative

	Year Ended December 31,			2015 to 2014		2014 to 2013	
	2015	2014	2013	$ Change	% Change	$ Change	% Change
	(dollars in thousands)						
General and administrative	$26,303	$21,180	$17,689	$5,123	24 %	$3,491	20 %
% of revenue	17 %	15 %	17 %				

2015 Compared to 2014. The increase in our general and administrative expenses was primarily due to increases in personnel and related costs of $4.1 million, including stock-based compensation expense of $2.4 million. The increase of general and administrative expenses was also due to higher costs of litigation and professional services. We expect that general and administrative expenses will continue to increase over time in absolute dollars due primarily to costs associated with being a public company and to support the growth in our business.
2014 Compared to 2013. The increase in our general and administrative expenses was primarily due to increases in personnel and related costs of $2.6 million, including bonuses and stock-based compensation.

Interest Expense

	Year Ended December 31,	2015 to 2014	2014 to 2013

	2015	2014	2013	$ Change	% Change	$ Change	% Change
	(dollars in thousands)						
Interest expense	$(1,209)	$(1,843)	$(604)	$634	(34)%	$(1,239)	205%

57

2015 Compared to 2014. Interest expense primarily consisted of interest expense from our loan credit facilities. The decrease in our interest expense was primarily due to the repayment of outstanding obligations under TriplePoint Capital LLC term loan credit facility partially offset by additional borrowing from Silicon Valley Bank under the revolving credit facility as the interest rate is lower under the Silicon Valley Bank revolving credit facility than the former TriplePoint Capital LLC term loan credit facility. See Note 5 of our consolidated financial statements included elsewhere in this Form 10-K for more information about our debt.
2014 Compared to 2013. Interest expense historically primarily consisted of interest expense from our loan credit facilities. The increase in our interest expense was due to our borrowing in the periods under a $10.0 million term loan credit facility from TriplePoint Capital LLC which we secured in December 2013.
Other Income (Expense), Net

	Year Ended December 31,			2015 to 2014		2014 to 2013	
	2015	2014	2013	$ Change	% Change	$ Change	% Change
	(dollars in thousands)						
Other income (expense), net	$285	$255	$(2,462)	$30	12%	$2,717	(110)%

2015 Compared to 2014. The change in our other income (expense), net was not significant.
2014 Compared to 2013. Our other income (expense), net, for fiscal 2013 primarily consisted of our fair value remeasurement of our convertible preferred stock warrants. Upon completion of the IPO in April 2014, all convertible preferred stock warrants automatically became exercisable for shares of common stock and no longer were subject to a fair value remeasurement, resulting in decrease of other expense.

Liquidity and Capital Resources

Capital Resources

As of December 31, 2015, we had cash and cash equivalents of $45.7 million and short-term investments of $46.6 million. $90.9 million of our cash, cash equivalents and short-term investments were held within the United States.

As of December 31, 2015, we had $20.0 million of outstanding debt under our revolving credit facility with Silicon Valley Bank, and we were in compliance with all covenants under our loan agreement with Silicon Valley Bank. We believe that our existing cash and cash equivalents will be sufficient to meet our anticipated working capital and capital expenditure needs for at least the next 12 months. Our future capital requirements will depend on many factors, including our growth rate, the timing and extent of our spending to support our research and development efforts, the expansion of our sales and marketing activities, the introduction of new and enhanced product and service offerings, the costs to ensure access to adequate manufacturing capacity, and the level of market acceptance of our products. However, we may be required to raise additional funds in the future through public or private debt or equity financing to meet additional working capital requirements. There can be no assurance that this additional financing will be available or, if available, will be on reasonable terms and not dilutive to our stockholders. If adequate funds are not available on acceptable terms our business and operating results could be adversely affected.

Cash Flows

The following table summarizes our cash flows for the periods indicated:

	Year Ended December 31,		
	2015	2014	2013
	(in thousands)		
Net cash used in operating activities	$(4,957)	$(8,748)	$(12,380)
Net cash used in investing activities	(50,908)	(6,749)	(2,910)
Net cash provided by financing activities	3,562	78,518	20,728
Net increase (decrease) in cash and cash equivalents	$(52,303)	$63,021	$5,438

Operating Activities

We recently demonstrated positive cash flow in our third and fourth quarters of our fiscal 2015. However, we have historically experienced negative cash flows from operating activities as we continue to invest in our business. Our largest uses of cash from operating activities is for employee-related expenditures and purchases of finished products from our contract manufacturers. Our primary source of cash flows from operating activities is cash receipts from our channel partners. Our cash flows from operating activities will continue to be affected principally by the extent to which we grow our total revenue and our operating expenses, primarily in our sales and marketing and research and development functions, in order to grow our business.

For fiscal 2015, operating activities used $5.0 million of cash as a result of our net loss of $46.2 million, partially offset by non-cash charges of $22.3 million and a net change of $18.9 million in our net operating assets and liabilities. Non-cash charges consisted primarily of stock-based compensation of $18.4 million and depreciation and amortization expense of $3.5 million. The net change in our net operating assets and liabilities was primarily due to a $13.1 million increase in deferred revenue as a result of an increase in sales of PCS and SaaS, an increase of $5.2 million in accounts payable, and an increase of $3.1 million in accrued liabilities, partially offset by an increase of $1.9 million in accounts receivable, $2.4 million in cash used for inventory purchases and $1.3 million increase in prepaid expenses and other current assets. Our days sales outstanding, or DSO, was 45 days as of December 31, 2015 and is calculated by dividing net accounts receivable at the end of the quarter by revenue recognized during the quarter, multiplied by the total days in the quarter.

For fiscal 2014, operating activities used $8.7 million of cash as a result of our net loss of $30.6 million, partially offset by non-cash charges of $12.7 million and a net change of $9.2 million in our net operating assets and liabilities. Non-cash charges consisted primarily of stock-based compensation of $10.3 million and depreciation and amortization expense of $2.3 million. The net change in our net operating assets and liabilities was primarily due to a$15.6 million increase in deferred revenue as a result of an increase in sales of PCS and SaaS, an increase of $1.6 million in accrued liabilities, and an increase of $1.3 million in accounts payable, partially offset by an increase of $7.1 million in accounts receivable and $1.5 million in cash used for inventory purchases. Our days sales outstanding, or DSO was 59 days as of December 31, 2014 and is calculated by dividing net accounts receivable at the end of the quarter by revenue recognized during the quarter, multiplied by the total days in the quarter.

For fiscal 2013, operating activities used $12.4 million of cash as a result of our net loss of $33.2 million, partially offset by non-cash charges of $8.2 million and a net change of $12.6 million in our net operating assets and liabilities. Non-cash charges consisted primarily of $4.3 million in stock-based compensation which increased due to new stock options granted combined with the increase in the fair value of our common stock. Non-cash charges also consisted of $2.2 million in the remeasurement of the fair value of our convertible preferred stock warrants. The net change in our net operating assets and liabilities was primarily due to a $13.9 million increase in deferred revenue as a result of an increase in sales of PCS and SaaS, an increase of $2.5 million in accrued liabilities, partially offset by an increase of $4.9 million in accounts receivable. Our days sales outstanding, or DSO, was 50 days as of December 31, 2013 and is calculated by dividing net accounts receivable at the end of the quarter by revenue recognized during the quarter, multiplied by the total days in the quarter.

Investing Activities

Our investing activities have primarily consisted of purchases of property and equipment and capitalized development costs of our SaaS offerings. In fiscal 2015, our investing activities also consisted of purchases and sales of marketable securities.

For fiscal 2015, cash used in investing activities was $50.9 million, primarily attributable to purchases and sales of marketable securities of $49.2 million and $2.5 million, respectively, capitalization of internal software development costs for development of our cloud services platform of $1.9 million, and purchases of property and equipment of $2.3 million, relating primarily to manufacturing, research and development lab equipment. The capitalization of internal software development costs for development of our next generation cloud services platform, HiveManager NG, represents personnel and related costs including wages, bonuses and stock-based compensation expenses. We started to capitalize costs for development of such cloud platform from December 2013. In April 2015, we completed and launched our HiveManager NG cloud services platform and began to amortize the capitalized costs on a straight-line basis over the estimated useful life of 5 years, as part of the cost of software subscription and services.

For fiscal 2014, cash used in investing activities was $6.7 million, primarily attributable to capitalization of internal software development costs for development of our new SaaS infrastructure of $4.4 million, and purchases of property and equipment of $2.4 million, relating primarily to manufacturing, research and development lab equipment and purchased software. The capitalization of internal software development costs for development of our new SaaS infrastructure represents personnel and related costs including wages and bonuses. We started to capitalize costs for development of our new SaaS infrastructure from December, 2013.

For fiscal 2013, cash used in investing activities was $2.9 million and was attributable to capital expenditures relating primarily to computer and other infrastructure equipment, testing and imaging equipment, and research and development lab equipment.

Financing Activities

Our financing activities have primarily consisted of the private placements of convertible preferred stock, issuance of debt, proceeds from exercises of stock options and proceeds from employee stock purchase plan, as well as proceeds from the sale of common stock in our IPO in April, 2014.

For fiscal 2015, financing activities used $3.6 million of cash, primarily as a result of a $3.2 million cash used for tax withholdings on vesting of restricted stock units, offset by $5.2 million in proceeds from employee stock purchase plan and $1.5 million in proceeds from exercise of stock options. In the first fiscal quarter of 2015, we paid-off in full the $10.0 million outstanding term loans with TriplePoint Capital LLC and borrowed an additional $10.0 million under our revolving credit facility with Silicon Valley Bank.

For fiscal 2014, financing activities provided $78.5 million of cash, primarily as a result of net proceeds of $80.2 million from our IPO in April 2014 (net of the underwriters' discounts and commissions), $0.9 million increase in net proceeds from exercises of convertible preferred stock warrants and $1.7 million in proceeds from exercises of stock options, partially offset by $4.0 million payment of offering costs related to our IPO.

For fiscal 2013, financing activities provided $20.7 million of cash, primarily as a result of net proceeds of $9.9 million from the sale of our Series E convertible preferred stock and our draw-down of $10.0 million under our term loan credit facility with TriplePoint Capital.

60

Debt Obligations

In June 2012, we entered into a revolving credit facility with Silicon Valley Bank for an aggregate principal amount of up to $10.0 million, with a sublimit of $3.0 million for borrowings guaranteed by the Export-Import Bank of the United States. Our revolving credit facility is collateralized by substantially all of our property, other than our intellectual property. Prior to March 31, 2015, the revolving credit facility bore monthly interest at a floating rate equal to the greater of (i) 4.00% or (ii) prime rate plus 0.75%. By amendment in March 2015, interest on the credit facility was adjusted as of March 31, 2015 to a floating rate equal to the lesser of (i) LIBOR rate plus 2.25% or (ii) prime rate minus 0.5%. In November 2015, we further amended the revolving credit facility to revise the floating interest rate to the lesser of (i) LIBOR rate plus 1.75% or (ii) prime rate minus 1.0%, which is effective January 1, 2016.

The revolving credit facility currently provides among other things, (i) a maturity date of March 31, 2017; (ii) no sublimit for borrowings guaranteed by the Export-Import Bank; and (iii) a revolving line up to $20.0 million, subject to certain conditions.

The revolving credit facility contains customary negative covenants which, unless approved by SVB, limit our ability to, among other things, incur additional indebtedness, grant liens, make investments, repurchase stock, pay dividends, transfer assets and merge or consolidate, as well as requires us to maintain a minimum adjusted quick ratio of 1.25 to 1.00 as of the last day of each month and to demonstrate minimum cash balances in order to have access to the available borrowing. The revolving credit facility also contains customary events of default, subject to customary cure periods for certain defaults, that include, among other things, non-payment defaults, covenant defaults, material judgment defaults, bankruptcy and insolvency defaults, cross-defaults to certain other material indebtedness, and defaults arising from inaccuracy of representation and warranties. Upon an event of default, the lenders may declare all or a portion of the outstanding obligations payable by us to be immediately due and payable and exercise other rights and remedies provided under the credit facility. During the existence of an event of default, interest on the obligations under the credit facility could be increased by 5.0%. As of December 31, 2015, we were in compliance with these covenants.

As of December 31, 2015, $20.0 million remains outstanding under the revolving credit facility.

We have been using the amount drawn under the revolving credit facility for working capital and general corporate purposes.

Contractual Obligations and Other Commitments

The following table summarizes our contractual obligations as of December 31, 2015:

	Payments Due by Period				
	Less Than 1 Year	1 to 3 Years	3 to 5 Years	More Than 5 Years	Total
	(in thousands)				
Contractual Obligations:					
Long-term debt obligations[1]	$—	$20,000	$—	$—	$20,000
Interest expense on our debt obligations[2]	500	125	—	—	$625
Purchase commitments[3]	13,979	—	—	—	13,979
Operating lease obligations[4]	2,025	101	—	—	2,126
Total contractual obligations	16,504	20,226	—	—	36,730

(1) Long-term debt includes $20.0 million in outstanding borrowings on our revolving line of credit facility.

(2) Represents our estimated interest expense on our outstanding debt obligations based on the interest rate in effect as of December 31, 2015.

(3) Consists of minimum purchase commitments with our contract manufacturers that are non-cancelable and other open purchase orders. Such minimum purchase commitments are based on our forecasted manufacturing requirements and typically provide for fulfillment with an agreed upon lead time or commercially standard lead times for the particular part or product. The timing and amount of payments may change due to changing business needs and other

factors.

(4) Operating leases include total future minimum rent payments under noncancelable operating lease agreements. In fiscal 2015, we made regular lease payments of $2.3 million under the operating lease agreements. The table above excludes liabilities for uncertain tax positions and related interest and penalties accrual as the amount is insignificant.

Contractual Obligations and Other Commitments

We subcontract with other companies to manufacture our products. During the normal course of our business, our contract manufacturers procure components based upon orders placed and forecasts provided by us. If we cancel all or part of our orders, we may still be liable to the contract manufacturers for the cost of the components that they purchase in reliance on our orders or forecasts. We periodically review our potential liability to our contract manufacturers, and as of December 31, 2015, we have no accruals recorded. Our financial position and results of operations could be negatively impacted if we were required to compensate the contract manufacturers for any unrecorded liabilities incurred.

Off-Balance Sheet Arrangements

Through December 31, 2015, we did not have any relationships with unconsolidated organizations or financial partnerships, such as structured finance or special purpose entities, that would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes.

We have entered into agreements with some of our end-customers that contain indemnification provisions in the event of claims alleging that our products infringe the intellectual property rights of a third party. Under these agreements, we have, at our option and expense, the ability to resolve any infringement, replace our product with a non-infringing product that is equivalent-in-function, or refund the customers the total product price. Other guarantees or indemnification arrangements include guarantees of product and service performance. We have not recorded a liability related to these indemnification and guarantee provisions and our guarantees and indemnification arrangements have not had any impact on our consolidated financial statements to date.

Critical Accounting Policies and Estimates

We prepare our consolidated financial statements in accordance with generally accepted accounting principles in the United States. The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, costs and expenses and related disclosures. We base our estimates on our historical experience and on various other assumptions that we believe to be reasonable. Actual results could differ significantly from our estimates. To the extent that there are material differences between these estimates and actual results, our future financial statement presentation, financial condition, results of operations and cash flows will be affected.

We believe that the assumptions and estimates associated with revenue recognition, inventory valuations, income taxes, stock-based compensation and warranty costs have the greatest potential impact on our consolidated financial statements. Therefore, we consider these to be our critical accounting policies and estimates. For further information on all of our significant accounting policies, please see Note 1 of the accompanying notes to our consolidated financial statements

Revenue Recognition

We derive revenue from two sources: (i) product, which includes hardware and software revenue, and (ii) software subscription and services, which includes post-contract customer support, or PCS, and software delivered as a service, or SaaS. We recognize revenue when all of the following criteria are met:

Persuasive Evidence of an Arrangement Exists. Evidence of an arrangement generally consists of a purchase order issued pursuant to the terms and conditions of a VAD and VAR reseller agreement or, in limited cases, an end-customer agreement.

Delivery or Performance has Occurred. We use shipping and related documents and VAD sell-through reports to verify delivery or performance. We do not recognize product revenue until transfer of title and risk of loss, which generally is upon shipment to VARs or end-customers.

The Sales Price is Fixed or Determinable. We assess whether the sales price is fixed or determinable based on payment terms and whether the sales price is subject to refund or adjustment.

Collection is Reasonably Assured. We assess probability of collection on a channel partner-by-channel partner basis. We subject our channel partner to a credit review process that evaluates its financial condition and ability to pay for our

62

products and services. If we conclude that collection is not reasonably assured, we do not recognize revenue until cash is received.

Our product revenue consists of revenue from the sale of our hardware products (which each contains embedded software related to our proprietary operating system), and HiveManager network management software which is considered essential to the functionality of our hardware products. Therefore, we consider our hardware appliances together with the related HiveManager software as non-software elements and not subject to the industry-specific software revenue recognition guidance.

Our software subscription and services revenue consists of revenue from SaaS and PCS arrangements. Our SaaS arrangements with customers do not provide the right to take possession of the software at any time during the hosting period, have a defined contract term, and we recognize ratably over the contract term beginning on the provisioning date of the contract, which is typically one, three or five years. We have determined that hardware sold with SaaS arrangements has stand-alone value and therefore have concluded that the hardware represents a separate unit of accounting that we recognize as revenue upon shipment assuming all other revenue recognition criteria are met. PCS arrangements include software updates, access to technical support personnel, and expedited replacement of defective hardware products. We recognize revenue for PCS services on a straight-line basis over the service contract term, which is typically one, three or five years.

We operate a multi-tier channel distribution model that includes VADs, VARs and direct sales to end-customers. For sales to VARs and end-customers, we recognize product revenue upon transfer of title and risk of loss, which is generally upon shipment. It is our practice to identify an end-customer prior to shipment to a VAR. We make substantially all of our sales outside of North America through VADs under agreements which currently allow them to stock our products in their inventory, price protection or rebates, and limited rights of return for stock rotation. We initially defer product revenue on sales made through these VADs and recognize revenue upon sell-through as the VADs report to us.

Most of our arrangements, other than stand-alone renewals of SaaS and PCS arrangements, are multiple-element arrangements with a combination of product and service (as defined above). We allocate arrangement consideration to all deliverables in multiple-element revenue arrangements at the inception of an arrangement based on the relative selling price method in accordance with the selling price hierarchy, which includes (i) vendor-specific objective evidence (VSOE), of selling price, if available; (ii) third-party evidence (TPE) of selling price, if VSOE is not available; and (iii) best estimate of selling price (BESP), if neither VSOE nor TPE is available.

VSOE. We determine VSOE based on our historical pricing and discounting practices for the specific products and services when sold separately. In determining VSOE, we require that a substantial majority of the stand-alone selling prices fall within a reasonably narrow pricing range. We established VSOE for some of our sales of PCS for both VAD and VAR channels as our pricing is sufficiently concentrated (based on an analysis of separate sales of PCS) to conclude that we can demonstrate VSOE of selling price of PCS.

TPE. When we cannot establish VSOE for deliverables in multiple-element arrangements, we apply judgment with respect to whether we can establish a selling price based on TPE. We determine TPE based on competitor prices for interchangeable products or services when sold separately to similarly situated customers. However, because our products contain a significant element of proprietary technology and our solutions offer substantially different features and functionality, we cannot typically obtain the comparable pricing of products with similar functionality.

BESP. When we are unable to establish selling price using VSOE or TPE, we use BESP in our allocation of arrangement consideration. The objective of BESP is to determine the price at which we would transact a sale if the product or service was sold regularly on a stand-alone basis. As we have not been able to establish VSOE or TPE for our products and some of our services, we determine BESP for the purposes of allocating the arrangement, primarily based on historical transaction pricing. We segregated historical transactions based on our pricing model and go-to-market strategy, which includes factors such as type of sales channel (VAR, VAD or end-customer), the geographies in which our products and services were sold (domestic or international) and offering type (product series, software subscriptions and level of support for PCS). The determination of BESP is approval by management.

We make certain estimates and maintain allowances for sales returns and other programs based on our historical experience. To date, these estimates have not been significant.

We include shipping charges billed to channel partners in product revenue and we include the related shipping costs in cost of product revenue.

Inventory

63

Our inventory consists of hardware products and related component parts and is stated at the lower of cost, which approximates actual cost computed on a first-in, first-out basis, or market value. We evaluate inventory for excess and obsolete products, based on management's assessment of future demand and market conditions, and technological obsolescence of our products. We do not reverse inventory write-downs, once established, as they establish a new cost basis for the inventory. We include inventory write-downs as a component of cost of product revenue in the statements of operations.

Income Taxes

We account for income taxes under an asset and liability approach for deferred income taxes, which requires recognition of deferred income tax assets and liabilities for the expected future tax consequences of events that we have recognized in our consolidated financial statements, but have not been reflected in taxable income. We make estimates and judgments in the calculation of certain tax liabilities and in the determination of the recoverability of certain deferred income tax assets, which arise from temporary differences and carryforwards. We measure our deferred income tax assets and liabilities using the currently enacted tax rates that apply to taxable income in effect for the years in which we expect to realize or settle those tax assets. We regularly assess the likelihood that we will realize our deferred income tax assets based on our historical level of taxable income, projections for our future taxable income and tax planning strategies. To the extent that we believe that any amounts are not more likely than not to be realized, we record a valuation allowance to reduce our deferred income tax assets. We regularly review our tax positions and benefits to be realized. We recognize tax liabilities based upon estimates of whether, and the extent to which, additional taxes will be due when such estimates are more likely than not to be sustained. An uncertain income tax position will not be recognized if it has less than a 50% likelihood of being sustained. We recognize interest and penalties related to income tax matters as income tax expense in the statements of operations.

Stock-Based Compensation

We calculate compensation expense for all stock-based awards based on the estimated fair values on the date of grant. Our stock-based awards include stock options, restricted stock units, or RSUs, and purchase rights under the employee stock purchase plan, or ESPP. The fair value of each RSU granted is determined using the fair value of our common stock on the date of the grant. The fair value of each stock option is estimated using the Black-Scholes option pricing model. The fair value of each stock purchase right under our ESPP is calculated based on the closing price of our stock on the date of grant and the value of a call and put option estimated using the Black-Scholes pricing model. The Black-Scholes pricing model requires assumptions including the market value of our common stock, expected term of the award, expected volatility of the price of our common stock, risk-free interest rates, and expected dividend yield.

We determine the expected term of employee stock options using the simplified method as provided by the Securities and Exchange Commission. The simplified method is presumed to be the average of the time-to-vesting and the contractual life of the options. The expected term of ESPP is based on the contractual terms. Since we have not established sufficient public trading history of our common stock we derive the expected volatility from the historical stock volatilities of the common stock of several publicly traded comparable companies over a period approximately equal to the expected term of the expected life of the options. The risk-free interest rate is based on the U.S. treasury yield curve in effect at the time of grant for zero-coupon U.S. treasury notes with maturities equal to the option's expected term. The expected dividend is assumed to be zero as we have never paid dividends and have no current plans to do so.

Warranty Liability

We maintain a warranty accrual for estimated future warranty obligations based on unit volumes by hardware product family together with anticipated future warranty costs. We generally cover our Wi-Fi access points and branch routers and switch products by a limited lifetime warranty, and our other hardware accessory products generally for a period of one year.

Recent Accounting Pronouncements

Refer to Recent Accounting Pronouncements, under Note 1, Description of Business and Summary of Significant Accounting Policies, of the Notes to Consolidated Financial Statements for recent accounting pronouncements that could have an effect on us.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Interest Rate Sensitivity

Our exposure to market risk for changes in interest rates relates primarily to our cash, cash equivalents, short-term investments and our outstanding debt obligations. We had cash, cash equivalents and short-term investments of $92.3 million and $98.0 million as of December 31, 2015 and December 31, 2014, respectively. These amounts were held primarily in

64

consisting of bank deposits, money market funds, certificates of deposit, commercial paper and bonds issued by corporate institutions and U.S. government agencies. Such interest-earning instruments carry a degree of interest rate risk. To date, fluctuations in interest income have not been significant.

We have outstanding debt of $20.0 million as of December 31, 2015, consisting of our borrowing under our revolving line of credit. The revolving line of credit bears interest at a variable rate. As of December 31, 2015, the applicable interest rate under our revolving line of credit was 3.00% per annum.

We do not enter into investments for trading or speculative purposes and have not used any derivative financial instruments to manage our interest rate risk exposure. We have not been exposed to material risks due to changes in interest rates. A hypothetical 10% change in interest rates during any of the periods presented would not have a material impact on our financial statements.

Foreign Currency Risk

We denominate most of our sales in U.S. dollars and, therefore, our revenues are not currently subject to significant foreign currency risk. However, the exchange rate of the U.S. dollar to foreign currencies has strengthened significantly of late, which could make the price of our products outside the United States less competitive, reducing our sales or requiring us to lower pricing for our products outside the United States in order to maintain sales and revenue performance. Our operating expenses are denominated in the currencies of the countries in which our operations are located, including in EMEA and APAC, and may be subject to fluctuations due to changes in foreign currency exchange rates. To date, we have not used derivative financial instruments to mitigate our exposure to foreign currency exchange risks. A hypothetical 10% change in foreign currency exchange rates applicable to our business would have an insignificant impact on our consolidated financial statements.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm	67
Consolidated Balance Sheets	68
Consolidated Statements of Operations	69
Consolidated Statements of Comprehensive Loss	70
Consolidated Statements of Stockholders' Equity (Deficit)	71
Consolidated Statements of Cash Flows	72
Notes to Consolidated Financial Statements	73

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM
To the Board of Directors and Stockholders of Aerohive Networks, Inc.
Sunnyvale, California
We have audited the accompanying consolidated balance sheets of Aerohive Networks, Inc. and subsidiaries (the "Company") as of December 31, 2015 and 2014, and the related consolidated statements of operations, comprehensive loss, stockholders' equity (deficit), and cash flows for each of the three years in the period ended December 31, 2015. 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 in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also 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, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.
In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of Aerohive Networks, Inc. and subsidiaries as of December 31, 2015 and 2014, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2015, in conformity with accounting principles generally accepted in the United States of America.

/s/ DELOITTE & TOUCHE LLP

San Jose, California
February 26, 2016

AEROHIVE NETWORKS, INC.
Consolidated Balance Sheets
(in thousands, except share and per share amounts)

	December 31, 2015	December 31, 2014
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$45,741	$98,044
Short-term investments	46,593	—
Accounts receivable, net of allowance for doubtful accounts of $15 and $106 as of December 31, 2015 and December 31, 2014, respectively	22,824	24,695
Inventories	10,775	8,360
Prepaid expenses and other current assets	4,129	2,610
Deferred cost of goods sold	757	1,001
Total current assets	130,819	134,710
Property and equipment, net	9,156	8,862
Goodwill	513	513
Other assets	426	169
Total assets	$140,914	$144,254
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Accounts payable	$15,140	$10,154
Accrued liabilities	11,856	9,181
Debt, current	—	12,451
Deferred revenue, current	27,893	22,014
Total current liabilities	54,889	53,800
Debt, non-current	20,000	7,301
Deferred revenue, non-current	31,369	24,141
Other liabilities	463	857
Total liabilities	106,721	86,099
Commitments and contingencies (Note 6)		
Stockholders' equity:		
Preferred stock, par value of $0.001 per share - 25,000,000 shares authorized as of December 31, 2015 and December 31, 2014; no shares issued and outstanding as of December 31, 2015 and December 31, 2014	—	—
Common stock, par value of $0.001 per share - 500,000,000 shares authorized as of December 31, 2015 and December 31, 2014; 49,017,293 and 46,028,908 shares issued and outstanding as of December 31, 2015 and December 31, 2014, respectively	49	46
Additional paid–in capital	231,289	208,998
Accumulated other comprehensive loss	(61)	—
Accumulated deficit	(197,084)	(150,889)
Total stockholders' equity	34,193	58,155
Total liabilities and stockholders' equity	$140,914	$144,254

See notes to consolidated financial statements.

68

AEROHIVE NETWORKS, INC.
Consolidated Statements of Operations
(in thousands, except share and per share amounts)

	Year Ended December 31,		
	2015	2014	2013
Revenue:			
Product	$126,281	$120,507	$97,564
Software subscription and services	25,378	16,785	9,571
Total revenue	151,659	137,292	107,135
Cost of revenue [1]:			
Product	40,496	38,365	31,431
Software subscription and services	9,897	6,400	4,250
Total cost of revenue	50,393	44,765	35,681
Gross profit	101,266	92,527	71,454
Operating expenses:			
Research and development [1]	36,924	27,546	25,742
Sales and marketing [1]	83,066	72,364	57,773
General and administrative [1]	26,303	21,180	17,689
Total operating expenses	146,293	121,090	101,204
Operating loss	(45,027)	(28,563)	(29,750)
Interest income	108	37	15
Interest expense	(1,209)	(1,843)	(604)
Other income (expense), net	285	255	(2,462)
Loss before income taxes	(45,843)	(30,114)	(32,801)
Income tax provision	(352)	(441)	(426)
Net loss	$(46,195)	$(30,555)	$(33,227)
Net loss attributable to common stockholders	$(46,195)	$(30,555)	$(33,227)
Net loss per share allocable to common stockholders, basic and diluted	$(0.98)	$(0.85)	$(4.84)
Weighted-average shares used in computing net loss per share allocable to common stockholders, basic and diluted	47,323,253	36,097,405	6,866,839

(1) Includes stock-based compensation as follows:

Cost of revenue	$902	$411	$64
Research and development	4,651	2,419	929
Sales and marketing	7,112	4,121	1,573
General and administrative	5,706	3,301	1,721
Total stock-based compensation	$18,371	$10,252	$4,287

See notes to consolidated financial statements.

69

AEROHIVE NETWORKS, INC.
Consolidated Statements of Comprehensive Loss
(in thousands)

	Year Ended December 31,		
	2015	2014	2013
Net loss	$(46,195)	$(30,555)	$(33,227)
Unrealized loss on available-for-sale investments, net of tax	(61)	—	—
Comprehensive loss	$(46,256)	$(30,555)	$(33,227)

See notes to consolidated financial statements.

70

AEROHIVE NETWORKS, INC.
Consolidated Statements of Stockholders' Equity (Deficit)
(in thousands, except share and per share data)

	Convertible Preferred Stock		Common Stock		Additional paid-in capital	Accumulated deficit	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity (Deficit)
	Shares	Amount	Shares	Amount				
Balances at December 31, 2012	26,704,174	$67	6,161,665	$15	$98,580	$(87,107)	—	$ 11,555
Issuance of Series E convertible preferred stock at $11.0315 per share, net of issuance costs of $56	906,494	2	—	—	9,941	—	—	9,943
Exercise of Series C preferred stock warrants	250,341	—	—	—	692	—	—	692
Reclassification of Series C preferred stock warrants upon exercise	—	—	—	—	1,755	—	—	1,755
Shares issued upon exercise of options	—	—	1,072,661	3	1,166	—	—	1,169
Vesting of common stock from early exercised options	—	—	185,143	—	481	—	—	481
Stock-based compensation	—	—	—	—	4,287	—	—	4,287
Net loss	—	—	—	—	—	(33,227)	—	(33,227)
Balances at December 31, 2013	27,861,009	$69	7,419,469	$18	$116,902	$(120,334)	—	$ (3,345)
Cashless exercise of Series A convertible preferred stock warrants	38,724	—	—	—	—	—	—	—
Issuance of Series C convertible preferred stock upon exercise of warrants	327,795	—	—	—	907	—	—	907
Reclassification of convertible preferred stock warrants upon exercise	—	—	—	—	3,202	—	—	3,202
Issuance of common stock upon initial public offering, net of issuance costs	—	—	8,625,000	9	74,789	—	—	74,798
	(28,227,528)	(69)	28,832,898	18	51	—	—	—

Conversion of preferred stock to common stock								
Conversion of preferred stock warrants to common stock warrants	—	—	—	—	611	—	—	611
Shares issued upon exercise of options	—	—	915,563	1	1,720	—	—	1,721
Vesting of common stock from early exercised options	—	—	113,500	—	435	—	—	435
Issuance of common stock upon vesting of RSUs	—	—	187,699	—	—	—	—	—
Shares repurchased for tax withholdings on vesting of RSUs	—	—	(65,221)	—	(316)	—	—	(316)
Stock-based compensation	—	—	—	—	10,697	—	—	10,697
Net loss	—	—	—	—	—	(30,555)	—	(30,555)
Balances at December 31, 2014	—	$—	46,028,908	$46	$208,998	$(150,889)	—	$ 58,155
Shares issued upon exercise of options	—	—	678,533	1	1,523	—	—	1,524
Common stock issued under ESPP	—	—	1,226,012	1	5,195	—	—	5,196
Vesting of common stock from early exercised options	—	—	27,000	—	45	—	—	45
Issuance of common stock upon vesting of RSUs	—	—	1,580,206	2	(2)	—	—	—
Shares repurchased for tax withholdings on vesting of RSUs	—	—	(523,366)	(1)	(3,157)	—	—	(3,158)
Modification for common stock warrants	—	—	—	—	59	—	—	59
Stock-based compensation	—	—	—	—	18,628	—	—	18,628
Unrealized loss on available for sale investments	—	—	—	—	—	—	(61)	(61)
Net loss	—	—	—	—	—	(46,195)	—	(46,195)
Balances at December 31, 2015	—	$—	49,017,293	$49	$231,289	$(197,084)	(61)	$ 34,193

See notes to consolidated financial statements.

AEROHIVE NETWORKS, INC.
Consolidated Statements of Cash Flows
(in thousands)

	Year Ended December 31, 2015	2014	2013
Cash flows from operating activities			
Net loss	$(46,195)	$(30,555)	$(33,227)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	3,548	2,349	1,571
Stock-based compensation	18,371	10,252	4,287
Remeasurement of convertible preferred stock warrant liability	—	(90)	2,225
Others	378	178	146
Changes in operating assets and liabilities:			
Accounts receivable, net	1,871	(7,115)	(4,859)
Inventories	(2,415)	(1,544)	32
Prepaid expenses and other current assets	(1,275)	(733)	(241)
Other assets	(257)	(98)	26
Accounts payable	5,237	1,295	1,002
Accrued liabilities	3,067	1,563	2,494
Other liabilities	(394)	165	297
Deferred revenue	13,107	15,585	13,867
Net cash used in operating activities	(4,957)	(8,748)	(12,380)
Cash flows from investing activities			
Purchases of property and equipment	(2,270)	(2,385)	(2,910)
Capitalized software development costs	(1,913)	(4,364)	—
Maturities and sales of short-term investments	2,498	—	—
Purchases of short-term investments	(49,223)	—	—
Net cash used in investing activities	(50,908)	(6,749)	(2,910)
Cash flows from financing activities			
Proceeds from initial public offering, net of underwriting discounts	—	80,213	—
Payment of offering costs	—	(4,007)	(1,408)
Net proceeds from issuance of convertible preferred stock	—	—	9,943
Proceeds from exercise of convertible preferred stock warrants	—	907	692
Proceeds from exercise of vested stock options	1,524	1,721	1,169
Proceeds from early exercise of stock options, net of repurchases	—	—	813
Proceeds from employee stock purchase plan	5,196	—	—
Payment for shares repurchased for tax withholdings on vesting of restricted stock units	(3,158)	(316)	—
Proceeds from issuance of debt	10,000	—	10,000
Payments for debt issuance cost	—	—	(481)
Repayments of debt	(10,000)	—	—
Net cash provided by financing activities	3,562	78,518	20,728
Net increase (decrease) in cash and cash equivalents	(52,303)	63,021	5,438
Cash and cash equivalents at beginning of period	98,044	35,023	29,585
Cash and cash equivalents at end of period	$45,741	$98,044	$35,023
Supplemental disclosure of cash flow information			
Income taxes paid	$519	$420	$406
Interest paid	$984	$1,428	$540

Supplemental disclosure of noncash investing and financing activities			
Conversion of convertible preferred stock warrants to common stock warrants upon IPO	$—	$611	$—
Unpaid property and equipment purchased	$60	$312	$164
Unpaid capitalized software development costs	$94	$439	$—
Reclassification of the convertible preferred stock warrant liability to additional paid-in capital on the exercise of the convertible preferred stock warrants	$—	$3,202	$1,755
Vesting of early exercised stock options	$45	$435	$481
Offering costs for common stock not yet paid	$—	$—	$2,090
Stock-based compensation in capitalized software development	$257	$445	$—

See notes to consolidated financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. DESCRIPTION OF BUSINESS AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Nature of Operations

Aerohive Networks, Inc. was incorporated in Delaware on March 15, 2006, and, together with its subsidiaries (the "Company"), has designed and developed a leading cloud and enterprise Wi-Fi solution that enables our customers to use the power of the Wi-Fi, cloud, analytics and applications to transform how they serve their customers. Our products include Wi-Fi access points, routers and switches required to build an edge-access network; a cloud services platform for centralized management; data collection and analytics; and applications that leverage the network to provide additional capabilities to the business and IT organization. Together, these products, service platforms and applications create a simple, scalable, and secure solution to deliver a better connected experience.

The Company has offices in North America, Europe, the Middle East and Asia Pacific and employs staff around the world.

Basis of Presentation and Consolidation

The Company prepared the accompanying consolidated financial statements in accordance with generally accepted accounting principles in the United States ("GAAP"), which includes the accounts of Aerohive Networks, Inc. and its wholly owned subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation.

Use of Estimates

The preparation of the accompanying consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Those estimates and assumptions include, among others, the selling price of product, software and support services, determination of fair value of common stock, preferred stock, preferred stock warrant liabilities, and stock-based awards, inventory valuations, accounting for income taxes, including the valuation reserve on deferred tax assets and uncertain tax positions, allowance for sales reserves, allowance for doubtful accounts, and warranty costs. Management evaluates estimates and assumptions on an ongoing basis using historical experience and other factors and adjusts those estimates and assumptions when facts and circumstances dictate. As future events and their effects cannot be determined with precision, actual results could differ from these estimates and assumptions, and those differences could be material to the consolidated financial statements.

Foreign Currency

The functional currency of the Company’s foreign subsidiaries is the U.S. dollar. Transactions denominated in currencies other than the functional currency are remeasured at the average exchange rate in effect during the period. At the end of each reporting period, the Company’s subsidiaries’ monetary assets and liabilities are remeasured to the U.S. dollar using exchange rates in effect at the end of the reporting period. Non-monetary assets and liabilities are remeasured at historical exchange rates. Gains and losses related to remeasurement are recorded in other income (expense), net in the consolidated statements of operations. Foreign currency exchange losses have not been significant in any period presented and the Company has not undertaken any hedging transactions related to foreign currency exposure.

Concentrations of Credit Risk and Significant Customers

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash and cash equivalents and accounts receivable. Cash equivalents are maintained in money market funds. The amount on deposit at any time with money market funds may exceed the insured limits provided on such funds.

The Company sells its products primarily to channel partners, which include value-added resellers, or VARs, and value-added distributors, or VADs. The Company’s accounts receivable are typically unsecured and are derived from revenue earned from customers located in the Americas, Europe, the Middle East and Africa, and Asia Pacific. Sales to foreign customers accounted for 38%, 40% and 39% of total revenue for the year ended December 31, 2015, 2014 and 2013, respectively. The Company performs ongoing credit evaluations to determine customer credit, but generally does not require collateral from its customers. The Company maintains reserves for estimated credit losses and these losses have historically been within management’s expectations.

Significant customers are those that represent more than 10% of the Company's total revenue or gross accounts receivable balance at each respective balance sheet date. The Company has entered into separate agreements with certain individual VADs that are part of a consolidated group of entities which collectively constitutes greater than 10% of the Company's total revenue or gross accounts receivable balance for certain periods, as presented in the tables below.

The percentages of revenue from a consolidated group of entities (VAD A) greater than 10% of total consolidated revenue were as follows:

	Year Ended December 31,					
	2015		2014		2013	
VAD A	13.8	%	13.6	%	14.1	%

The percentages of receivables from VAD A and an individual entity (VAD B) greater than 10% of total consolidated accounts receivable were as follows:

	As of December 31,			
	2015		2014	
VAD A	18.5	%	18.8	%
VAD B	11.2	%	*	

* Less than 10%

Fair Value Measurements

The Company's financial instruments consist of cash and cash equivalents, short-term investments, accounts receivable, accounts payable, accrued liabilities and long-term debt. Accounts receivable, accounts payable and accrued liabilities are stated at their carrying value, which approximates fair value due to the short time to the expected receipt or payment. The carrying amount of the Company's long-term debt approximates its fair value as the stated interest rate approximates market rates currently available to the Company. As of December 31, 2015, the Company has not elected the fair value option for any financial assets and liabilities for which such an election would have been permitted.

Cash Equivalents

The Company considers all highly liquid investments with maturities of three months or less when purchased to be cash equivalents. Cash and cash equivalents consist of cash on hand and highly liquid investments in money market funds, including overnight investments. Due to the short-term nature and liquidity of these financial instruments, the carrying value of these assets approximates fair value.

Short-Term Investments

The Company classifies all its investments as available-for-sale at the time of purchase since it is management's intent that these investments be available for current operations, and as such, includes these investments as short-term investments on its balance sheets. These investments consist of investments with original maturities longer than three months, including commercial paper, investment-grade corporate and government debt securities with Moody's and S&P ratings of A-/A3 or better. Short-term investments classified as available-for-sale are recorded at fair market value with the related unrealized gains and losses included in accumulated other comprehensive income (loss), a component of stockholders' equity. Realized gains and losses are recorded in the consolidated statements of operations. The investments are adjusted for amortization of premiums and discounts to maturity and such amortization is included in interest income (expense), net. The Company periodically assesses whether its investments with unrealized loss positions are other than temporarily impaired. Other-than-temporary impairment charges exists when the entity has the intent to sell the security, it will more likely than not be required to sell the security before anticipated recovery or it does not expect to recover the entire amortized cost basis of the security. Other than temporary impairments are determined based on the specific identification method and are reported in the consolidated statements of operations.

Allowance for Doubtful Accounts

Accounts receivable are recorded at invoiced amounts, net of allowances for doubtful accounts, if applicable, and do not accrue interest. The Company evaluates the collectability of its accounts receivable based on known collection risks and historical experience. In circumstances where the Company is aware of a specific customer's inability to meet its financial obligations (e.g., bankruptcy filings or substantial downgrading of credit ratings), the Company records a specific reserve for bad debts against amounts due to reduce the net recognized receivable to the amount the Company reasonably believes will be collected. For all other customers, the Company records reserves for bad debts based on the length of time the receivables are past due and the Company's historical experience of collections and write-offs. If circumstances change, such as higher-than-expected defaults or an unexpected material adverse change in a major customer's ability to meet its financial obligations, the Company may reduce the estimate of the recoverability of the amounts due, potentially by a significant amount.

Amounts recorded in the consolidated statement of operations relating to allowance for doubtful accounts were immaterial for the year ended December 31, 2015, 2014, and 2013, respectively.

Inventory

Inventory consists of hardware products and related component parts and is stated at the lower of cost, which approximates actual cost computed on a first-in, first-out basis, or market value. The Company evaluates inventory for excess and obsolete products, based on management's assessment of future demand and market conditions, and technological obsolescence of its products. Inventory write-downs, once established, are not reversed as they establish a new cost basis for the inventory. Inventory write-downs are included as a component of cost of product revenue in the accompanying consolidated statements of operations. For the year ended December 31, 2015, 2014 and 2013, the provisions for excess and obsolete inventories were $0.7 million, $0.3 million and $0.1 million, respectively. The Company uses contract manufacturers to provide manufacturing services for its products.

Software Development Costs

The costs to develop the Company's perpetual license software offerings have not been capitalized because the Company's current software development process is essentially completed concurrent with the establishment of technological feasibility. As such, all related software development costs are expensed as incurred and included in research and development expenses in the consolidated statements of operations.

Research and development costs incurred during the preliminary project stage related to the Company's cloud-managed networking platform are expensed as incurred. Capitalization begins when the preliminary project stage is complete, management with the relevant authority authorizes and commits to the funding of the software project, and it is probable the project will be completed. Capitalization ceases when the project is substantially complete and ready for its intended purpose. The Company amortizes the capitalized costs on a straight-line basis over the estimated useful life, generally three to five years.

For the year ended December 31, 2015, 2014 and 2013, $1.8 million, $5.2 million and $0.1 million software development costs were capitalized, respectively. The capitalized software development costs include $0.3 million and $0.4 million capitalized stock-based compensation expense for fiscal 2015 and 2014.

In April 2015, the Company completed and launched its next generation cloud services platform, and began to amortize the capitalized software development costs to cost of software subscription and services on a straight-line basis over an estimated useful life of five years. Such internal-use software is included in the software category in property and equipment.

Property and Equipment, net

Property and equipment, including computer and other equipment, laboratory and research and development equipment, purchased software, internal-use software, office furniture and equipment, and construction in progress, are stated at cost, less accumulated depreciation and amortization. Depreciation is computed using the straight-line method over the estimated useful lives of the related assets. Leasehold improvements are amortized on a straight-line basis over the shorter of the estimated useful lives of the assets or the remaining lease term. Depreciation on property and equipment ranges from two to five years.

Leasehold improvements are amortized on a straight-line basis over the shorter of the estimated useful lives of the assets or the remaining lease term. The amortization period for the leasehold improvements primarily ranges from two to five years.

Goodwill

Goodwill represents the excess purchase consideration of an acquired entity over the fair value of the net tangible and intangible assets acquired.

The Company has determined that it operates as one reporting unit and performs its annual impairment test of goodwill during the fourth quarter of each fiscal year or whenever events or circumstances change that would indicate that goodwill might be impaired. Triggering events that may indicate impairment include, but are not limited to, a significant adverse change in the business climate, unanticipated competition, loss of key personnel, significant changes in the manner the Company uses the acquired assets or the strategy for the overall business, significant negative industry or economic trends or significant underperformance relative to historical operations or projected future results of operations.

In conducting the impairment test, the Company first assesses qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount as a basis for determining whether it is necessary to perform the two-step goodwill impairment test. If the qualitative step is not passed, the Company performs a two-step impairment test whereby in the first step, the Company must compare the fair value of the reporting unit with its carrying amount. If the carrying amount exceeds its fair value, the Company performs the second step of the goodwill impairment test to determine the amount of impairment. The second step, measuring the impairment loss, compares the implied fair value of the goodwill with the carrying value of the goodwill. Any excess of the goodwill carrying value over the implied fair value is recognized as an impairment loss. No impairment of goodwill was identified during the years ended December 31, 2015, 2014 and 2013.

Impairment of Long-Lived Assets

The carrying amounts of long-lived assets, including property and equipment and intangible assets subject to depreciation and amortization, are periodically reviewed for impairment whenever events or changes in circumstances indicate that the carrying value of these assets may not be recoverable or that the useful life is shorter than the Company had originally estimated. Recoverability of these assets is measured by comparison of the carrying amount of each asset to the future undiscounted cash flows the asset is expected to generate over their remaining lives. If the asset is considered to be impaired, the amount of any impairment is measured as the difference between the carrying value and the fair value of the impaired asset. If the useful life is shorter than originally estimated, the Company amortizes the remaining carrying value over the new shorter useful life.

No impairment of any long-lived assets was identified for the years ended December 31, 2015, 2014 and 2013.

Convertible Preferred Stock Warrant Liability

The Company accounts for freestanding warrants to purchase shares of convertible preferred stock as liabilities in the consolidated balance sheets at their estimated fair value because the preferred shares underlying the warrants contain anti-dilution provisions that require the Company to increase the number of common shares into which the preferred shares are convertible upon any future down-round financing. At the end of each reporting period, changes in the estimated fair value of the warrants to purchase shares of convertible preferred stock are recorded in other income (expense), net in the consolidated statements of operations. Changes in estimated fair value of convertible preferred stock warrant liability was immaterial for the year ended December 31, 2014 and was $2.2 million for the year ended December 31, 2013. The Company adjusted the liability for changes in fair value until the completion of the IPO in April 2014. Upon conversion of the underlying preferred stock to common stock, the related warrant liability was remeasured to fair value and the remaining liability was reclassified to additional paid-in capital.

Revenue Recognition

The Company derives revenue from two sources: (i) product, which includes hardware and software revenue, and (ii) software subscription and services, which includes post-contract customer support, or PCS, and software delivered as a service, or SaaS. Revenue is recognized when all of the following criteria are met.

Persuasive Evidence of an Arrangement Exists. Evidence of an arrangement generally consists of a purchase order issued pursuant to the terms and conditions of a VAD and VAR reseller agreement or, in limited cases, an end-customer agreement.

Delivery or Performance has Occurred. The Company uses shipping and related documents and VAD sell-through reports to verify delivery or performance. The Company does not recognize product revenue until transfer of title and risk of loss, which generally is upon shipment to VARs or end-customers.

The Sales Price is Fixed or Determinable. The Company assesses whether the sales price is fixed or determinable based on payment terms and whether the sales price is subject to refund or adjustment.

Collection is Reasonably Assured. The Company assesses probability of collection on a channel partner-by-channel partner basis. The Company subjects its channel partners to a credit review process that evaluates their financial

condition and ability to pay for the Company's products and services. If the Company concludes that collection is not reasonably assured, the Company does not recognize revenue until cash is received.

The Company's product revenue consists of revenue from the sale of the Company's hardware products (which each contain embedded software related to its proprietary operating system) and HiveManager network management software which is considered essential to the functionality of the Company's hardware products. Therefore, the Company's hardware appliances together with related HiveManager software are considered non-software elements and are not subject to the industry-specific software revenue recognition guidance.

The Company's software subscription and services revenue consists of revenue from SaaS and PCS arrangements. SaaS arrangements with customers do not provide the right to take possession of the software at any time during the hosting period, have a defined contract term, and are recognized ratably over the contract term beginning on the provisioning date of the contract, which is typically one, three or five years. The Company has determined that hardware sold with SaaS arrangements has stand-alone value and therefore has concluded that the hardware represents a separate unit of accounting that is recognized as revenue upon shipment assuming all other revenue recognition criteria are met. PCS arrangements include software updates, access to technical support personnel, and expedited replacement of defective hardware products. Revenue for PCS services is recognized on a straight-line basis over the service contract term, which is typically one, three or five years.

The Company operates a multiple-tier channel distribution model that includes VADs, VARs and direct sales to end-customers (including managed service providers). For sales to VARs and end-customers, the Company recognizes product revenue upon transfer of title and risk of loss, which is generally upon shipment. It is the Company's practice to identify an end-customer prior to shipment to a VAR. Substantially all of the Company's sales outside of North America are made through VADs under agreements, which currently allow the VADs to stock of the Company's products in their inventory and provide price protection or rebates, and limited rights of return for stock rotation. The Company initially defers product revenue on sales made through these VADs and recognizes revenue upon sell-through as the VADs report to the Company.

Most of the Company's arrangements, other than stand-alone renewals of SaaS and PCS arrangements, are multiple-element arrangements with a combination of product and service (as defined above). The Company allocates arrangement consideration in multiple-element revenue arrangements at the inception of an arrangement to all deliverables based on the relative selling price method in accordance with the selling price hierarchy, which includes (i) vendor-specific objective evidence (VSOE) of selling price, if available; (ii) third-party evidence (TPE) of selling price, if VSOE is not available; and (iii) best estimate of selling price (BESP), if neither VSOE nor TPE is available.

VSOE. The Company determines VSOE based on its historical pricing and discounting practices for the specific products and services when sold separately. In determining VSOE, the Company requires that a substantial majority of the stand-alone selling prices fall within a reasonably narrow pricing range. The Company established VSOE for some of its sales of PCS for both VAD and VAR channels as our pricing is sufficiently concentrated (based on an analysis of separate sales of PCS) to conclude that we can demonstrate VSOE of selling price of PCS.

TPE. When VSOE cannot be established for deliverables in multiple-element arrangements, the Company applies judgment with respect to whether it can establish a selling price based on TPE. TPE is determined based on competitor prices for interchangeable products or services when sold separately to similarly situated customers. However, because the Company's products contain a significant element of proprietary technology and the Company's solutions offer substantially different features and functionality, the comparable pricing of products with similar functionality typically cannot be obtained.

BESP. When the Company is unable to establish selling price using VSOE or TPE, the Company uses BESP in its allocation of arrangement consideration. The objective of BESP is to determine the price at which the Company would transact a sale if the product or service was sold regularly on a stand-alone basis. As the Company has not been able to establish VSOE or TPE for its products and some of its services, the Company determines BESP for the purposes of allocating the arrangement, primarily based on historical transaction pricing. Historical transactions are segregated based on the Company's pricing model and go-to-market strategy, which include factors such as type of sales channel (VAR, VAD or end-customer), the geographies in which the Company's products and services were sold (domestic or international) and offering type (product series, software subscriptions and level of support for PCS). The determination of BESP is made through consultation with and approval by management.

The Company makes certain estimates and maintains allowances for sales returns and other programs based on its historical experience. To date, these estimates have not been significant.

Shipping charges billed to channel partners are included in product revenue and the related shipping costs are included in cost of product revenue.

Deferred Costs of Goods Sold

When the Company’s products have been delivered, but the product revenue associated with the arrangement has been deferred as a result of not meeting the revenue recognition criteria (see “Revenue Recognition” above), the related product costs are also deferred.

Deferred Offering Costs

Deferred offering costs, which consist of direct incremental legal, consulting and accounting fees relating to the IPO, were capitalized before the IPO. Upon the completion of the IPO in 2014, the Company reclassified $5.4 million deferred offering costs to additional paid-in capital.

Warranty Liability

The Company maintains a warranty accrual for estimated future warranty obligations based on unit volumes by hardware product family together with anticipated future warranty costs. The Company’s Wi-Fi access points, branch routers and switches are generally covered by a limited lifetime warranty, and other hardware accessory products are generally covered for a period of one year.

Advertising Costs

Advertising costs are charged to sales and marketing expenses as incurred in the consolidated statements of operations. Advertising expense was immaterial for the fiscal years ended December 31, 2015, 2014 and 2013.

Research and Development Expenses

Research and development costs, other than capitalized software development costs, are charged to operations as incurred and consist primarily of personnel costs (including compensation costs and stock-based compensation), outside services, expensed materials, depreciation and an allocation of overhead expenses (including facilities and information technology infrastructure costs), as well as software development costs incurred prior to the establishment of technological feasibility, such as product certification, travel, depreciation and recruiting.

Comprehensive Income (Loss)

Comprehensive (loss) income consists of all components of net (loss) income and all components of other comprehensive (loss) income within stockholders’ equity. The Company’s other comprehensive (loss) income includes unrealized gains and losses from its available-for-sale securities that are not considered other-than-temporarily impaired, net of taxes.

Stock-Based Compensation

The Company measures compensation expense for all stock-based awards based on the estimated fair values on the date of grant. The Company’s stock-based awards include stock options, restricted stock units (RSU) and purchase rights under the employee stock purchase plan (ESPP). The fair value of each RSU granted is determined using the fair value of the Company’s common stock on the date of the grant. The fair value of each stock option is estimated using the Black-Scholes option pricing model. The fair value of each stock purchase right under the Company's ESPP is calculated based on the closing price of the Company's stock on the date of grant and the value of a call and put option estimated using the Black-Scholes pricing model. The Black-Scholes pricing model requires assumptions including the market value of the Company's common stock, expected term of the award, expected volatility of the price of the Company's common stock, risk-free interest rates, and expected dividend yield.

Stock-based compensation is recognized on a straight-line basis over the requisite service period, net of estimated forfeitures. The forfeiture rate is based on an analysis of the Company’s actual historical forfeitures.

Income Taxes

The Company accounts for income taxes under an asset and liability approach for deferred income taxes, which require recognition of deferred income tax assets and liabilities for the expected future tax consequences of events that have been recognized in the consolidated financial statements, but have not been reflected in taxable income. Estimates and judgments occur in the calculation of certain tax liabilities and in the determination of the recoverability of certain deferred income tax assets, which arise from temporary differences and carryforwards. Deferred income tax assets and liabilities are measured using the currently enacted tax rates that apply to taxable income in effect for the years in which those tax assets are expected to be realized or settled. The Company regularly assesses the likelihood that deferred income tax assets will be realized based on historical levels of taxable income, projections for future taxable income, and tax planning strategies. To the extent that the Company believes any amounts are not more likely than not to be realized, the Company records a valuation allowance to reduce the deferred income tax assets. The Company regularly assesses the need for a valuation allowance on its deferred tax assets, and to the extent that the Company determines that an adjustment is needed, such adjustment will be recorded in the period that the determination is made.

The Company regularly reviews its tax positions and benefits to be realized. The Company recognizes tax liabilities based upon estimates of whether, and the extent to which, additional taxes will be due when such estimates are more likely than not to be sustained. An uncertain income tax position will not be recognized if it has less than a 50% likelihood of being sustained. The Company recognizes interest and penalties related to income tax matters as income tax expense in the accompanying consolidated statements of operations.

Recent Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board (“FASB”) issued Accounting Standard Update (“ASU”) 2014-09, Revenue from Contracts with Customers (Topic 606), which provides guidance for revenue recognition. This ASU affects any entity that either enters into contracts with customers to transfer goods or services or enters into contracts for the transfer of non-financial assets. The guidance in this ASU supersedes the revenue recognition requirements in Topic 605, Revenue Recognition, and most industry-specific guidance. In August 2015, the FASB issued ASU 2015-14 to delay the effective date of this standard by one year to December 15, 2017. The standard will be effective for the Company on January 1, 2018. Adoption of the ASUs is either retrospective to each prior period presented or retrospective with a cumulative adjustment to retained earnings or accumulated deficit as of the adoption date. The Company is currently assessing the impact of the ASUs on its consolidated financial statements.

In July 2015, FASB issued ASU 2015-11, Simplifying the Measurement of Inventory. The new standard replaces the current lower of cost or market test with the lower of cost or net realizable value test. Net realizable value is defined as the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. The new standard should be applied prospectively and is effective for annual reporting periods beginning after December 15, 2016 and interim periods within those annual periods, with early adoption permitted. The Company does not expect the adoption of this standard to have a material impact on the Company's Consolidated Financial Statements.

In November 2015, FASB issued ASU No. 2015-17, Balance Sheet Classification of Deferred Taxes, requiring all deferred tax assets and liabilities, and any related valuation allowance, to be classified as noncurrent on the balance sheet. The classification change for all deferred taxes as noncurrent simplifies entities’ processes as it eliminates the need to separately identify the net current and net noncurrent deferred tax asset or liability in each jurisdiction and allocate valuation allowances. We elected to prospectively adopt the accounting standard in the beginning of our fourth quarter of fiscal 2015. Prior periods in our Consolidated Financial Statements were not retrospectively adjusted.

2. FAIR VALUE MEASUREMENTS

The Company records its financial assets and liabilities at fair value. The inputs used in the valuation methodologies in measuring fair value are defined in the fair value hierarchy as follows:

Level 1	Quoted prices (unadjusted) in active markets that are accessible at the measurement date for identical assets or liabilities.
Level 2	Observable prices that are based on inputs not quoted on active markets, but corroborated by market data.
Level 3	Unobservable inputs are used when little or no market data is available.

The Company's financial instruments consist of Level 1 and Level 2 assets as of December 31, 2015 and Level 1 assets as of December 31, 2014. Level 1 assets include highly liquid money market funds that are included in cash and cash equivalents. These instruments are generally classified within Level 1 of the fair value hierarchy because they are valued based on quoted market prices in active markets. Level 2 assets include U.S. treasuries, corporate securities and commercial paper that are included in short-term investments. The Company uses inputs such as actual trade data, benchmark yields, broker/dealer quotes or alternative pricing sources with reasonable levels of price transparency which are obtained from quoted market prices, independent pricing vendors, or other sources, to determine the ultimate fair value of these assets.

The components of the Company's cash equivalents and investments are as follows:

	December 31, 2015			
	Level 1	Level 2	Level 3	Total
Financial Assets		(in thousands)		
Cash equivalents:				
Money market funds	$33,436	$—	$—	$33,436
Total cash equivalents	$33,436	$—	$—	$33,436
Short-term investments:				
U.S. treasuries	$—	$15,967	$—	$15,967
Corporate securities	$—	$23,639	$—	$23,639
Commercial paper	$—	$6,987	$—	$6,987
Total short-term marketable securities	$—	$46,593	$—	$46,593
Total assets measured at fair value	$33,436	$46,593	$—	$80,029

	December 31, 2014			
	Level 1	Level 2	Level 3	Total
Financial Assets	(in thousands)			
Money market funds	$80,240	$—	$—	$80,240

The Company had no Level 3 financial liability for the years ended December 31, 2015 and 2014. Before the IPO, the Company had convertible preferred stock warrant liabilities, which was classified as Level 3 financial liability. In connection with the conversion of convertible preferred stock warrants to common stock warrants upon the completion of the IPO, $0.6 million convertible preferred stock warrant liability was reclassified to additional paid-in capital in stockholders' equity (deficit), and does not require fair value measurement. A summary of changes in the fair value of convertible preferred stock warrants for the years ended December 31, 2014 and 2013 are as follows:

	Year Ended December 31	
	2014	2013
	(in thousands)	
Fair value, beginning of period	$3,903	$3,352
Issuance of convertible preferred stock warrants	—	81
Exercise of convertible preferred stock warrants	(3,202)	(1,755)
Change in fair value of Level III liabilities, included in other income (expense), net	(90)	2,225
	$(611)	$—

Conversion of convertible preferred stock warrants to common stock warrants		
Fair value, end of period	$—	$3,903

80

3. CASH EQUIVALENTS AND SHORT-TERM INVESTMENTS

As of December 31, 2014, the Company's cash equivalents include money market funds. The Company had no short-term investments as of December 31, 2014. As of December 31, 2015, cash equivalents and short-term investments consist of:

	Amortized Cost	Gross Unrealized Gain (Loss)	Estimated Fair Value
	(in thousands)		
Classified as current assets:			
Cash equivalents:			
Money market funds	33,436	—	33,436
Total cash equivalents	33,436	—	33,436
Short-term investments:			
U.S. treasuries	15,988	(21)	15,967
Corporate securities	23,679	(40)	23,639
Commercial paper	6,987	—	6,987
Total short-term investments	46,654	(61)	46,593
Total cash equivalents and short-term investments	$80,090	$(61)	$80,029

Unrealized losses related to these investments are due to interest rate fluctuations as opposed to credit quality. In addition, we do not intend to sell, and it is not more likely than not that we would be required to sell, these investments before recovery of their cost basis. As a result, there is no other-than-temporary impairment for these investments as of December 31, 2015.

The following table summarizes the contractual maturities of investments:

	As of December 31, 2015	
	Amortized Cost	Fair Value
	(in thousands)	
Contractual maturity		
Due within one year	$46,654	$46,593
Total	46,654	46,593

4. CONSOLIDATED BALANCE SHEET COMPONENTS

Inventory

Inventory consists of the following:

	As of December 31,	
	2015	2014
	(in thousands)	
Components, including raw materials	$41	$63
Finished goods	10,734	8,297
Total inventory	$10,775	$8,360

Property and Equipment, net

Property and equipment, net consists of the following:

	Estimated Useful Lives	As of December 31, 2015	2014
		(in thousands)	
Computer and other equipment	3 years	$1,704	$1,822
Manufacturing, research and development laboratory equipment	3 years	4,476	3,741
Software	2 to 5 years	8,470	1,882
Office furniture and equipment	3 years	1,041	761
Leasehold improvements	2 to 5 years	614	532
Construction in progress		—	5,459
Property and equipment, gross		16,305	14,197
Less: Accumulated depreciation and amortization		(7,149)	(5,335)
Property and equipment, net		$9,156	$8,862

Construction in progress primarily represents the capitalization of development costs incurred by the Company during the application development stage of the Company’s cloud services platform. In April 2015, the Company completed and launched the next generation of its cloud services platform, and began to amortize these capitalized costs to cost of software subscription and services revenue on a straight-line basis over an estimated useful life of the software of five years. As of December 31, 2015, such internal-use software is included in the software category.

Depreciation and amortization expense was $3.5 million, $2.2 million and $1.4 million for the year ended December 31, 2015, 2014 and 2013, respectively.

Accrued Liabilities

Accrued liabilities consist of the following:

	As of December 31, 2015	2014
	(in thousands)	
Accrued compensation	$9,410	$7,090
Accrued expenses and other liabilities	1,801	1,806
Warranty liability, current portion	645	285
Total accrued liabilities	$11,856	$9,181

Deferred Revenue

Deferred revenue consists of the following:

	As of December 31, 2015	2014
	(in thousands)	
Products	$3,199	$3,886
Software subscription and services	56,063	42,269
Total deferred revenue	59,262	46,155
Less: current portion of deferred revenue	27,893	22,014
Non-current portion of deferred revenue	$31,369	$24,141

Warranty Liability

The following table summarizes the activity related to the Company's accrued liability for estimated future warranty:

	As of December 31,		
	2015	2014	2013
	(in thousands)		
Beginning balance	$891	$923	$707
Charges to operations	1,079	536	505
Obligations fulfilled	(578)	(557)	(289)
Changes in existing warranty	(414)	(11)	—
Total product warranties	$978	$891	$923
Current portion	$645	$285	$249
Non-current portion	$333	$606	$674

Changes in existing warranty reflect a combination of changes in expected warranty claims and changes in the related costs to service such claims.

5. DEBT

Financing Agreements

In June 2012, the Company entered into a revolving credit facility with Silicon Valley Bank (the revolving credit facility) for a principal amount of up to $10.0 million, with a sublimit of $3.0 million for borrowings guaranteed by the Export-Import Bank of the United States. The revolving credit facility is collateralized by substantially all of the Company's property, other than intellectual property. Prior to March 31, 2015, the revolving credit facility bore monthly interest at a floating rate equal to the greater of (i) 4.00% or (ii) prime rate plus 0.75%. By amendment in March 2015, interest on the credit facility adjusted as of March 31, 2015 to a floating rate equal to the lesser of (i) LIBOR rate plus 2.25% or (ii) prime rate minus 0.5%. In November 2015, the Company further amended the revolving credit facility to revise the floating interest rate to the lesser of (i) LIBOR rate plus 1.75% or (ii) prime rate minus 1.0%, which is effective January 1, 2016.

The revolving credit facility currently provides among other things, (i) a maturity date of March 31, 2017; (ii) no sublimit for borrowings guaranteed by the Export-Import Bank; and (iii) a revolving line up to $20.0 million, subject to certain conditions.

The revolving credit facility contains customary negative covenants which, unless approved by SVB, limit the Company's ability to, among other things, incur additional indebtedness, grant liens, make investments, repurchase stock, pay dividends, transfer assets and merge or consolidate, as well as requiring the Company to maintain a minimum adjusted quick ratio of 1.25 to 1.00 and minimum cash balances as of the last day of each month. The revolving credit facility also contains customary events of default, subject to customary cure periods for certain defaults, that include, among other things, non-payment defaults, covenant defaults, material judgment defaults, bankruptcy and insolvency defaults, cross-defaults to certain other material indebtedness, and inaccuracy of representation and warranties. Upon an event of default, the lender may declare all or a portion of the outstanding obligations payable by the Company to be immediately due and payable and exercise other rights and remedies provided for under the credit facility. During the existence of an event of default, interest on the obligations under the credit facility could be increased by 5.0%. As of December 31, 2015 and December 31, 2014, the Company was in compliance with these covenants.

As of December 31, 2015, $20.0 million remains outstanding under the revolving credit facility.

In August 2013, the Company entered into a term loan credit facility with TriplePoint Capital LLC (the term loan credit facility) that allowed the Company, subject to certain funding conditions including compliance with certain covenants and the absence of certain events or conditions that could have been deemed to have a material adverse effect on the Company's business, to borrow money under term loans in an aggregate principal amount of up to $20.0 million. In December 2013, the Company borrowed $10.0 million under the term loan credit facility under two separate loans. The stated interest rate for each loan was 10.75% and 9.75%, respectively, and was reduced to 10.25% and 9.25%, respectively, due to the completion of the IPO in 2014. In the first quarter 2015, the Company elected to voluntarily repay in full all of its outstanding obligations under the term loan credit facility, along with an end-of-term payment of $0.3 million, and terminated the facility.

Debt Repayment Commitments

83

As of December 31, 2015, the amount of future principal and interest repayments due on the Company's short term and long term debts is as follows:

Year Ending December 31,	Interest on Debt	Long Term Debt	Total
	(in thousands)		
2016	$500	$20,000	$20,500
2017	125	—	125
	$625	$20,000	$20,625

6. COMMITMENTS AND CONTINGENCIES

Lease Commitments

The Company leases its main office facility in Sunnyvale, California, which is set to expire in September 2016. In addition, the Company leases office space for its subsidiaries in the United Kingdom, the Netherlands and China under non-cancelable operating leases that expire at various times through May 2017. The Company has also entered into various lease agreements in other locations in the United States and globally to support its sales and research and development functions. The Company recognizes rent expense on a straight-line basis over the lease period. Future minimum lease payments by year under operating leases as of December 31, 2015 are as follows:

	Amount
Year Ending December 31,	(in thousands)
2016	$2,025
2017	101
Total	$2,126

Rent expense was $2.5 million, $2.1 million and $1.7 million for the year ended December 31, 2015, 2014 and 2013, respectively.

Manufacturing Commitments

The Company subcontracts with manufacturing companies to manufacture its hardware products. The contract manufacturers procure components based on non-cancellable orders placed by the Company. If the Company cancels all or part of an order, the Company is liable to the contract manufacturers for the cost of the related components purchased under such orders.

As of December 31, 2015 and December 31, 2014, the Company had manufacturing commitments with contract manufacturers for inventory totaling approximately $14.0 million and $8.0 million, respectively.

Contingencies

The Company may be subject to legal proceedings and litigation arising in the ordinary course of business. The Company will record a liability when it believes that it is both probable that a loss has been incurred and the amount can be reasonably estimated. The Company expects to periodically evaluate developments in its legal matters that could affect the amount of liability that it has previously accrued, if any, and make adjustments as appropriate. Significant judgment is required to determine both likelihood of there being, and the estimated amount of, a loss related to such matters, and the Company’s judgment may be incorrect. The outcome of any proceeding is not determinable in advance. Until the final resolution of any such matter for which the Company may be required to accrue, there may be an exposure to loss in excess of the amount accrued and such excess amount could be significant.

The Company is currently engaged in the following separate litigations which allege that the Company’s products infringe certain patents.

- AirTight Networks, or AirTight, alleges that the Company’s products infringe U.S. Patent #7,339,914, or the ‘914 Patent. On January 23, 2013, in light of AirTight’s allegations, the Company filed in the U.S. District Court, Northern District of California, a Complaint for Declaratory Judgment against AirTight asserting that the Company’s products do

84

not infringe the ‘914 Patent and that the ‘914 Patent is, in any case, invalid and not enforceable. AirTight filed a separate action asserting infringement of the ‘914 Patent by some or all of the Company’s products, which was then related to the Company’s initial action for declaratory judgment. The related cases are currently stayed pending resolution of petitions which the Company filed with the U.S. Patent and Trademark Office, or PTO, to initiate a reexamination of the ‘914 Patent. All claims are currently rejected and Airtight has appealed the final rejection of all claims of the ‘914 Patent.

- Linex Technologies, or Linex, filed on March 19, 2013 a Complaint in the U.S. District Court, Southern District of Florida, asserting that some or all of the Company’s products infringe U.S. Patents #6,493,377, or the ‘377 Patent, and #7,167,503, or the ’503 Patent. The Company filed an answer and counterclaims for declaratory judgment against Linex asserting that the Company’s products do not infringe the ‘377 and ‘503 Patents, and that the ‘377 and ‘503 Patents are, in any case, invalid and not enforceable. The Company separately filed with the PTO petitions to initiate reexamination of the ‘377 and ‘503 Patents, which the PTO granted. In the PTO reexaminations, all claims under the ‘377 Patent are currently rejected and Linex has appealed the final rejections of the claims, and the petition regarding the claims subject to the ‘503 Patent is still pending. This case is currently stayed pending the reexaminations.
- Chrimar Systems, or Chrimar, filed in July 2015 a complaint in the U.S. District Court, Eastern District of Texas, asserting that certain of the Company’s products which utilize Power over Ethernet (PoE) functionality infringe United States Patent Nos. 8,155,012, 8,942,107, 8,902,760 and 9,019,838. The complainant has since also named one of the Company’s customers as a co-defendant and, in at least one instance, filed a separate action against a channel partner based on that partner’s sale of Company products. The Company continues to evaluate the allegations and its possible obligations to the Company’s customer and partners under written indemnification commitments.

The Company is also currently in litigation asserting claims under federal securities laws.

In June 2015, a class action complaint was filed in the Superior Court of the State of California, County of San Mateo, against the Company and certain of its current and former officers and directors. This action was subsequently related and consolidated with two identical, follow-on complaints and is captioned Hunter v. Aerohive Networks, Inc., et al., Shareholder Litigation, Master File No. 534070. The consolidated complaint alleges claims under federal securities laws that the Registration Statement which the Company filed with the Securities and Exchange Commission on Form S-1 in connection with its initial public offering in March 2014 contained false and/or misleading statements or omissions. The consolidated action also names as defendants the investment firms who underwrote the Company’s initial public offering.

The consolidated complaint alleges that the Registration Statement failed to disclose, among other things, product deficiencies, poor sales, and a decline in sales-related personnel. The complaint additionally alleges that the Company improperly recognized revenue, including by booking certain sales with rights of return. The consolidated complaint seeks unspecified compensatory damages and other relief. The Company is advancing certain defense costs with respect to individual defendants, including the underwriting investment firms, under written indemnification agreements.

The Company intends to defend these lawsuits vigorously.

The Company is not able to predict or estimate any range of reasonably possible loss related to these lawsuits. If these matters have an adverse outcome, they may have a material impact on the Company’s financial position, results of operations or cash flows.

In October 2015, the Company resolved the pending action brought by JSDQ Mesh Technologies LLC, filed in June 2015 in the U.S. District Court, District of Delaware, asserting that certain of the Company’s products which utilize a so-called wireless mesh transmission feature infringe United States Patent Nos. 7,286,828, 7,916,648, RE43,675 and RE44,607. The complaint also named one of the Company’s customers as a co-defendant. The amount of the Company’s settlement payment regarding this matter was not material.

Guarantees

The Company has entered into agreements with some of its customers that contain indemnification provisions in the event of claims alleging that the Company’s products infringe the intellectual property rights of a third party. The Company has at its option and expense the ability to repair any infringement, replace product with a non-infringing equivalent-in-function product, or refund the customers the total product price. Other guarantees or indemnification arrangements include guarantees of product and service performance. The Company has not recorded a liability related to these indemnification and guarantee provisions and the Company's guarantees and indemnification arrangements have not had any impact on the consolidated financial statements to date.

7. STOCKHOLDERS' EQUITY
Initial Public Offering and Conversion of Convertible Preferred Stock
Prior to the closing of the Company's IPO on April 2, 2014, the Company had outstanding 5,680,096 shares designated as Series A convertible preferred stock, 4,929,749 shares designated as Series B convertible preferred stock, 9,052,344 shares designated as Series C convertible preferred stock, 5,619,234 shares designated as Series D convertible preferred stock, and 2,946,105 shares designated as Series E convertible preferred stock.
In April 2014, the Company completed its initial public offering ("IPO"), in which the Company issued 8,625,000 shares of the Company's common stock, inclusive of 1,125,000 shares of common stock sold upon the underwriters' exercise in full of the overallotment option, at an offering price of $10.00 per share. The Company received proceeds of $80.2 million after deducting the underwriters' discounts and commissions of $6.0 million. Upon completion of the IPO, the Company reclassified $5.4 million deferred offering costs to additional paid-in capital.
In connection with the IPO, 28,227,528 outstanding shares of the Company's convertible preferred stock automatically converted into 28,832,898 shares of common stock, and the warrants to purchase 103,034 shares of convertible preferred stock became warrants to purchase 107,876 shares of common stock.
Common Stock and Preferred Stock
On April 2, 2014, in connection with the IPO, the Company filed an amended and restated certificate of incorporation to increase the amount of common stock authorized for issuance to 500 million shares at par value of $0.001 per share, and to increase the amount of preferred stock authorized for issuance to 25 million shares with a $0.001 par value per share.

Each holder of common stock is entitled to one vote for each share of common stock held. As of December 31, 2015 and 2014, the Company had 49,017,293 and 46,028,908 of common stock issued and outstanding, respectively. As of December 31, 2015 and 2014, the Company had no shares of preferred stock issued or outstanding.
Common Stock reserved for Future Issuance
As of December 31, 2015 and 2014, the Company had, on an as-if converted basis, reserved shares of common stock for future issuance as follows:

	As of December 31,	
	2015	2014
Common stock reserved for future grants under the Equity Incentive Plan	5,017,525	2,259,230
Reserved under 2014 Employee Stock Purchase Plan	1,804,669	800,000
Options and Restricted Stock Units issued and outstanding	10,589,268	9,776,124
Common stock subject to repurchase	—	27,000
Warrants to purchase common stock	73,883	107,876
Total reserved shares of common stock for future issuance	17,485,345	12,970,230

Common Stock Warrants
Upon the closing of the Company's IPO on April 2, 2014, all of the outstanding 103,034 shares of convertible preferred stock warrants automatically converted into an aggregate of 107,876 shares of common stock warrants on a 1:1.1228 basis for Series B convertible preferred stock warrants, and on a 1:1 basis for Series C and Series E convertible preferred stock warrants, as a result of which the Company reclassified the related liability ($0.6 million carrying value) to additional paid-in capital in stockholders' equity.
On February 27, 2015, in connection with the amendment of the Company's loan agreement with TriplePoint Capital LLC, the Company provided TriplePoint Capital LLC a term extension of one additional year for its common stock warrants to purchase 73,883 shares of its common stock that were scheduled to expire on March 27, 2015. In March 2015, 33,993 shares of common stock warrants expired.

As of December 31, 2015, 44,280 shares and 29,603 shares of the Company's common stock warrants remained outstanding and exercisable at exercise prices of $4.057 and $2.768 per share. The common stock warrants expire in March 2016.

8. STOCK-BASED COMPENSATION

2014 Equity Incentive Plan

On March 26, 2014, the Company's 2014 Equity Incentive Plan (2014 Plan) became effective. On March 27, 2014, the Company's earlier 2006 Global Share Plan (2006 Plan) was terminated and all reserved but unissued shares under the 2006 Plan were added to the 2014 Plan and all shares underlying stock awards granted under the 2006 Plan that otherwise would return to the 2006 Plan instead were rolled into the 2014 Plan. The Company may not grant additional awards under the 2006 Plan, but the 2006 Plan will continue to govern outstanding awards previously granted under it.

The 2014 Plan provides for the grant of incentive stock options within the meaning of Section 422 of the Internal Revenue Code (ISO), only to employees of the Company or any parent or subsidiary of the Company, and for the grant of nonstatutory stock options (NSO), restricted stock, restricted stock units, stock appreciation rights, performance units and performance shares to employees, directors and consultants of the Company, and the employees and consultants of any parent or subsidiary of the Company.

In January 2015, the Company effected an increase of the 2,306,812 number of shares reserved under the 2014 Plan. In May 2015, the Company’s stockholders approved an increase of 3,000,000 shares reserved under the 2014 Plan. As of December 31, 2015, the Company had 5,017,525 total shares of common stock reserved and available for grant under the 2014 Plan. On the first day of each fiscal year beginning January 1, 2016 through January 1, 2024, the number of shares of common stock reserved for issuance under the 2014 Plan may increase by an amount equal to the lesser of (i) 4,000,000 Shares, (ii) 5% of the Company’s outstanding shares on the last day of the immediately preceding fiscal year, or (iii) such number of shares determined by the board of directors.

The following table summarizes the total number of shares available for grant under the 2014 Plan as of December 31, 2015:

	Shares Available for Grant	
Balance, December 31, 2014	2,259,230	
Authorized	5,306,812	
Options granted	(1,759,063	)
Options canceled	1,375,261	
Awards granted	(3,318,015	)
Awards canceled	1,153,300	
Balance, December 31, 2015	5,017,525	

Stock Options

The following table summarizes the information about outstanding stock option activity:

87

	Options Outstanding			
	Number of Shares Underlying Outstanding Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value
				(in thousands)
Balance, December 31, 2014	6,837,893	$5.71	7.39	$8,004
Options granted	1,759,063	6.87		
Options exercised	(678,533)	2.25		
Options canceled	(1,375,261)	7.25		
Balance, December 31, 2015	6,543,162	$6.05	7.03	$6,570
Options exercisable, December 31, 2015	3,252,497	$4.33	5.74	$6,160
Options vested and expected to vest, December 31, 2015	6,145,853	$5.95	6.93	$6,548

The weighted average grant date fair value of options granted was $3.42, $5.01 and $4.86 per share for the year ended December 31, 2015, 2014 and 2013, respectively. The aggregate grant date fair value of the Company's stock options granted was $6.0 million, $6.2 million and $17.5 million for the year ended December 31, 2015, 2014 and 2013, respectively.
The aggregate intrinsic value of stock options exercised was $2.4 million, $6.7 million and $7.9 million for the year ended December 31, 2015, 2014 and 2013, respectively. The intrinsic value represents the difference between option exercise prices and (i) the estimated fair value of the Company’s common stock, prior to the IPO, (ii) or the closing stock price of the Company’s common stock, following the IPO.
The stock options outstanding and exercisable under its stock option plan as of December 31, 2015, are as follows:

	Options Outstanding			Options Vested and Exercisable	
Range of Exercise Prices	Number of Options Outstanding	Weighted Average Remaining Contractual Term (Years)	Weighted Average Exercise Price per Share	Number of Options Exercisable	Weighted Average Exercise Price per Share
$0.08 - $1.83	1,080,321	4.52	$1.00	1,077,605	$1.00
$2.05 - $5.61	918,658	7.19	2.90	584,886	2.15
$6.00	1,182,285	5.66	6.00	907,365	6.00
$6.09 - $6.85	245,000	9.60	6.28	—	—
$7.15	1,175,624	9.03	7.15	156,240	7.15
$7.48 - $11.31	1,941,274	7.64	9.68	526,401	9.87
	6,543,162	7.03	$6.05	3,252,497	$4.33

Restricted Stock Units
The Company currently grants Restricted Stock Units (RSUs) to certain employees and directors. The RSUs typically vest over a period of time, generally one year, two years or four years, and are subject to the participant’s continuing service to the Company over that period. Until vested, RSUs do not have the voting and dividend participation rights of common stock and the shares underlying the awards are not considered issued and outstanding.
The following is a summary of the Company’s RSU activity and related information for the year ended December 31, 2015:

	Restricted Stock Units Outstanding	
	Shares	Weighted Average Grant Date Fair Value Per Share
Balance, December 31, 2014	2,938,231	$7.03
Awards granted	3,318,015	6.45
Awards vested	(1,580,206)	$7.15
Awards canceled	(629,934)	$7.13
Balance, December 31, 2015	4,046,106	$6.49

The weighted average grant date fair value of RSUs granted was $6.45 and $7.16 per share for the year ended December 31, 2015 and 2014, respectively. The aggregate grant date fair value of RSUs granted for the year ended December 31, 2015 and 2014 was $21.4 million and $23.5 million, respectively. The aggregate fair value of shares vested as of the respective vesting dates, was $9.6 million and $0.9 million, respectively, for the year ended December 31, 2015 and 2014. No RSUs were granted and vested for the years ended December 31, 2013.

The number of RSUs vested includes shares that the Company withheld on behalf of employees to satisfy the minimum statutory tax withholding requirements. During the year ended December 31, 2015 and 2014, the Company withheld 523,366 and 65,221 shares of stock, respectively, for an aggregate value of $3.2 million and $0.3 million, respectively, from employees upon the vesting of their RSUs to satisfy the minimum statutory tax withholding requirement. Such shares were returned to the Company's 2014 Equity Incentive Plan and are available under the plan terms for future issuance.

2014 Employee Stock Purchase Plan

The 2014 Employee Stock Purchase Plan (ESPP) is a ten-year plan, effective in March 2014. The ESPP authorizes the issuance of shares of common stock pursuant to purchase rights granted to employees of the Company and its designated subsidiaries. In January 2015, the Company effected an increase of 230,681 the number of shares reserved under the ESPP. In May 2015, the Company's stockholders approved increasing by 2,000,000 the number of shares reserved under the ESPP. As of December 31, 2015, the Company had 1,804,669 total shares of common stock reserved for issuance under the ESPP. Under the ESPP, on the first day of each of fiscal years 2016 and 2017, the number of shares of common stock reserved and available for issuance may increase in an amount equal to the lesser of (i) 1,000,000 Shares, (ii) 2.0% of the Company's outstanding shares on the first day of the applicable fiscal year, or (iii) such number of shares determined by the board of directors. Beginning fiscal year 2018 through fiscal year 2023, the number of shares of common stock reserved for issuance may increase in an amount equal to the lesser of (i) 1,000,000 shares, (ii) 1.0% of the Company's outstanding shares on the first day of the applicable fiscal year, or (iii) such number of shares determined by the board of directors.

Under the ESPP, the Company grants stock purchase rights to all eligible employees, currently covering a two-year offering period, with purchase dates at the end of each interim six-month purchase period. Shares are purchased using employee payroll deductions at purchase prices equal to 85% of the lesser of the fair market value of the Company's common stock at either the first day of each offering period or the date of purchase. The ESPP has a reset provision. If the closing price of the Company's common stock on the last day of any purchase period during an offering period is lower than the closing sales price on the first day of the related offering period, the reference price for purposes of determining the purchase price of shares for subsequent purchase periods in the applicable offering period will be reset to such lower price. No participant may purchase more than $25,000 worth of common stock in any calendar year, or 5,000 shares of common stock in any six-month purchase period. For the year ended December 31, 2015, 1,226,012 shares of common stock were purchased under the ESPP at a weighted average purchase price of $4.24 per share. No shares were issued under the ESPP for the year ended December 31, 2014.

Determination of Fair Values

The Company determines the expected term of employee stock options using the simplified method as provided by the Securities and Exchange Commission. The simplified method is presumed to be the average of the time-to-vesting and the contractual life of the options. The expected term of ESPP is based on the contractual terms. Since the Company has not had sufficient public trading history of its common stock, the expected volatility is derived from the historical stock volatilities of the common stock of several publicly traded comparable companies over a period approximately equal to the expected term of the expected life of the options. The risk-free interest rate is based on the U.S. treasury yield curve in effect at the time of grant

for zero-coupon U.S. treasury notes with maturities equal to the option's expected term. The expected dividend is assumed to be zero as the Company has never paid dividends and has no current plans to do so.
Prior to the IPO, the fair value of the shares of common stock underlying the stock-based awards was historically determined by the board of directors, with input from management. Because there was no public market for the Company’s common stock, the board of directors determined the fair value of the common stock on the grant-date of the stock-based award by considering a number of objective and subjective factors, including valuations of comparable companies, sales of the Company’s convertible preferred stock to unrelated third parties, operating and financial performance, the lack of liquidity of the Company’s capital stock, and general and industry-specific economic outlook. Subsequent to the completion of the Company’s IPO on April 2, 2014, the fair value of common stock underlying stock-based awards is determined based on the closing stock price of the Company’s shares on the date of grant.
Weighted average assumptions for the Company's stock options granted were as follows:

	Year Ended December 31,					
	2015		2014		2013	
Stock options:						
Expected term (in years)	6.04		5.56		5.99	
Expected volatility	51	%	49	%	54	%
Risk free interest rate	1.75	%	1.85	%	1.48	%
Dividend rate	—		—		—	

Weighted average assumptions used to value employee stock purchase rights under the Black-Scholes model were as follows:

	Year Ended December 31,	
	2015	2014
ESPP purchase rights:		
Expected term (in years)	0.5 - 2.00	0.68 - 2.00
Expected volatility	35% - 55%	35% - 40%
Risk free interest rate	0.07% - 0.51%	0.08% - 0.49%
Dividend rate	—	—

Stock-based Compensation Expense
The total stock-based compensation the Company recognized for stock-based awards in the consolidated statements of operations is as follows:

	Year Ended December 31,		
	2015	2014	2013
	(in thousands)		
Cost of revenue	$902	$411	$64
Research and development	4,651	2,419	929
Sales and marketing	7,112	4,121	1,573
General and administrative	5,706	3,301	1,721
Total stock-based compensation	$18,371	$10,252	$4,287

The following table presents stock-based compensation expense by award-type:

	Year Ended December 31,		
	2015	2014	2013
	(in thousands)		
Stock Options	$4,733	$5,780	$4,287
Restricted Stock Units	11,652	3,188	—
Employee Stock Purchase Plan	1,986	1,284	—
Total stock-based compensation	$18,371	$10,252	$4,287

As of December 31, 2015, unrecognized stock-based compensation related to outstanding stock options, RSUs and ESPP purchase rights, net of estimated forfeitures, was $9.4 million, $20.3 million and $2.3 million, respectively, which the Company expects to recognize over weighted-average periods of 2.61 years, 2.77 years and 0.92 years, respectively. For the year ended December 31, 2015 and 2014, the Company capitalized $0.3 million and $0.4 million stock-based compensation expense to internal-use cloud services platform. There was no capitalized stock-based compensation expense for the year ended 2013.

9. NET LOSS PER SHARE

The Company calculates basic and diluted net loss per share of common stock allocable to common stockholders by dividing the net loss allocable to common stockholders by the weighted average number of common shares outstanding during the period. Diluted net loss per share of common stock is the same as basic net loss per share of common stock, since the effects of potentially dilutive securities are antidilutive. Upon completion of the IPO on April 2, 2014, all outstanding convertible preferred stock were converted to common stock and were included in the weighted average number of common shares used to compute net loss per share from the conversion date.

For the period prior to the conversion of convertible preferred stock, the Company calculated the net loss per share in conformity with the two-class method as all series of convertible preferred stock were considered participating securities because they were entitled to receive noncumulative dividends prior and in preference to any dividends on shares of common stock. Due to the Company’s net losses during that period, there was no impact on the earnings per share calculation in applying the two-class method since the participating securities have no legal requirement to share in any losses.

The following table presents the computation of basic and diluted net loss per share allocable to common stockholders:

	Year Ended December 31,		
	2015	2014	2013
	(in thousands, except for share and per share data)		
Numerator:			
Net loss	$(46,195)	$(30,555)	$(33,227)
Denominator:			
Weighted-average shares used to compute net loss per share, basic and diluted	47,323,253	36,097,405	6,866,839
Net loss per share:			
Basic and diluted	$(0.98)	$(0.85)	$(4.84)

The following period-end outstanding common stock equivalents were excluded from the computation of diluted net loss per share for the periods presented because including them would have been antidilutive:

	Year Ended December 31,		
	2015	2014	2013
Shares of common stock issuable under the Equity Incentive Plan	10,589,268	9,776,124	8,198,074
Common stock subject to repurchase	—	27,000	140,500
Common stock issuable upon exercise of warrants	73,883	107,876	477,050
Employee Stock Purchase Plan	133,113	106,184	—
Convertible preferred stock	—	—	28,466,379
Total	10,796,264	10,017,184	37,282,003

10. INCOME TAXES

The geographical breakdown of the Company's loss before income taxes for the year ended December 31, 2015, 2014 and 2013 is as follows:

	Year Ended December 31,		
	2015	2014	2013
	(in thousands)		
Domestic	$(39,635)	$(23,663)	$(26,461)
Foreign	(6,208)	(6,451)	(6,340)
Loss before income Taxes	$(45,843)	$(30,114)	$(32,801)

The components of the income tax provision are as follows:

	Year Ended December 31,		
	2015	2014	2013
	(in thousands)		
Current:			
State	$(39)	$93	$12
Federal	—	—	—
Foreign	638	337	375
Total current	$599	$430	$387
Deferred:			
State	$—	$(1)	$6
Federal	12	12	33
Foreign	(259)	—	—
Total deferred	$(247)	$11	$39
Total income tax provision	$352	$441	$426

The Company has intercompany services agreements with its subsidiaries located in the United Kingdom and China, which require payment for services rendered by these subsidiaries at an arm's-length transaction price. The foreign tax expense represents foreign income tax payable by these subsidiaries on profit generated on intercompany services agreements.

Undistributed earnings of our foreign subsidiaries were approximately $7.9 million, $4.1 million and $2.7 million as of December 31, 2015, 2014 and 2013, respectively, and are considered to be permanently reinvested outside of the United States, and no U.S. income taxes have been provided for on these earnings.

The reconciliation of federal statutory income tax provision to the Company’s effective income tax provision is as follows:

	Year Ended December 31,		
	2015	2014	2013
	(in thousands)		
U.S. federal taxes at statutory tax rate	$(15,587)	$(10,239)	$(11,152)
State taxes, net of federal benefit	(26)	61	12
Change in valuation allowance	12,309	6,662	7,624
Foreign tax rate differential	2,752	2,509	2,530
Warrant revaluation	—	(31)	757
Stock-based compensation	1,775	2,025	1,198
Tax credits	(785)	(627)	(906)
Other	(86)	81	363
Provision for income taxes	$352	$441	$426

Foreign tax rate differential is primarily due to losses incurred in foreign jurisdictions that are subject to tax rates that are lower than the United States tax rate.

The tax effects of temporary differences that give rise to significant components of our deferred tax assets for federal and state income taxes are as follows:

	As of December 31,	
	2015	2014
	(in thousands)	
Deferred tax assets:		
Net operating loss carryforwards	40,357	36,626
Research and development credits	5,192	4,720
Accruals and reserves	3,044	1,304
Deferred revenue	10,068	3,558
Stock-based compensation	2,290	1,510
Other	440	