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

Form 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2017

OR

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

For the transition period from __________ to __________

001- 37582
(Commission File No.)

ADESTO TECHNOLOGIES CORPORATION

(Exact name of Registrant as specified in its charter)

Delaware **(State or other jurisdiction of incorporation or organization)**	**16-1755067** **(I.R.S. Employer Identification No.)**
3600 Peterson Way **Santa Clara, California** **(Address of principal executive offices)**	**95054** **(Zip Code)**

(408) 400-0578
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Common Stock, par value $0.0001 per share	The NASDAQ Stock Market LLC

Securities registered pursuant to Section 12(g) of the Act:
None

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

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 (Exchange Act) 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 ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, 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 if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

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

Large accelerated filer	☐		Accelerated filer	☒
Non-accelerated filer	☐	(Do not check if a smaller reporting Company)	Smaller reporting company	☐
			Emerging growth company	☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☒

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The aggregate market value of voting stock held by non-affiliates of the Registrant on June 30, 2017, based on the closing price of $4.55 for shares of the Registrant's common stock as reported by The Nasdaq Capital Market, was approximately $80.0 million. Shares of common stock held by each executive officer, director and their affiliated holders have been excluded on the grounds that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes. The registrant has no non-voting common equity.

As of February 20, 2018, there were 21,393,777 shares of the Registrant's Common Stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

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PART I

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This report contains forward-looking statements. All statements contained in this report other than statements of historical fact, including statements regarding our future results of operations and financial position, our business strategy and plans and our objectives for future operations, are forward-looking statements. The words “believe,” “may,” “will,” “potentially,” “estimate,” “continue,” “anticipate,” “intend,” “could,” “would,” “project,” “plan,” “expect,” “seek” and similar expressions are intended to identify forward-looking statements. We have based these forward-looking statements largely on our current expectations and projections about future events and trends that we believe may affect our financial condition, results of operations, business strategy, short-term and long-term business operations and objectives and financial needs. These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including those described in the “Risk Factors” section and elsewhere in this report. Moreover, we operate in a very competitive and rapidly changing environment, and new risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this report may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements.

You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee that the future results, levels of activity, performance or events and circumstances reflected in the forward-looking statements will be achieved or occur. We undertake no obligation to update publicly any forward-looking statements for any reason after the date of this report to conform these statements to actual results or to changes in our expectations, except as required by law.

As used in this report, the terms “Adesto,” “we,” “us,” and “our” mean Adesto Technologies Corporation and its subsidiaries unless the context indicates otherwise.

ITEM 1. BUSINESS

Overview

We are a leading provider of application-specific, ultra-low power non-volatile memory, or NVM, products. We optimize our NVM products for Internet of Things, or IoT, applications including current and next-generation Internet-connected devices in the consumer, industrial, medical and wearables markets. We combine our NVM design capabilities with proprietary intellectual property and differentiated technology platforms to deliver high-performance products that dramatically reduce the overall energy consumption of our customers' systems and extend battery life. Our products feature embedded intelligence in a small form factor and high reliability.

We sell our products directly to leading original equipment manufacturers and original design manufacturers, or OEMs and ODMs, respectively, that manufacture products for our end customers. In general, we work directly with our customers to have our NVM devices designed into and qualified for their products, which we refer to as design wins. Although we maintain direct sales, support and development relationships with our end customers, most of our products are sold to those end customers through distributors.

We were originally incorporated in California in January 2006, and reincorporated in Delaware in October 2015. We completed our initial public offering, or IPO, of common stock in October 2015.Our principal executive offices are located at 3600 Peterson Way, Santa Clara, California 95054 and our telephone number is (408) 400-0578. Our website is www.adestotech.com. The contents of our website are not incorporated into, or otherwise to be regarded as part of, this Annual Report on Form 10-K.

Our Products

We offer six product families, DataFlash, Fusion Serial Flash, Standard Serial Flash, EcoXiP, Mavriq and Moneta, which are manufactured using two technology platforms: industry-standard "floating gate" technology and our proprietary Conductive Bridging Random Access Memory, or CBRAM, technology. We optimize our products to operate at a wide voltage range, allowing continued operation even as the battery discharges and reaches very low power levels, where commodity NVM devices typically fail. Operating intelligence, such as low power mode, is designed into our products to help systems save energy. Our products allow for greater storage efficiency than competing commodity NVM products in logging small packets of data for the IoT. This reduces microcontroller unit burden on system resources and allows for less frequent re-write cycles, enabling dramatic increases in battery life and enhancing the reliability of the flash memory components. By incorporating power management features in our NVM products, we enable our customers to reduce the number of included components and the overall footprint of their systems, thereby lowering the total cost of their systems. Some of our new products can significantly improve system performance and power consumption by enabling the use of intelligent design to accelerate data handling capability between microprocessor and memory components.

Product Families

DataFlash. Our DataFlash family of NVM products contains smart features that reduce power requirements and improve system efficiencies, and is especially well suited for data-logging applications, such as industrial automation, home automation sensing and health and fitness tracking.

Fusion Serial Flash. Our Fusion Serial Flash product family combines industry-standard sector sizes and read/write commands with new features, such as wide voltage, ultra-deep power down mode and flexible erase capability. The Fusion Serial Flash family of memory products is designed for use in a wide variety of high-volume consumer applications, such as wearables, mobile and other applications requiring energy conservation and in which program code is copied from flash into embedded RAM for execution. Its features can extend the life of battery-operated devices, such as Bluetooth 4.0 products, DECT ULE (Ultra Low Energy) products, ZigBee RF4CE, Z-Wave and other Wi-Fi and Wi-Fi-direct applications.

Key features provided by our DataFlash and Fusion Serial Flash product families include ultra-deep power down, which assists in system-level energy savings, and wide supply voltage range operation, which can maximize battery life. Our DataFlash product family also has byte-write capability, which enables management of the NVM system resources with a much simpler stack and allows for a smaller software footprint in the controller's Static Random Access Memory, or SRAM, making more resources available for higher priority operations and lowering energy consumption.

EcoXiP. Our EcoXiP product family is a new generation of non-volatile memory products ideal for execute-in-place applications in embedded IoT systems. EcoXiP enables improved processor performance, and reduced system power consumption. Features such as a high-speed octal double data rate, or DDR, interface and a proprietary pre-fetching scheme optimize both throughput and latency and allow the microprocessor to operate more efficiently with our EcoXiP memory. Our EcoXiP also features the ability to perform concurrent read and write functions, further improving system performance. EcoXiP products also offer designers flexibility for future growth, by providing a roadmap for higher density memory to store additional code and have best-in-class power management features to improve device and system power consumption.

Standard Serial Flash. The Standard Serial Flash is a high quality non-volatile memory product family with industry standard features to store boot or program code with a low pin count industry standard serial interface. A wide range of densities from 4Mb to 128Mb devices operating at either 3V or 1.8V is available for this product family. Adesto's Standard Serial Flash products are used in a variety of applications ranging from smart home applications to industrial applications demanding reliability, quality and performance.

Mavriq. Our Mavriq family of memory products provides robust, embedded or stand-alone storage technology. These products are built on our CBRAM architecture and feature wide voltage range operation, low energy write and ultra-fast write speeds, enabling extended battery life in connected devices and other energy-conscious applications. Our specialty Mavriq medical products are specifically designed to survive the extreme conditions of sterilization. They have passed both gamma and e-beam sterilization testing and are compatible across the sterilization conditions of heat, pressure and irradiation. With functional and electrical compatibility with competing serial memory products, our low-energy Mavriq memory solutions are well matched to the new design requirements of IoT and other applications such as camera sensors, Bluetooth low energy devices, wearables, gaming components, printer cartridges, medical equipment and other devices that leverage its unique capabilities.

Moneta. With the ability to read and write at 50-100x lower power than comparable memory products, the Moneta family of memory products meets the requirements of new, ultra-low energy IoT electronics and enables applications in innovative energy harvesting and other low energy system designs. By consuming less energy during standard operation, these products can extend battery life and/or allow customers flexibility to use smaller batteries to power their systems. In addition to their inherent low power technology capability, Moneta products are built on our CBRAM architecture and employ innovative features to save energy, automatically switching to deep power down between transactions, and providing an ultra-deep power down mode. Our Moneta products make energy efficient battery-operated and battery-free designs possible, by enabling the lowest power read, write and standby NVM operations. Applications for these products include retail beacons, wearable medical and fitness devices, industrial and environmental sensors, agricultural monitors and other extreme low energy/long battery life, or energy harvesting systems.

Our Technology

Our product families are based on multiple layers of innovation and differentiation arising from feature sets and architectures that are built on two fundamental silicon technology platforms: industry-standard floating gate and our proprietary CBRAM. We believe these areas of differentiation enable us to address the specific needs of the IoT market.

We offer more than 100 products across our product families. Each product family utilizes technologies that differentiate it from competing commodity products and provides value to our customers.

Key components of our DataFlash and Fusion Serial Flash architectures include small page write operation, auto-erase and ultra-deep power down modes to reduce standby energy consumption. Both families also include wide voltage input-output interface, which helps extend battery life. In addition, our DataFlash family incorporates dual SRAM, buffers that enable utilization of a single, very low pin-count memory device for all NVM needs related to data and code storage, reducing the overall required footprint of the system.

Key components of our EcoXiP architecture include a high-speed octal DDR interface and a proprietary pre-fetching scheme to optimize both throughput and latency and allow the microprocessor to operate more efficiently. EcoXiP also features the ability to perform concurrent read and write functions to improve system performance. EcoXiP also includes configurable strength input/output pins and a range of power management features to enable reduced device and system power consumption.

Key components of our Mavriq and Moneta architectures include low-energy read and ultra-fast direct write capability and the ability to switch to deep power down between transactions to extend battery life. In addition, the Moneta memory products' low power capability is ideal for energy harvesting applications.

Customers

Our end customers include leading tier-1 OEMs and ODMs that use our products across multiple industries and applications, including next-generation Internet-connected appliances, wearables, smart meters, sensors and medical devices. We have also secured a number of reference design wins for Bluetooth 4.0 and Z-Wave products for Home Automation applications. During the year ended December 31, 2017, more than 2,000 end customers purchased our products. We generate most of our revenue from sales of our products to two independent, non-exclusive distributors, which many of our end customers use as an alternative means of fulfillment to direct purchases from us. For the year ended December 31, 2017, sales of our products to Arrow Electronics and SAS Electronic Company accounted for approximately 18% and 10%, respectively, of our revenue. For the year ended December 31, 2016, sales of our products to Arrow Electronics and SAS Electronic Company accounted for approximately 14% and 11%, respectively, of our revenue. For the year ended December 31, 2015, sales of our products to Arrow Electronics, SAS Electronic Company, and Avnet Inc. accounted for approximately 17%, 12% and 11%, respectively, of our revenue. While no end customers accounted for 10% or more of our revenue in 2017 through direct sales, one end customer accounted for 10% or more of our revenue in 2016 and 2015 through sales to distributors. A majority of our revenue for the year ended December 31, 2017 was generated by approximately 45 end customers.

Sales

We sell our products through our worldwide sales organization and through our channel of representatives and distributors to OEMs and ODMs. End customers primarily fulfill and procure product orders through our distribution partners. We have sales personnel covering three primary regions, the Americas, Asia Pacific and Europe, Middle East and Africa.

Manufacturing

We employ a fabless manufacturing business model and rely on third-party suppliers for all phases of the manufacturing process, including fabrication, assembly and testing. Our fabless business model allows us to leverage the expertise of industry-leading suppliers in such areas as fabrication, assembly, quality control and assurance, reliability and testing, and avoid the significant costs and risks associated with owning and operating such manufacturing operations. These suppliers also are responsible for procurement of raw materials used in the production of our products. As a result, we are able to focus our resources on product design, additional quality assurance, marketing and customer support.

We do not have a guaranteed level of production capacity from any of our suppliers' facilities for the production of our products. We carefully qualify each of our suppliers and their subcontractors and processes to ensure they meet our standards for quality and reliability.

Wafer Fabrication

We currently manufacture the majority of our floating gate solutions in 110nm silicon wafer production process geometries utilizing the services of United Microelectronics Corporation in Taiwan. In early 2015, we commenced developing our first floating gate technology-based flash products in a 65nm process node at XMC, a foundry in Wuhan, China. Our CBRAM-based products are manufactured in 130nm silicon wafer production process geometries by Altis Semiconductor S.N.C., or Altis, in Corbeil-Essonnes, France (acquired by X-FAB Silicon Foundries in 2016). In February 2016, we entered into an agreement with TowerJazz Panasonic Semiconductor Company, or (TPSCo), to manufacture our 45 nm CBRAM products at TPSCo's 300 nm fabrication facility in Hokuriku, Japan which was subsequently amended in November 2016, February 2017 and December 2017.

Assembly, Testing and Wafer Probe

We maintain multiple sources for assembly and final testing of our products. Amkor Technology, Inc. in Taiwan, Korea and the Philippines as well as Greatek Electronics Inc. in Taiwan currently provide substantially all of our assembly and final test services. Our wafer probing is performed by King Yuan Electronics Co., Ltd. in Taiwan. We continually monitor the manufacturing and testing of our products at all of our contractors to ensure that our manufacturing and testing procedures are properly implemented. As part of our total quality assurance program, our quality management system has been certified to ISO 9001:2008 standards. Our foundry, assembly and test vendors are also ISO 9001 certified.

Research and Development

We believe that our continued success depends on our ability to both introduce improved versions of our existing solutions and to develop new solutions for the markets that we serve. Through our research and development efforts, we intend to continually expand our portfolio of patents to enhance our intellectual property position. As of December 31, 2017, we had a core team of 49 engineers involved in research and development primarily located in our research and development design center at our headquarters in Santa Clara, California. For the years ended December 31, 2017, 2016 and 2015, our research and development expense was $14.1 million, $15.9 million and $12.8 million, respectively.

Competition

We operate in the highly competitive global semiconductor market in general and the semiconductor memory market in particular. We expect competition to increase and intensify as more and larger semiconductor companies enter our markets. Increased competition could result in price pressure, reduced profitability and loss of market share, any of which could materially and adversely affect our business, revenue and operating results.

Currently, our competitors range from large, international companies offering a wide range of commodity NVM products to companies specializing in other alternative, specialized emerging memory technologies. Our primary competitors in the NVM market include Macronix International Co. Ltd., Micron Technology, Inc., Cypress Semiconductor Corporation, Winbond Electronics Corp., and several China based suppliers who primarily cater to the local markets. Among these large memory suppliers, we compete primarily on an overall value proposition and not on a product or technology basis. We expect competition in our current markets to increase in the future as existing competitors improve or expand their product offerings and as new companies enter these markets.

Our ability to compete successfully depends on elements both within and outside of our control, including industry and general economic trends. Many of our competitors are substantially larger, have greater financial, technical, marketing, distribution, customer support and other resources, are more established than we are, and have significantly better brand recognition and broader product offerings which may enable them to better withstand adverse economic or market conditions in the future.

Our ability to compete successfully in the rapidly evolving memory market depends on several factors, including:

- performance of our products, as measured by speed;
- energy consumption of our products;
- the ease of implementation of our products by customers;
- the strength of customer relationships;
- reputation and reliability;
- customer support;

- our products' cost effectiveness for the total solution relative to that of our competitors;
- our success in designing and manufacturing new products that anticipate the memory and integration needs of our customers' current and future products and applications; and
- the design, manufacture, commercialization and market adoption of our CBRAM technology that anticipate the power, performance, reliability and integration needs of our customers' next-generation and application-specific products and applications.

We believe we compete favorably with respect to each of these factors.

Intellectual Property

Our success depends in part on our ability to protect our products and technologies from unauthorized third-party copying and use. To accomplish this, we rely on a combination of intellectual property rights, including patents, trade secrets, copyrights and trademarks, as well as customary contractual protections. As of December 31, 2017, we held 121 patents that expire at various times between June 2020 and March 2036 and had 18 U.S. patent applications pending. We also held 26 foreign patents that expire at various times between May 2021 and July 2032 and had 32 foreign patent applications pending.

We seek to file for patents that have broad application in the semiconductor industry and that would provide a competitive advantage. However, there can be no assurance that our pending patent application or any future applications will be approved, that any issued patents will provide us with competitive advantages or will not be challenged by third parties, or that the patents of others will not have an adverse effect on our ability to do business. In addition, there can be no assurance that others will not independently develop substantially equivalent intellectual property or otherwise gain access to our trade secrets or intellectual property, or disclose such intellectual property or trade secrets, or that we can effectively protect our intellectual property.

In addition to the intellectual property that we developed, we have acquired and licensed technology from third parties for incorporation in our products. In January 2007, we entered into a license agreement with Axon Technologies Corp. Pursuant to this license agreement, we have rights in Axon's patents and trade secrets covering, among other things, Axon's programmable metallization cell, or PMC, technology, which is a component of our CBRAM technology. This license provides us with broad rights to use and sub-license this technology, and we have the exclusive right to make, have made by authorized foundries or integrated device manufacturers, use, sell, lease, offer for sale, and import products covered by Axon's licensed patents and trade secrets in certain fields of use. The license will last for the lifetime of the licensed patents, which currently ends in September 2026. We pay a royalty for use of the licensed intellectual property in our products. In July 2012, we purchased certain flash memory product assets from Atmel Corporation. As part of the asset purchase, Atmel granted us non-exclusive, perpetual and irrevocable licenses to its patent portfolio for development of flash memory products. In December 2017, we entered into a license agreement with TowerJazz Panasonic Semiconductor Company. The license is for two years and is a non-exclusive, non-transferable, non-assignable license to use and evaluate certain TowerJazz technologies.

Employees

As of December 31, 2017, we had 102 employees. Of these full-time employees, 49 were engaged in research and development, 34 in sales and marketing, nine in operations and support and 10 in general and administrative capacities. The substantial majority of our employees are based in the United States, although we have small numbers of personnel in Europe and Asia. None of our employees are represented by a labor union. We have not experienced any work stoppages. We consider our relations with our employees to be good.

Financial Information about Segments and Geographic Areas

We manage our operations and allocate resources as a single reporting segment. Financial information about our segment and geographic areas is incorporated herein by reference to Note 7 of Notes to Consolidated Financial Statements under Part II, Item 8. In addition, financial information regarding our operations, assets and liabilities, including our revenue and net loss for the years ended December 31, 2017, 2016, and 2015 and our total assets as of December 31, 2017 and 2016, is included in our Consolidated Financial Statements in Part II, Item 8 of this Annual Report on Form 10-K.

Available Information

We make available our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934, as amended, free of charge on our website at www.adestotech.com, as soon as reasonably practicable after they are electronically filed with or furnished to the Securities and Exchange Commission or SEC. Additionally, copies of materials filed by us with the SEC may be accessed at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549 or at www.sec.gov. For information about the SEC's Public Reference Room, contact 1-800-SEC-0330.

The contents of the websites referred to above are not incorporated into this report. Further, our references to the URLs for these websites are intended to be inactive textual references only.

ITEM 1A. RISK FACTORS

An investment in our common stock involves a high degree of risk. You should carefully consider the risks and uncertainties described below, together with all of the other information in this Annual Report on Form 10-K, including the *section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and related notes, before making a decision to invest in our common stock. Our business, operating results, financial condition, or prospects could be materially and adversely affected by any of these risks and uncertainties. If any of these risks actually occurs, the trading price of our common stock could decline and you might lose all or part of your investment. Our business, operating results, financial performance, or prospects could also be harmed by risks and uncertainties not currently known to us or that we currently do not believe are material.*

Risks Related to Our Business and Our Industry

We have a history of losses which may continue in the future, and we cannot be certain that we will achieve or sustain profitability.

We have incurred net losses since our inception. We incurred net losses of $5.7 million, $11.6 million, and $8.4 million for the years ended December 31, 2017, 2016 and 2015, respectively. As of December 31, 2017, we had an accumulated deficit of $99.8 million. We expect to incur significant expenses related to the continued development and expansion of our business, including in connection with our efforts to pursue opportunities in emerging IoT markets, develop and improve upon our products and technology, maintain and enhance our research and development and sales and marketing activities and hire additional personnel. Further, revenue may not grow or revenue may decline for a number of possible reasons, many of which are outside our control, including a decline in demand for our products, increased competition, business conditions that adversely affect the semiconductor memory industry, including reduced demand for products in the end markets that we serve, or our failure to capitalize on growth opportunities. If we fail to generate sufficient revenue to support our operations, we may not be able to achieve or sustain profitability.

We rely on third parties to manufacture, package, assemble and test the semiconductor components comprising our products, which exposes us to a number of risks, including reduced control over manufacturing and delivery timing and potential exposure to price fluctuations, which could result in a loss of revenue or reduced profitability.

As a fabless semiconductor company, we outsource the manufacturing, packaging, assembly and testing of our semiconductor components to third-party foundries and assembly and testing service providers. We use two foundries, United Microelectronics Corporation in Taiwan and XMC in Wuhan, China, for the production of our flash memory products and a single foundry, Altis Semiconductor S.N.C. in France (acquired by X-FAB Silicon Foundries in 2016), for our Mavriq and Moneta products. Our primary assembly and testing contractor in 2017 was Amkor Technology, Inc. in Taiwan, Korea and the Philippines. Our wafer probing is performed by King Yuan Electronics Co., Ltd. in Taiwan.

Relying on third-party manufacturing, assembly and testing presents a number of risks, including but not limited to:

- capacity and materials shortages during periods of high demand;
- reduced control over delivery schedules, inventories and quality;
- the unavailability of, or potential delays in obtaining access to, key process technologies;
- the inability to achieve required production or test capacity and acceptable yields on a timely basis;
- misappropriation of our intellectual property;
- the third parties' ability to perform its obligations due to bankruptcy or other financial constraints;
- limited warranties on wafers or products supplied to us; and
- potential increases in prices.

Any of the foregoing risks may affect our ability to meet customer demand. For example, a former silicon wafer supplier suddenly declared bankruptcy in December 2013 and abruptly shut down its foundry. As a result, we were unable to fulfill a portion of our customers' orders in 2014 while we transitioned wafer production to a new foundry. Based on the average selling prices then in effect for those wafers, we estimate that the potential loss of revenue exceeded $10.0 million.

We currently do not have long-term supply contracts with our third-party contract manufacturers for the manufacture, package, assembly and test of our products. Therefore, they are not obligated to perform services or supply components to us for any specific period, in any specific quantities, or at any specific price, except as may be provided in a particular purchase order. During periods of high demand and tight inventories, our third-party foundries and assembly and testing contractors may allocate capacity to the production of other companies' components while reducing deliveries to us, or significantly raise their prices. In particular, they may allocate capacity to other customers that are larger and better financed than us or that have long-term agreements, decreasing the capacity available to us. Shortages of capacity available to us may be caused by the actions of their other, large customers that may be difficult to predict, such as major product launches. If we need other foundries or assembly and test contractors because of increased demand, or if we are unable to obtain timely and adequate deliveries from our providers, we might not be able to cost-effectively and quickly retain other vendors to satisfy our requirements. Because the lead-time needed to establish a relationship with a new third-party supplier could be several quarters, there is no readily available alternative source of supply for any specific component. In addition, the time and expense to qualify a new foundry could result in additional expense, diversion of resources or lost sales, any of which would negatively impact our financial results.

In the event that we expand production of a component to include a new contract manufacturer, it may take approximately 18 to 24 months to allow a transition from our current foundry or assembly services provider to the new provider. We may experience difficulty migrating production to a new contract manufacturer and, consequently, may experience reduced yields, delays in component deliveries and increased research and development expense. The inability by us or our third-party manufacturers to effectively and efficiently transition our technology to their infrastructure may adversely affect our operating results and our gross margin. There can be no assurance that we will be able to find suitable replacements for our third-party contract manufacturers.

If any of our current or future foundry partners or assembly and test subcontractors significantly increases the costs of wafers or other materials, interrupts or reduces our supply, including for reasons outside of their control, or if any of our relationships with our suppliers is terminated, our operating results could be adversely affected. During 2017, one of our foundry partners increased the costs of wafers to us. Although such increase did not have a material impact on our results of operations for the year ended December 31, 2017 and is not expected to have a material impact in the near term, there can be no assurances that additional increases will not have a material adverse impact on our future operating results. Such increases could also damage our customer relationships, result in lost revenue, cause a loss in market share or damage our reputation.

We may be unable to match production with customer demand for a variety of reasons including our inability to accurately forecast customer demand or the capacity constraints of contract manufacturers, which could adversely affect our operating results.

We make planning and spending decisions, including determining production levels, production schedules, component procurement commitments, personnel needs and other resource requirements, based on our estimates of product demand and customer requirements. Our products are typically purchased pursuant to individual purchase orders. While our customers may provide us with their demand forecasts, they are not contractually committed to buy any quantity of products beyond purchase orders. Furthermore, many of our customers may increase, decrease, cancel or delay purchase orders already in place without significant penalty. The short-term nature of commitments by our customers and the possibility of unexpected changes in demand for their products reduce our ability to accurately estimate future customer requirements. On occasion, customers may require rapid increases in production, which can strain our resources, necessitate more onerous procurement commitments and reduce our gross margin. If we overestimate customer demand, we may purchase products that we may not be able to sell, which could result in decreases in our prices or write-downs of unsold inventory. Conversely, if we underestimate customer demand or if sufficient manufacturing capacity was unavailable, we would lose sales opportunities and could lose market share or damage our customer relationships. The rapid pace of innovation in our industry could also render significant portions of our inventory obsolete. Excess or obsolete inventory levels could result in unexpected expenses or write-downs of inventory values that could adversely affect our business, operating results and financial condition.

Our quarterly operating results or other operating metrics may fluctuate significantly, which could cause the trading price of our common stock to decline.

Our quarterly operating results and other operating metrics have fluctuated in the past and may continue to fluctuate from quarter to quarter. We expect that this trend will continue as a result of a number of factors, many of which are outside of our control and may be difficult to predict, including:

- the receipt, reduction, delay or cancellation of orders by large customers;
- the gain or loss of significant customers and distributors;
- the timing and success of our launch of new or enhanced products and those of our competitors;
- market acceptance of our products and our customers' products;
- the level of growth or decline in the IoT market;
- the timing and extent of research and development and sales and marketing expenditures;
- the amount and timing of operating expenses related to the maintenance and expansion of our business, operations and infrastructure;
- changes in our product mix;
- our ability to reduce the manufacturing costs of our products;
- competitive pressures resulting in lower than expected average selling prices;
- fluctuations in sales by and inventory levels of OEMs and ODMs who incorporate our memory products in their products;
- cyclical and seasonal fluctuations in our markets;
- fluctuations in the manufacturing yields of our third-party contract manufacturers;
- events that impact the availability of production capacity at our third-party subcontractors and other interruptions in the supply chain including due to geopolitical events, natural disasters, materials shortages, bankruptcy or other causes;
- supply constraints for and changes in the cost of the other components incorporated into our customers' products;
- the timing of expenses related to the acquisition of technologies or businesses;

- product rates of return or price concessions in excess of those expected or forecasted;
- costs associated with the repair and replacement of defective products;
- unexpected inventory write-downs or write-offs;
- costs associated with litigation over intellectual property rights and other litigation;
- the length and unpredictability of the purchasing and budgeting cycles of our customers;
- loss of key personnel or the inability to attract qualified engineers; and
- geopolitical events, such as war, threat of war or terrorist actions, or the occurrence of natural disasters.

Any one of the factors above or the cumulative effect of some of the factors above may result in significant fluctuations in our operating results.

The semiconductor memory industry is highly cyclical and our markets may experience significant cyclical fluctuations in demand as a result of changing economic conditions, budgeting and buying patterns of customers and others factors. As a result of these and other factors affecting demand for our products and our results of operations in any given period, the results of any prior quarterly or annual periods should not be relied upon as indicative of our future revenue or operating performance. Fluctuations in our revenue and operating results could also cause our stock price to decline.

The market for semiconductor memory products is characterized by declines in average selling prices, which we expect to continue, and which could negatively affect our revenue and margins.

Our customers expect the average selling price of our products to decrease year-over-year and we expect this trend to continue. When such pricing declines occur, we may not be able to mitigate the effects by selling more or higher margin units, or by reducing our manufacturing costs. In such circumstances, our operating results could be materially and adversely affected. Our products have experienced declining average selling prices over their life cycle. The rate of decline may be affected by a number of factors, including relative supply and demand, the level of competition, production costs and technological changes. As a result of the decreasing average selling prices of our products following their launch, our ability to increase or maintain our margins depends on our ability to introduce new or enhanced products with higher average selling prices and to reduce our per-unit cost of sales and our operating costs. We may not be able to reduce our costs as rapidly as companies that operate their own manufacturing, assembly and testing facilities, and our costs may even increase because we do not operate our own manufacturing, assembly or testing facilities, which could also reduce our gross margins. In addition, our new or enhanced products may not be as successful or enjoy as high margins as we expect. If we are unable to offset any reductions in average selling prices by introducing new products with higher average selling prices or reducing our costs, our revenue and margins will be negatively affected and may decrease.

The semiconductor memory market is highly cyclical and has experienced severe downturns in the past, generally as a result of wide fluctuations in supply and demand, constant and rapid technological change, continuous new product introductions and price erosion. During downturns, periods of intense competition, or the presence of oversupply in the industry, the selling prices for our products may decline at a high rate over relatively short time periods as compared to historical rates of decline. We are unable to predict selling prices for any future periods and may experience unanticipated, sharp declines in selling prices for our products.

Our prospects for growth depend on the growth and development of the emerging IoT industry, and if the market does not develop as we expect, our business prospects may be harmed.

Our products are increasingly being utilized in IoT edge devices. The IoT industry is nascent and is characterized by rapidly changing technologies, devices and connectivity requirements, evolving industry standards and changing customer demands. The continued development of IoT depends in part on significant growth in the number of connected devices. Such growth is affected by various factors, including the continued growth in the use of mobile operator networks and the Internet to connect an increasing number and variety of devices, price reductions for key hardware and software components, innovation of other components of the IoT nodes toward low-power formats, and the continued development of IoT standards and protocols. Without these continued developments, IoT might not gain widespread market acceptance and our business could suffer. Security and privacy concerns, evolving business practices and consumer preferences may also slow the growth and development of IoT. Because our revenue growth ultimately depends upon the success of IoT, our business may suffer as a result of slowing or declining growth in IoT adoption. Even if the IoT industry does develop, we may not be well positioned or able to penetrate and capitalize on this new market. As a result of these factors, the future revenue and income potential of our business is uncertain.

The markets for our products are evolving, and changing market conditions, such as the introduction of new technologies or changes in customer preferences, may negatively affect demand for our products. If we fail to properly anticipate or respond to changing market conditions, our business prospects and results of operations will suffer.

The NVM industry is subject to constant and rapid changes in technology, frequent new product introductions, short product life cycles, rapid product obsolescence and evolving technical standards. New technologies may be introduced that make the current technologies on which our products are based less competitive or obsolete or require us to make changes to our technology that could be expensive and time consuming to implement. Due to the evolving nature of our markets, our future success depends on our ability to accurately anticipate and respond to changes in industry standards, technological requirements, customer and consumer preferences and other market conditions. Our technologies could become obsolete sooner than we expect because of faster than anticipated, or unanticipated, changes in one or more of the industry standards and technological requirements. We may be unable to develop and introduce new or enhanced technologies that satisfy customer requirements and achieve market acceptance in a timely manner or at all, succeed in commercializing the technologies on which we have focused our research and development expenditures to develop, and anticipate new industry standards and technological changes. If we fail to adapt successfully to technological changes or fail to obtain access to important new technologies, we may be unable to retain customers or attract new customers. Any decrease in demand for our products, or the need for low-power products in general, due to the emergence of competing technologies, changes in customer preferences and requirements or other factors, could adversely affect our business, results of operations and prospects.

We must continuously develop new and enhanced products, and if we are unable to successfully market our new and enhanced products for which we incur significant expenses to develop, our results of operations and financial condition will be materially adversely affected.

In order to compete effectively in our markets, we must continually design, develop and introduce new and improved products with improved features in a cost-effective manner in response to changing technologies and market demand. This requires us to devote substantial financial and other resources to research and development. We have developed and are continuing to develop next-generation products, such as our Mavriq and EcoXiP products, which we expect to be one of the drivers of our future revenue growth. However, we may not succeed in developing and marketing these new and enhanced products. We also face the risk that customers may not value or be willing to bear the cost of incorporating our new and enhanced products into their products, particularly if they believe their customers are satisfied with current solutions. Regardless of the improved features or superior performance of our new and enhanced products, customers may be unwilling to adopt our solutions due to design or pricing constraints, or because they do not want to rely on a single or limited supply source. Because of the extensive time and resources that we invest in developing new and enhanced products, if we are unable to sell customers new generations of our products, our revenue could decline and our business, financial condition, results of operations and cash flows would be negatively affected. For example, we generated limited revenue from sales of our Mavriq products to date. While we expect revenue from our Mavriq products to grow, we may not be able to materially increase our revenue from this product family. Similarly, any of our other next generation products or product families may not achieve market acceptance and contribute significantly to our revenue. If we are unable to successfully develop and market our new and enhanced products that we have incurred significant expenses developing, our results of operations and financial condition will be materially and adversely affected.

Our success and future revenue depend on our ability to secure design wins and on our customers' ability to successfully sell the products that incorporate our solutions. Securing design wins is a lengthy, expensive and competitive process, and may not result in actual orders and sales, which could cause our revenue to decline.

We sell to customers that incorporate our NVM into their products. A design win occurs after a customer has tested our product, verified that it meets the customer's requirements, qualified our solutions for their products and placed an order for the purchase of our products. Our customers may need several months to years to test, evaluate and adopt our product and additional time to begin volume production of the product that incorporates our solution. Due to this generally lengthy design cycle, we may experience significant delays from the time we increase our operating expenses and make investments in our products to the time that we generate revenue from sales of these products. Moreover, even if a customer selects our solution, we cannot guarantee that this will result in any sales of our products, as the customer may ultimately change or cancel its product plans, or efforts by our customer to market and sell its product may not be successful. We may not generate any revenue from design wins after incurring the associated costs, which would cause our business and operating results to suffer.

If a current or prospective customer designs a competitor's solution into its product, it becomes significantly more difficult for us to sell our solutions to that customer because changing suppliers involves significant time, cost, effort and risk for the customer even if our solutions remain compatible with their product design. If current or prospective customers do not include our solutions in their products and we fail to achieve a sufficient number of design wins, our results of operations and business may be harmed.

We rely on our relationships with OEMs and ODMs to enhance our solutions and market position, and our failure to continue to develop or maintain such relationships in the future would harm our ability to remain competitive.

We develop our products for leading OEMs and ODMs that serve a variety of end markets and are developing devices for wearables, sensors, Bluetooth 4.0 and other IoT applications. For each application, manufacturers create products that incorporate specialized semiconductor technology, which makers of memory products use as the basis for their products. These manufacturers set the specifications for many of the key components to be used on each generation of their products and, in the case of memory components, generally qualify only a few vendors to provide memory components for their products. As each new generation of their products is released, vendors are validated in a similar fashion. We must work closely with semiconductor manufacturers to ensure our products become qualified for use in their products. As a result, maintaining close relationships with leading product manufacturers that are developing devices for wearables, Bluetooth 4.0 and other IoT applications is crucial to the long-term success of our business. We could lose these relationships for a variety of reasons, including our failure to qualify as a vendor, our failure to demonstrate the value of our new solutions, declines in product quality, or if OEMs or ODMs seek to work with vendors with broader product suites, greater production capacity or greater financial resources. If our relationships with key industry participants were to deteriorate or if our solutions were not qualified by our customers, our market position and revenue could be materially and adversely affected.

Our business is dependent on selling through distributors.

Sales through distributors accounted for approximately 74% of our revenues in 2017. We do not have long-term agreements with our distributors, and we and our distributors may each terminate our relationship with little or no advance notice.

Any future adverse conditions in the U.S. or global economies or in the U.S. or global credit markets could materially impact the operations of our distributors. Any deterioration in the financial condition of our distributors or any disruption in the operations of our distributors could adversely impact the flow of our products to our end customers and adversely impact our results of operation. In addition, during an industry or economic downturn, it is possible there will be an oversupply of products and a decrease in demand for our products from our distributors, which could reduce our revenues in a given period. Violations of the Foreign Corrupt Practices Act and similar regulations, or similar laws, by our distributors could have a material adverse impact on our business.

Changes to industry standards and technical requirements relevant to our products and markets could adversely affect our business, results of operations and prospects.

Our products are only a part of larger electronic systems. All products incorporated into these systems must comply with various industry standards and technical requirements created by regulatory bodies or industry participants in order to operate efficiently together. Industry standards and technical requirements in our markets are evolving and may change significantly over time. For our products, the industry standards are developed by the Joint Electron Device Engineering Council, an industry trade organization. In addition, large industry-leading semiconductor and electronics companies play a significant role in developing standards and technical requirements for the product ecosystems within which our products can be used. Our customers also may design certain specifications and other technical requirements specific to their products and solutions. These technical requirements may change as the customer introduces new or enhanced products and solutions.

Our ability to compete in the future will depend on our ability to identify and comply with evolving industry standards and technical requirements. The emergence of new industry standards and technical requirements could render our products incompatible with products developed by other suppliers or make it difficult for our products to meet the requirements of certain of our customers in consumer, industrial, IoT and other markets. As a result, we could be required to invest significant time and effort and to incur significant expense to redesign our products to ensure compliance with relevant standards and requirements. If our products are not in compliance with prevailing industry standards and technical requirements for a significant period of time, we could miss opportunities to achieve crucial design wins, our revenue may decline and we may incur significant expenses to redesign our products to meet the relevant standards, which could adversely affect our business, results of operations and prospects.

If sales of our customers' products decline or if their products do not achieve market acceptance, our business and operating results could be adversely affected.

Our revenue depends on our customers' ability to commercialize their products successfully. The markets for our customers' products are extremely competitive and are characterized by rapid technological change. Competition in our customers' markets is based on a variety of factors including price, performance, product quality, marketing and distribution capability, customer support, name recognition and financial strength. As a result of rapid technological change, the markets for our customers' products are characterized by frequent product introductions, short product life cycles, fluctuating demand and increasing product capabilities. As a result, our customers' products may not achieve market success or may become obsolete. We cannot assure you that our customers will dedicate the resources necessary to promote and commercialize their products, successfully execute their business strategies for such products, or be able to manufacture such products in quantities sufficient to meet demand or cost-effectively manufacture products at a high volume. Our customers do not have contracts with us that require them to manufacture, distribute or sell any products. Moreover, our customers may develop internally, or in collaboration with our competitors, technology that they may utilize instead of the technology available to them through us. Our customers' failure to achieve market success for their products, including as a result of general declines in our customers' markets or industries, could negatively affect their willingness to utilize our products, which may result in a decrease in our revenue and negatively affect our business and operating results.

Our revenue also depends on the timely introduction, quality and market acceptance of our customers' products that incorporate our solutions. Our customers' products are often very complex and subject to design complexities that may result in design flaws, as well as potential defects, errors and bugs. We have in the past been subject to delays and project cancellations as a result of design flaws in the products developed by our customers. For example, in 2014, flaws in one of our customer's products that were unrelated to our memory solutions generated negative publicity for our customer and delayed the product's release until it could be redesigned. In the past, we have also been subject to delays and project cancellations as a result of changing market requirements, such as the customer adding a new feature, or because a customer's product fails their end customer's evaluation or field trial. Customer products may also be delayed due to issues with other vendors of theirs. We incur significant design and development costs in connection with designing our solutions for customers' products. If our customers discover design flaws, defects, errors or bugs in their products, or if they experience changing market requirements, failed evaluations or field trials, or issues with other vendors, they may delay, change or cancel a project. If we have already incurred significant development costs, we may not be able to recoup those costs, which in turn would adversely affect our business and financial results.

We face competition and expect competition to increase in the future. If we fail to compete effectively, our revenue growth and results of operations will be materially and adversely affected.

The global semiconductor market in general, and the semiconductor memory market in particular, are highly competitive. We expect competition to increase and intensify as other semiconductor companies enter our markets, many of which have greater financial and other resources with which to pursue technology development, product design, manufacturing, marketing and sales and distribution of their products. Increased competition could result in price pressure, reduced profitability and loss of market share, any of which could materially and adversely affect our business, revenue and operating results. Currently, our competitors range from large, international companies offering a wide range of semiconductor products to companies specializing in other alternative, specialized emerging memory technologies. Our primary competitors include Macronix International Co. Ltd., Micron Technology, Inc., Cypress Semiconductor Corporation, and Winbond Electronics Corp. In addition, as the IoT market opportunity grows, we expect new entrants will enter these markets and existing competitors, including leading semiconductor companies, may make significant investments to compete more effectively against our products. These competitors could develop technologies or architectures that make our products or technologies obsolete.

Our ability to compete successfully depends on factors both within and outside of our control, including:

- the functionality and performance of our products and those of our competitors;
- our relationships with our customers and other industry participants;
- prices of our products and prices of our competitors' products;
- our ability to develop innovative products;
- our ability to retain high-level talent, including our management team and engineers; and
- the actions of our competitors, including merger and acquisition activity, launches of new products and other actions that could change the competitive landscape.

Competition could result in pricing pressure, reduced revenue and profitability and loss of market share, any of which could materially and adversely affect our business, results of operations and prospects. In the event of a market downturn, competition in the markets in which we operate may intensify as our customers reduce their purchase orders. Our competitors that are significantly larger and have greater financial, technical, marketing, distribution, customer support and other resources or more established market recognition than us may be better positioned to accept lower prices and withstand adverse economic or market conditions.

Our customers require our products and our third-party contractors to undergo a lengthy and expensive qualification process. If we are unsuccessful or delayed in qualifying any of our products with a customer, our business and operating results would suffer.

Prior to selecting and purchasing our products, our customers typically require that our products undergo extensive qualification processes, which involve testing of our products in the customers' systems, as well as testing for reliability. This qualification process may continue for several months or years. However, obtaining the requisite qualifications for a memory product does not assure any sales of the product. Even after successful qualification and sales of a product to a customer, a subsequent revision in our third-party contractors' manufacturing process or our selection of a new contract manufacturer may require a new qualification process, which may result in delays and excess or obsolete inventory. After our products are qualified and selected, it can and often does take several months or more before the customer commences volume production of systems that incorporate our products. Despite these uncertainties, we devote substantial resources, including design, engineering, sales, marketing and management efforts, to qualify our products with customers in anticipation of sales. If we are unsuccessful or delayed in qualifying any of our products with a customer, sales of those products may be precluded or delayed, which may impede our growth and harm our business.

Our costs may increase substantially if our third-party manufacturing contractors do not achieve satisfactory product yields or quality.

The fabrication process is extremely complicated and small changes in design, specifications or materials can result in material decreases in product yields or even the suspension of production. From time to time, the third-party foundries that we contract to manufacture our products may experience manufacturing defects and reduced manufacturing yields related to errors or problems in their manufacturing processes or the interrelationship of their processes with our designs. In some cases, our third-party foundries may not be able to detect these defects early in the fabrication process or determine the cause of such defects in a timely manner.

Generally, in pricing our products, we assume that manufacturing yields will continue to improve, even as the complexity of our products increases. Once our products are initially qualified with our third-party foundries, minimum acceptable yields are established. We are responsible for the costs of the units if the actual yield is above the minimum. If actual yields are below the minimum we are not required to purchase the units. Typically, minimum acceptable yields for our new products are generally lower at first and gradually improve as we achieve full production. Unacceptably low product yields or other product manufacturing problems could substantially increase overall production time and costs and adversely impact our operating results. Product yield losses will increase our costs and reduce our gross margin. In addition to significantly harming our results of operations and cash flow, poor yields may delay shipment of our products and harm our relationships with existing and potential customers.

The complexity of our products may lead to errors, defects and bugs, which could negatively impact our reputation with customers and result in liability.

Products as complex as ours may contain errors, defects and bugs when first introduced to customers or as new versions are released. Our products have in the past experienced such errors, defects and bugs. Delivery of products with production defects or reliability, quality or compatibility problems could significantly delay or hinder market acceptance of the products or result in a costly recall and could damage our reputation and adversely affect our ability to retain existing customers and attract new customers. Errors, defects or bugs could cause problems with the functionality of our products, resulting in interruptions, delays or cessation of sales of these products to our customers. We may also be required to make significant expenditures of capital and resources to resolve such problems. We cannot assure you that problems will not be found in new products, both before and after commencement of commercial production, despite testing by us, our suppliers or our customers. Any such problems could result in:

- delays in development, manufacture and roll-out of new products;

- additional development costs;
- loss of, or delays in, market acceptance;
- diversion of technical and other resources from our other development efforts;
- claims for damages by our customers or others against us; and
- loss of credibility with our current and prospective customers.

Any such event could have a material adverse effect on our business, financial condition and results of operations.

We may experience difficulties in transitioning to new wafer fabrication process technologies or in achieving higher levels of design integration, which may result in reduced manufacturing yields, delays in product deliveries and increased expenses.

We aim to use the most advanced manufacturing process technology appropriate for our solutions that is available from our third-party foundries. As a result, we periodically evaluate the benefits of migrating our solutions to other technologies in order to improve performance and reduce costs. These ongoing efforts require us from time to time to modify the manufacturing processes for our products and to redesign some products, which in turn may result in delays in product deliveries. We may face difficulties, delays and increased expense as we transition our products to new processes, and potentially to new foundries. We will depend on our third-party foundries as we transition to new processes. We cannot assure you that our third-party foundries will be able to effectively manage such transitions or that we will be able to maintain our relationship with our third-party foundries or develop relationships with new third-party foundries. If we or any of our third-party foundries experience significant delays in transitioning to new processes or fail to efficiently implement transitions, we could experience reduced manufacturing yields, delays in product deliveries and increased expenses, any of which could harm our relationships with our customers and our operating results.

As smaller line width geometry manufacturing processes become more prevalent, we intend to move our future products to increasingly smaller geometries in order to reduce costs while integrating greater levels of functionality into our products. This transition will require us and our third-party foundries to migrate to new designs and manufacturing processes for smaller geometry products. We may not be able to achieve smaller geometries with higher levels of design integration or to deliver new integrated products on a timely basis. We periodically evaluate the benefits, on a product-by-product basis, of migrating to smaller geometry process technologies to reduce our costs and increase performance. We are dependent on our relationships with our third-party foundries to transition to smaller geometry processes successfully. We cannot assure you that our third-party foundries will be able to effectively manage any such transition. If we or our third-party foundries experience significant delays in any such transition or fail to implement a transition, our business, financial condition and results of operations could be materially harmed.

If we fail to retain qualified finance personnel and strengthen our financial reporting systems and infrastructure, we may not be able to timely and accurately report our financial results or comply with the requirements of being a public company, including compliance with the Sarbanes-Oxley Act and SEC reporting requirements.

Our ability to timely and accurately report our financial results or comply with the requirements of being a public company depends on our maintaining adequate numbers of accounting and finance staff with technical accounting, SEC reporting and Sarbanes-Oxley Act compliance expertise. Any inability to recruit or retain qualified accounting and finance staff would have an adverse impact on our ability to accurately and timely prepare our consolidated financial statements. We may be unable to hire qualified professionals with requisite technical and public company experience when and as needed. In addition, new employees will require time and training to learn our business and operating processes and procedures. If our finance and accounting organization is unable for any reason to respond adequately to the increased demands from being a public company, the quality and timeliness of our financial reporting may suffer, which could result in the identification of material weaknesses in our internal controls. Any consequences resulting from inaccuracies or delays in our reported financial statements could cause the trading price of our common stock to decline and could harm our business, operating results and financial condition.

If we fail to strengthen our financial reporting systems, infrastructure and internal control over financial reporting to meet the demands placed upon us as a public company, including the requirements of the Sarbanes-Oxley Act, we may be unable to report our financial results timely and accurately and prevent fraud. We expect to incur significant expense and devote substantial management effort toward ensuring compliance with Section 404.

A breach of our security systems may damage our reputation and adversely affect our business.

Our security systems are designed to protect our customers', suppliers' and employees' confidential information, as well as maintain the physical security of our facilities. We also rely on a number of third-party "cloud-based" service providers of corporate infrastructure services relating to, among other things, human resources, electronic communication services and some finance functions, and we are, of necessity, dependent on the security systems of these providers. Any security breaches or other unauthorized access by third parties to the systems of our cloud-based service providers or the existence of computer viruses in their data or software could expose us to a risk of information loss and misappropriation of confidential information. Accidental or willful security breaches or other unauthorized access by third parties to our information systems or facilities, or the existence of computer viruses in our data or software, could expose us to a risk of information loss and misappropriation of proprietary and confidential information belonging to us, our customers or our suppliers. Any theft or misuse of this information could result in, among other things, unfavorable publicity, damage to our reputation, difficulty in marketing our products, allegations by our customers that we have not performed our contractual obligations, litigation by affected parties and possible financial obligations for liabilities and damages related to the theft or misuse of this information, any of which could have a material adverse effect on our business, financial condition, our reputation, and our relationships with our customers and partners. Since the techniques used to obtain unauthorized access or to sabotage systems change frequently and are often not recognized until launched against a target, we may be unable to anticipate these techniques or to implement adequate preventative measures.

Failure to protect our intellectual property could substantially harm our business.

Our success and ability to compete depend in part upon our ability to protect our intellectual property. We rely on a combination of intellectual property rights, including patents, mask work protection, copyrights, trademarks, trade secrets and know-how, in the United States and other jurisdictions. The steps we take to protect our intellectual property rights may not be adequate, particularly in foreign jurisdictions such as China. Any patents we hold may not adequately protect our intellectual property rights or our products against competitors, and third parties may challenge the scope, validity or enforceability of our issued patents. In addition, other parties may independently develop similar or competing technologies designed around any patents or patent applications that we hold. Some of our products and technologies are not covered by any patent or patent application, as we do not believe patent protection of these products and technologies is critical to our business strategy at this time. A failure to timely seek patent protection on products or technologies generally precludes us from seeking future patent protection on these products or technologies.

In addition to patents, we also rely on contractual protections with our customers, suppliers, distributors, employees and consultants, and we implement security measures designed to protect our trade secrets and know-how. However, we cannot assure you that these contractual protections and security measures will not be breached, that we will have adequate remedies for any such breach or that our customers, suppliers, distributors, employees or consultants will not assert rights to intellectual property or damages arising out of such contracts.

We may initiate claims against third parties to protect our intellectual property rights if we are unable to resolve matters satisfactorily through negotiation. Litigation brought to protect and enforce our intellectual property rights could be costly, time-consuming and distracting to management. It could also result in the impairment or loss of portions of our intellectual property, as an adverse decision could limit our ability to assert our intellectual property rights, limit the value of our technology or otherwise negatively impact our business, financial condition and results of operations. Additionally, any enforcement of our patents or other intellectual property may provoke third parties to assert counterclaims against us. Our failure to secure, protect and enforce our intellectual property rights could materially harm our business.

We may face claims of intellectual property infringement, which could be time-consuming, costly to defend or settle, result in the loss of significant rights, harm our relationships with our customers and distributors, or otherwise materially adversely affect our business, financial condition and results of operations.

The semiconductor memory industry is characterized by companies that hold patents and other intellectual property rights and that vigorously pursue, protect and enforce intellectual property rights. These companies include patent holding companies or other adverse patent owners who have no relevant product revenue and against whom our own patents may provide little or no deterrence. From time to time, third parties may assert against us and our customers' patent and other intellectual property rights to technologies that are important to our business.

Claims that our products, processes or technology infringe third-party intellectual property rights, regardless of their merit or resolution, could be costly to defend or settle and could divert the efforts and attention of our management and technical personnel. We may also be obligated to indemnify our customers or business partners in connection with any such litigation, which could result in increased costs. Infringement claims also could harm our relationships with our customers or distributors and might deter future customers from doing business with us. If any such proceedings result in an adverse outcome, we could be required to:

- cease the manufacture, use or sale of the infringing products, processes or technology;
- pay substantial damages for infringement;
- expend significant resources to develop non-infringing products, processes or technology, which may not be successful;
- license technology from the third-party claiming infringement, which license may not be available on commercially reasonable terms, or at all;
- cross-license our technology to a competitor to resolve an infringement claim, which could weaken our ability to compete with that competitor; or
- pay substantial damages to our customers to discontinue their use of or to replace infringing technology sold to them with non-infringing technology, if available.

Any of the foregoing results could have a material adverse effect on our business, financial condition and results of operations. Furthermore, our exposure to the foregoing risks may also be increased as a result of acquisitions of other companies or technologies. For example, we may have a lower level of visibility into the development process with respect to intellectual property or the care taken to safeguard against infringement risks with respect to the acquired company or technology. In addition, third parties may make infringement and similar or related claims after we have acquired technology that had not been asserted prior to the acquisition.

We rely upon third-party licensed technology to develop our products. If licenses of third-party technology are inadequate, our ability to develop and commercialize our products or product enhancements could be negatively impacted.

Our products incorporate technology licensed from third parties. In connection with our acquisition of certain flash memory assets from Atmel Corporation in 2012, we obtained a perpetual license to Atmel's flash memory technology. In addition, a component of our CBRAM technology is licensed from Axon Technology Corp. In December 2017, we entered into a license agreement with TowerJazz Panasonic Semiconductor Company. While we believe these licenses enable us to develop our products and pursue our current product strategies, these licenses may not provide us with the benefits we expect from them. From time to time, we may be required to license additional technology from third parties to develop our products or product enhancements. However, these third-party licenses may not be available to us on commercially reasonable terms or at all. Our inability to obtain third-party licenses necessary to develop products and product enhancements could require us to obtain substitute technology at a greater cost or of lower quality or performance standards or delay product development. Any of these results may limit our ability to develop new products, which could harm our business, financial condition and results of operations.

Our success depends on our ability to attract and retain key employees, and our failure to do so could harm our ability to grow our business and execute our business strategies.

Our success depends on our ability to attract and retain our key employees, including our management team and experienced engineers. Competition for personnel in the semiconductor technology field is intense, and the availability of suitable and qualified candidates is limited. We compete to attract and retain qualified research and development personnel with other semiconductor companies, universities and research institutions, particularly those in the San Francisco Bay Area where our headquarters is located. The members of our management and key employees are at-will employees. If we lose the services of any key senior management member or employee, we may not be able to locate suitable or qualified replacements, and may incur additional expenses to recruit and train new personnel, which could severely impact our business and prospects. The loss of the services of one or more of our key employees, especially our key engineers, or our inability to attract and retain qualified engineers, could harm our business, financial condition and results of operations.

We may not be able to effectively manage our growth, and we may need to incur significant expenditures to address the additional operational and control requirements of our growth, either of which could harm our business and operating results.

We expect to increase headcount and the overall size of our operations to support our growth. To effectively manage our growth, we must continue to expand our operational, engineering and financial systems, procedures and controls and to improve our accounting and other internal management systems. This may require substantial managerial and financial resources, and our efforts in this regard may not be successful. Our current systems, procedures and controls may not be adequate to support our future operations. If we fail to adequately manage our growth, or to improve our operational, financial and management information systems, or fail to effectively motivate or manage our new and future employees, the quality of our products and the management of our operations could suffer, which could adversely affect our operating results.

We have expanded in the past and expect to continue to expand in the future through acquisitions of, or investments in, other companies, each of which may divert our management's attention, result in additional dilution to stockholders or use resources that are necessary to operate our business.

In the past, we have grown our business through acquisitions and we expect to continue to evaluate and enter into discussions regarding potential strategic transactions that we believe could complement or expand our business, enhance our technical capabilities or otherwise offer growth opportunities. These transactions could be material to our financial condition and results of operations. The process of integrating businesses and technology can create unforeseen operating difficulties and expenditures as could the integration of any future acquisitions. Such transactions could create risks for us, including:

- difficulties in assimilating acquired personnel, operations and technologies or realizing synergies expected in connection with an acquisition, particularly with acquisitions of companies with large and widespread operations, complex products or that operate in markets in which we historically have had limited experience;
- unanticipated costs or liabilities, including possible litigation, associated with the acquisition;
- incurrence of acquisition-related costs;
- diversion of management's attention from other business concerns;
- use of resources that are needed in other parts of our business; and
- use of substantial portions of our available cash to consummate an acquisition.

Our failure to address these risks or other problems encountered in connection with our past or future acquisitions and investments could cause us to fail to realize the anticipated benefits of these acquisitions or investments, cause us to incur unanticipated liabilities and harm our business generally. Future acquisitions could also result in the use of substantial amounts of our cash and cash equivalents, dilutive issuances of our equity securities, the incurrence of debt, contingent liabilities, amortization expenses or the write-off of goodwill, any of which could harm our financial condition. Also, the anticipated benefits of any acquisitions may not materialize, may be less beneficial, or may develop more slowly, than we expect. If we do not receive the benefits anticipated from these acquisitions and investments, or if the achievement of these benefits is delayed, our operating results may be adversely affected and our stock price could decline.

We have operations outside of the United States and intend to expand our international operations, which exposes us to significant risks.

We have limited operations in Europe and Asia. We intend to expand our operations in Asia. The success of our business depends, in large part, on our ability to operate successfully from geographically disparate locations and to further expand our international operations and sales. Operating in international markets requires significant resources and management attention and subjects us to regulatory, economic and political risks that are different from those we face in the United States. We cannot be sure that further international expansion will be successful. In addition, we face risks in doing business internationally that could expose us to reduced demand for our products, lower prices for our products or other adverse effects on our operating results. Among the risks we believe are most likely to affect us are:

- difficulties, inefficiencies and costs associated with staffing and managing foreign operations;
- longer and more difficult customer qualification and credit checks;
- greater difficulty collecting accounts receivable and longer payment cycles;
- the need for various local approvals to operate in some countries;
- difficulties in entering some foreign markets without larger-scale local operations;
- compliance with local laws and regulations;
- unexpected changes in regulatory requirements, including the elimination of tax holidays;
- reduced protection for intellectual property rights in some countries;
- adverse tax consequences as a result of repatriating cash generated from foreign operations to the United States;
- adverse tax consequences, including potential additional tax exposure if we are deemed to have established a permanent establishment outside of the United States;
- adverse tax consequences, including potential additional tax costs, resulting from the new tax legislation signed into law on December 22, 2017, that imposes a minimum domestic tax on the earnings of foreign subsidiaries;
- the effectiveness of our policies and procedures designed to ensure compliance with the Foreign Corrupt Practices Act of 1977 and similar regulations;
- fluctuations in currency exchange rates, which could increase the prices of our products to customers outside of the United States, increase the expenses of our international operations by reducing the purchasing power of the U.S. dollar and expose us to foreign currency exchange rate risk if, in the future, we denominate our international sales in currencies other than the U.S. dollar;
- new and different sources of competition; and
- political and economic instability, and terrorism.

Our failure to manage any of these risks successfully could harm our operations and reduce our revenue.

In order to comply with environmental laws and regulations, we may need to modify our activities or incur substantial costs, and if we fail to comply with environmental regulations we could be subject to substantial fines or be required to have our suppliers alter their processes.

The semiconductor memory industry is subject to a variety of international, federal, state and local governmental regulations directed at preventing or mitigating environmental harm, as well as to the storage, discharge, handling, generation, disposal and labeling of toxic or other hazardous substances. Failure to comply with environmental regulations could subject us to civil or criminal sanctions and property damage or personal injury claims. Compliance with current or future environmental laws and regulations could restrict our ability to expand our business or require us to modify processes or incur other substantial expenses which could harm our business. In response to environmental concerns, some customers and government agencies impose requirements for the elimination of hazardous substances, such as lead (which is widely used in soldering connections in the process of semiconductor packaging and assembly), from electronic equipment. For example, the European Union, or EU, adopted its Restriction on Hazardous Substance Directive which prohibits, with specified exceptions, the sale in the EU market of new electrical and electronic equipment containing more than agreed levels of lead or other hazardous materials and China has enacted similar regulations. Environmental laws and regulations such as these could become more stringent over time, causing a need to redesign technologies, imposing greater compliance costs and increasing risks and penalties associated with violations, which could seriously harm our business.

The issuance of new accounting standards or future interpretations of existing accounting standards could adversely affect our operating results.

We prepare our financial statements in accordance with accounting principles generally accepted in the United States of America, or GAAP. A change in those principles could have a significant effect on our reported results and might affect our reporting of transactions completed before a change is announced. GAAP is issued and subject to interpretation by the Financial Accounting Standards Board, the SEC and various other bodies formed to promulgate and interpret accounting principles. A change in these principles or interpretations could have a significant effect on our reported financial results, and could affect the reporting of transactions completed before the announcement of a change. The issuance of new accounting standards or future interpretations of existing accounting standards, or changes in our business practices or estimates, could result in future changes in our revenue recognition or other accounting policies that could have a material adverse effect on our results of operations.

Some of our facilities and the facilities of our suppliers are located near known earthquake fault zones, and the occurrence

of an earthquake or other catastrophic disaster could damage our facilities, which could cause us to curtail our operations.

Our principal offices, and our contract manufacturers' and suppliers' facilities in Asia, are located near known earthquake fault zones and, therefore, are vulnerable to damage from earthquakes. We are also vulnerable to damage from other types of disasters, such as power loss, fire, floods and similar events. If any such disaster were to occur, our ability to operate our business could be seriously impaired. In addition, we may not have adequate insurance to cover our losses resulting from disasters or other similar significant business interruptions. Any significant losses that are not recoverable under our insurance policies could seriously impair our business and financial condition.

We may not be able to secure additional financing on favorable terms, or at all, to meet our future capital needs.

We have funded our operations since inception through equity financings, our borrowing arrangements, and our public offerings in October 2015 and June 2017. We have incurred net losses and negative cash flows from operating activities since our inception, and we expect we will continue to incur operating and net losses and negative cash flows from operations for the foreseeable future. We do not know when or if our operations will generate sufficient cash to fund our ongoing operations. In the future, we expect to require additional capital to fund our ongoing operations, respond to business opportunities, challenges, acquisitions or unforeseen circumstances and may determine to engage in equity or debt financings or enter into credit facilities, but we may not be able to timely secure additional debt or equity financing or raise additional capital in the public market on favorable terms or at all.

Our current term loan facility limits our ability to incur indebtedness, and these restrictions are subject to a number of qualifications and exceptions subject to the consent of our lender. Any additional debt financing obtained by us in the future could also involve restrictive covenants relating to our capital-raising activities and other financial and operational matters, which may make it more difficult for us to obtain additional capital and to pursue business opportunities, including potential acquisitions.

If we raise additional funds through issuances of equity, convertible debt securities or other securities convertible into equity, our existing stockholders could suffer significant dilution in their percentage ownership of our company, and any new equity securities we issue could have rights, preferences and privileges senior to those of holders of our common stock. If we are unable to obtain adequate financing or financing on terms satisfactory to us, when we require it, our ability to continue to grow or support our business and to respond to business challenges could be significantly limited.

Provisions of our debt agreements may restrict our ability to pursue our business strategies.

Borrowings under our $12 million term loan facility and $5 million line of credit are collateralized by substantially all of our assets. Our credit facility restricts our ability to, among other things:

- dispose of or sell assets;
- consolidate or merge with other entities;
- incur additional indebtedness;
- create liens on our assets;
- pay dividends;
- make investments;
- enter into transactions with affiliates; and
- redeem subordinated indebtedness.

These restrictions are subject to certain exceptions. In addition, our credit facility, as amended, requires us to comply with certain financial covenants. The operating and financial restrictions and covenants in the credit facility, as well as any future financing agreements that we may enter into, may restrict our ability to finance our operations, engage in business activities or expand or fully pursue our business strategies. Our ability to comply with these covenants may be affected by events beyond our control, and we may not be able to meet those covenants. A breach of any of these covenants could result in a default under the credit facility (as it did during the months of August, September, October and November 2016), which could cause, among other things (unless such default is waived by the lender), all or a portion of the outstanding indebtedness thereunder to become immediately due and payable and subject to an increase by 5% of the interest rate charged during the period of the unremedied breach. In addition, the lender would be able to sell or lease our assets in satisfaction of our outstanding indebtedness.

Our ability to use net operating losses to offset future taxable income may be subject to certain limitations.

In general, under Section 382 of the U.S. Internal Revenue Code of 1986, as amended, or the Code, 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, and tax credits to offset tax. In addition, although we do not expect to undergo an ownership change, we may experience an ownership change in the future, and our ability to utilize our NOLs and tax credits could be further limited by Section 382 of the Code. Future changes in our stock ownership, many of which are outside of our control, could result in an ownership change under Section 382 of the Code. Our net operating losses and tax credits could also be impaired under state laws. As a result, we might not be able to utilize a material portion of our state NOLs and tax credits.

If we are unable to implement and maintain effective internal control over financial reporting in the future, investors may lose confidence in the accuracy and completeness of our financial reports and the market price of our common stock may be negatively affected.

As a public company, we are required to maintain internal controls over financial reporting and to report any material weaknesses in such internal controls. If and when we no longer meet the definition of an "emerging growth company" as defined by the JOBS Act, we would be required under Section 404 of the Sarbanes-Oxley Act to evaluate and determine the effectiveness of our internal control over financial reporting and, beginning with our annual report for the applicable fiscal year provide a management report on our internal control over financial reporting, which must be attested to by our independent registered public accounting firm. If we have one or more material weaknesses in our internal control over financial reporting, we may not detect errors on a timely basis and our financial statements may be materially misstated. We are in the process of designing and implementing our internal control over financial reporting required to comply with this obligation, which process will be time consuming, costly and complicated. If we identify material weaknesses in our internal control over financial reporting, if we are unable to comply with the requirements of Section 404 in a timely manner, if we are unable to determine that our internal control over financial reporting is effective, or if our independent registered public accounting firm is unable to express an opinion as to the effectiveness of our internal control over financial reporting, investors may lose confidence in the accuracy and completeness of our financial reports, the market price of our common stock could be negatively affected, and we could become subject to investigations by the NASDAQ Stock Market, the SEC or other regulatory authorities, which could require additional financial and management resources.

Regulations related to "conflict minerals" may force us to incur additional expenses, may make our supply chain more complex and may result in damage to our reputation with customers.

Pursuant to the Dodd-Frank Act, the SEC has adopted requirements for companies that use certain minerals and metals, known as conflict minerals, in their products, whether or not these products are manufactured by third parties. These requirements will require companies to diligence, disclose and report whether or not such minerals originate from the Democratic Republic of Congo and adjoining countries. The implementation of these requirements could adversely affect the sourcing, availability and pricing of minerals used in the manufacture of our products, and affect our costs and relationships with customers, distributors and suppliers as we must obtain additional information from them to ensure our compliance with the disclosure requirement. In addition, we will incur additional costs to comply with the disclosure requirements, including costs related to determining the source of any of the relevant minerals and metals used in our products. Since our supply chain is complex, we may not be able to sufficiently verify the origins for these minerals and metals used in our products through the due diligence procedures that we implement, which may harm our reputation. In such event, we may also face difficulties in satisfying customers who require that all of the components of our products are certified as conflict mineral free and these customers may discontinue, or materially reduce, purchases of our products, which could result in a material adverse effect on our results of operations and our financial condition may be adversely affected.

Risks Related to Ownership of Our Common Stock

The market price of our common stock has been and will likely continue to be volatile, and you could lose all or part of your investment.

The market price of our common stock has been, and will likely continue to be, volatile. Since shares of our common stock were sold in our initial public offering in October 2015 at a price of $5.00 per share, our stock price has fluctuated significantly. In addition to the factors discussed in this Annual Report on Form 10-K, the market price of our common stock may fluctuate significantly in response to numerous factors, many of which are beyond our control, including:

- overall performance of the equity markets in general, in our industry or in the markets we address;
- our operating performance and the performance of other similar companies;
- changes in the estimates of our results of operations that we provide to the public, our failure to meet these projected results or changes in recommendations by securities analysts that elect to follow our common stock;
- announcements of technological innovations, new products or enhancements to products, acquisitions, strategic alliances or significant agreements by us or by our competitors;
- announcements of new business partners, on the termination of existing business partner arrangements or changes to our relationships with such business partners;
- recruitment or departure of key personnel;
- announcements of litigation or claims against us;
- changes in legal requirements relating to our business;
- the economy as a whole, market conditions in our industry, and the industries of our customers and end customers;
- trading activity by our principal stockholders;
- the expiration of contractual lock-up or market standoff agreements; and
- sales of shares of our common stock by us or our stockholders.

In addition, the stock markets have experienced extreme price and volume fluctuations that have affected and continue to affect the market prices of equity securities of many technology companies. Stock prices of many technology companies have fluctuated in a manner unrelated or disproportionate to the operating performance of those companies. In the past, stockholders have filed securities class action litigation following periods of market volatility. If we were to become involved in securities litigation, it could subject us to substantial costs, divert resources and the attention of management from our business, and adversely affect our business.

If securities analysts do not publish research or reports about our business or if they downgrade our stock, the price of our stock could decline.

The trading market for our common stock rely in part on the research and reports that industry or financial analysts publish about us or our business. We do not control these analysts. If few analysts cover our company, the price and trading volume of our stock could suffer. If one or more of the analysts who cover us downgrade our stock, or publish unfavorable research about our business, our stock price would likely decline rapidly. If one or more of these analysts cease coverage of our company or fail to publish regularly, we could lose visibility in the market, which in turn could cause our stock price to decline.

We do not intend to pay dividends for the foreseeable future.

We have never declared nor paid cash dividends on our capital stock. We currently intend to retain any future earnings to finance the operation and expansion of our business, and we do not expect to declare or pay any dividends in the foreseeable future. In addition, our ability to pay cash dividends on our capital stock is restricted by the terms of our current credit facility and is likely to be restricted by any future debt financing arrangement. Any return to stockholders will therefore be limited to increases in the price of our common stock, if any.

Provisions in our amended and restated certificate of incorporation and bylaws or Delaware law might discourage, delay or prevent a change of control of our company or changes in our management.

Delaware corporate law and our amended and restated certificate of incorporation and bylaws contain provisions that could discourage, delay or prevent a change in control of our company or changes in our board of directors that the stockholders of our company may deem advantageous. Among other things, these provisions:

- establish a classified board of directors so that not all members of our board are elected at one time;
- provide that directors may be removed only “for cause” and only with the approval of stockholders representing 66 2/3 percent of our outstanding common stock;
- require super-majority voting to amend some provisions in our amended and restated certificate of incorporation and bylaws;
- authorize the issuance of “blank check” preferred stock that our board could issue to increase the number of outstanding shares and to discourage a takeover attempt;
- eliminate the ability of our stockholders to call special meetings of stockholders;
- prohibit stockholder action by written consent, which means that all stockholder actions will be required to be taken at a meeting of our stockholders;
- provide that our board of directors is expressly authorized to make, alter or repeal our bylaws; and
- establish advance notice requirements for nominations for election to our board or for proposing matters that can be acted upon by stockholders at stockholder meetings.

These provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors, which is responsible for appointing the members of our management. In addition, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which generally prohibits a Delaware corporation from engaging in a broad range of business combinations with any “interested” stockholder for a period of three years following the date on which the stockholder became an “interested” stockholder. Any delay or prevention of a change of control transaction or changes in our management could cause the market price of our common stock to decline.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

We lease approximately 34,000 square feet in Santa Clara, California for our corporate headquarters, pursuant to a noncancelable lease, which expires in July 2023. We believe that our existing facilities are adequate to meet our current needs, and we intend to add or change facilities as needs require. We believe that, if required, suitable additional or substitute space would be available to accommodate expansion of our operations.

ITEM 3. LEGAL PROCEEDINGS

We are not currently a party to any legal proceedings which, if determined adversely to us, would individually or in the aggregate have a material adverse effect on our business, operating results, financial condition or cash flows. We may, from time to time, become involved in legal proceedings arising in the ordinary course of our business and as our business grows, we may become a party to an increasing number of legal proceedings.

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 for Common Stock

Our common stock has been listed on The Nasdaq Capital Market under the symbol "IOTS" since October 27, 2015, the date of our initial public offering. Prior to our initial public offering, there was no public market for our common stock.

The following table sets forth for the indicated periods the high and low closing sales prices of our common stock as reported by The Nasdaq Capital Market.

	High	Low
Fiscal 2017 quarter ended:		
March 31, 2017	$ 4.40	$ 1.90
June 30, 2017	$ 5.60	$ 3.85
September 30, 2017	$ 8.15	$ 4.25
December 31, 2017	$ 8.50	$ 6.15
Fiscal 2016 quarter ended:		
March 31, 2016	$ 7.59	$ 5.11
June 30, 2016	$ 5.76	$ 3.02
September 30, 2016	$ 3.81	$ 2.02
December 31, 2016	$ 2.59	$ 1.60

As of February 20, 2018, there were 38 registered stockholders of record of our common stock. Because many of our shares of common stock are held by brokers or other institutions on behalf of stockholders, we are unable to estimate the total number of stockholders represented by the record holders.

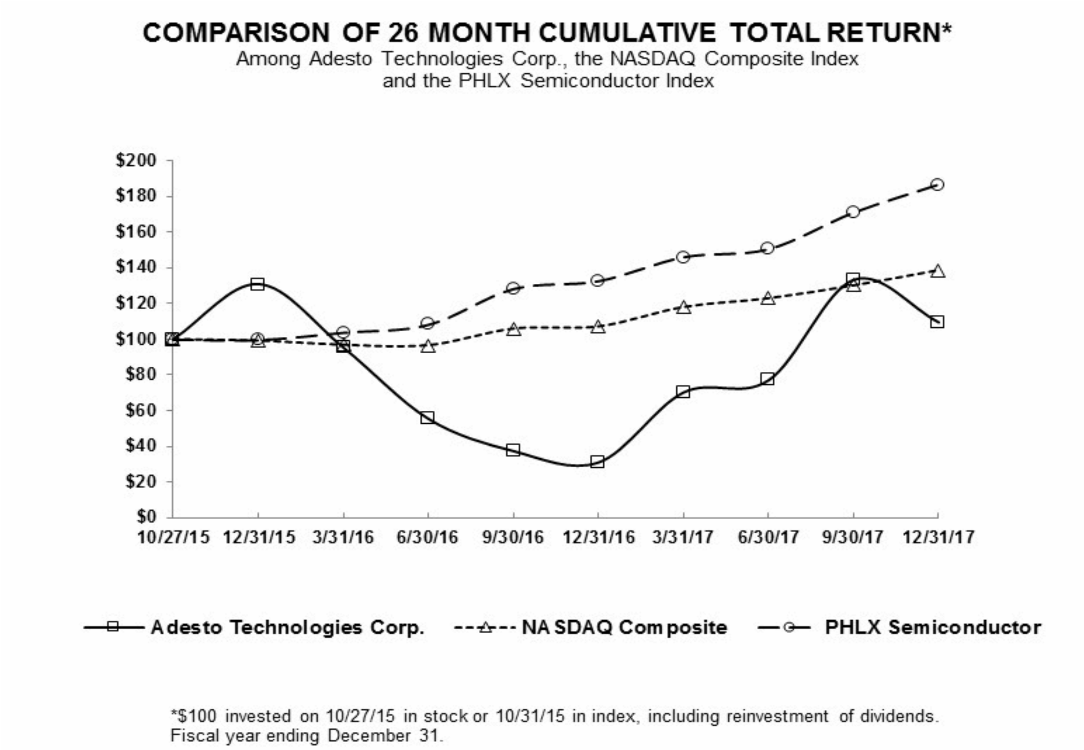
Dividend Policy

We have never declared or paid any cash dividends on our capital stock. We currently intend to retain any future earnings and do not expect to pay any cash dividends on our common stock for the foreseeable future. Any determination to pay dividends in the future will be at the discretion of our board of directors. In addition, the terms of our $12.0 million term loan facility and our $5.0 million line of credit currently prohibit us from paying dividends.

Stock Performance Graph

This performance graph shall not be deemed "filed" for purposes of Section 18 of the Exchange Act or otherwise subject to the liabilities under that Section, and shall not be deemed to be incorporated by reference into any filing of Adesto under the Securities Act or the Exchange Act.

The graph below compares the cumulative total stockholder return on our common stock with the cumulative total return on the NASDAQ Composite Index and the PHLX Semiconductor Index for the period from October 27, 2015 (the date our common stock commenced trading on The Nasdaq Capital Market) to December 31, 2017, the end of our last fiscal year. The comparisons in the graph below are based on historical data and are not intended to forecast or be indicative of future stock price performance of our common stock.



Recent Sale of Unregistered Securities and Use of Proceeds

Use of Proceeds

On October 30, 2015, we completed our initial public offering in which we sold 5,000,000 shares of common stock at a price to the public of $5.00 per share. On November 4, 2015, we completed the sale of an additional 192,184 shares of common stock pursuant to the underwriters' over-allotment option. The aggregate offering price for shares sold by us in the offering was approximately $26.0 million. The offer of up to 5,750,000 shares in the initial public offering, for a proposed maximum aggregate offering price of $28.75 million, were registered under the Securities Act pursuant to a registration statement on Form S-1 (File No. 333-206940) that was declared effective by the Securities and Exchange Commission on October 26, 2015.

Needham & Company, LLC, Oppenheimer & Co. Inc. and Roth Capital Partners, LLC were the underwriters for the offering. Following the sale of 5,192,184 shares in connection with the closing of the initial public offering and the sale of the shares subject to the over-allotment option, the offering terminated. We raised approximately $22.1 million in net proceeds after deducting underwriting discounts and commissions of approximately $1.8 million and other offering expenses of approximately $2.0 million. As of December 31, 2017, we had used substantially all of the aggregate net proceeds from our initial public offering to fund working capital and general corporate requirements in the ordinary course of business. No such payments were made, whether directly or indirectly to our directors or officers or their associates, holders of 10% or more of any class of our equity securities or to our affiliates.

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

None.

ITEM 6. SELECTED FINANCIAL DATA

We have derived the selected consolidated statements of operations data for the years ended December 31, 2017, 2016, and 2015, and the consolidated balance sheet data as of December 31, 2017 and 2016 from our audited consolidated financial statements included elsewhere in this Annual Report on Form 10-K. The consolidated statements of operations data for the years ended December 31, 2014 and 2013 and the consolidated balance sheet data as of December 31, 2015, 2014 and 2013 have been derived from our audited consolidated financial statements not included in this Annual Report on Form 10-K.You should read the following selected consolidated financial data below in conjunction with the section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements, related notes and other financial information included elsewhere in this Annual Report on Form 10-K. The selected consolidated financial data in this section are not intended to replace our consolidated financial statements and the related notes, and are qualified in their entirety by the consolidated financial statements and related notes included elsewhere in this Annual Report on Form 10-K. Our historical results are not necessarily indicative of the results that may be expected for any period in the future.

Consolidated Statements of Operations Data:

	Year Ended December 31,				
	2017	2016	2015	2014	2013
	(in thousands, except share and per share data)				
Revenue, net	$ 56,112	$ 43,968	$ 43,259	$ 41,465	$ 49,684
Cost of revenue	28,637	22,618	24,775	25,532	29,738
Gross profit	27,475	21,350	18,484	15,933	19,946
Operating expenses:					
Research and development	14,094	15,896	12,795	14,410	15,033
Sales and marketing	11,064	11,026	8,345	7,211	8,094
General and administrative	7,148	6,693	3,978	2,356	2,677
Gain from settlement with former foundry supplier	—	(1,962)	—	—	—
Total operating expenses	32,306	31,653	25,118	23,977	25,804
Loss from operations	(4,831)	(10,303)	(6,634)	(8,044)	(5,858)
Other income (expense):					
Interest expense, net	(753)	(1,275)	(1,115)	(864)	(2,731)
Other income (expense), net	(3)	(50)	(695)	114	508
Total other (expense), net	(756)	(1,325)	(1,810)	(750)	(2,223)
Loss before provision for (benefit from) for income taxes	(5,587)	(11,628)	(8,444)	(8,794)	(8,081)
Provision for (benefit from) income taxes	101	(16)	(61)	140	72
Net loss	$ (5,688)	$ (11,612)	$ (8,383)	$ (8,934)	$ (8,153)
Net loss per share:					
Basic and diluted	$ (0.31)	$ (0.77)	$ (2.79)	$ (16.48)	$ (15.14)
Weighted average number of shares used in computing net loss per share:					
Basic and diluted	18,591,308	15,085,973	3,007,929	542,248	538,388

Consolidated Balance Sheets Data:

	December 31,				
Consolidated Balance Sheets Data:	2017	2016	2015	2014	2013
	(in thousands)				
Cash and cash equivalents	$ 30,078	$ 19,719	$ 23,089	$ 5,972	$ 11,580
Total assets	60,812	46,183	49,938	31,447	43,589
Current liabilities	14,474	15,408	17,644	21,634	20,139
Debt	13,334	18,048	13,420	10,749	14,901
Preferred stock warrant liability	—	—	—	122	262
Convertible preferred stock	—	—	—	78,467	78,467
Total stockholders' equity (deficit)	32,950	16,365	24,479	(70,252)	(61,661)

In September 2017, we entered into a three-year $12.0 million term loan facility and a $5.0 million line of credit. As of December 31, 2017, we had net borrowings of $11.8 million outstanding under our term loan facility, of which $0.9 million is included in current liabilities. We also had borrowings of $1.5 million under our line of credit as of December 31, 2017.

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 Annual Report on Form 10-K. This discussion contains forward-looking statements based upon current plans, expectations and beliefs 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 "Risk Factors" and in other parts of this Annual Report on Form 10-K.

Overview

We are a leading provider of application-specific, ultra-low power non-volatile memory, or NVM, products. We optimize our NVM products for Internet of Things, or IoT, applications including current and next-generation Internet-connected devices in the consumer, industrial, medical and wearables markets. We combine our NVM design capabilities with proprietary intellectual property and differentiated technology platforms to deliver high-performance products that dramatically reduce the overall energy consumption of our customers' systems and extend battery life. Our products feature embedded intelligence in a small form factor and high reliability.

Our revenue is derived from the sale of our NVM products, primarily our serial flash memory products, which represented substantially all of our revenue for the year ended December 31, 2017. In recent years, we have invested in developing and commercializing new flash memory products that are well suited for low-power, high-growth applications. In 2013, we introduced the first of our next-generation DataFlash and Fusion Serial Flash products. Revenue from our next-generation NVM products were $55.8 million, $43.5 million and $39.9 million for the years ended December 31, 2017, 2016 and 2015, respectively. We had been exclusively developing products based on Conductive Bridging RAM, or CBRAM, technology prior to our 2012 acquisition of assets from Atmel, which brought us our first flash memory products. We believe products based on this technology have the potential to contribute to our long-term growth and thus we continue to invest our resources into developing and enhancing our families of CBRAM-based products, although revenue associated with these products has not been material to date.

For the year ended December 31, 2017, our products were sold to more than 2,000 end customers. In general, we work directly with our customers to have our NVM devices designed into and qualified for their products. Although we maintain direct sales, support and development relationships with our customers, once our products are designed into a customer's product, we sell a majority of our products to those customers through distributors. We generated 74%, 71% and 73% of our revenue from distributors during the years ended December 31, 2017, 2016 and 2015, respectively. Sales to three distributors generated approximately 38%, 35% and 40% of our revenue during the years ended December 31, 2017, 2016 and 2015, respectively. Additionally, we derived approximately 79%, 85% and 80% of our revenue internationally during the years ended December 31, 2017, 2016 and 2015, respectively, the majority of which was recognized in the Asia Pacific, or APAC, region. Revenue by geography is recognized based on the region to which our products are sold, and not to where the end products are shipped.

We employ a fabless manufacturing strategy and use market-leading suppliers for all phases of the manufacturing process, including wafer fabrication, assembly, testing and packaging. This strategy significantly reduces the capital investment that would otherwise be required to operate manufacturing facilities of our own.

Factors Affecting Our Performance

Product adoption in new markets and applications. We optimize our products to meet the technical requirements of the emerging IoT market. The growth in the IoT market is dependent on many factors, most of which are outside of our control. Should the IoT market not develop or develop more slowly, our financial results could be adversely affected.

Ability to attract and retain customers that make large orders. In 2017, our products were sold to more than 2,000 end customers, of which approximately 45 generated more than half our revenue. No end customer accounted for 10% or more of our revenue in 2017. One end customer accounted for 10% or more of our revenue in 2016 and 2015. While we expect the composition of our customers to change over time, our business and operating results will depend on our ability to continually target new and retain existing customers that make large orders, particularly those in growth markets which are less dependent on macroeconomic conditions.

Design wins with new and existing customers. We believe our solutions significantly improve the performance and potentially lower the system cost of our customers' designs, particularly if we are part of the early design phase. Accordingly, we work closely with our customers and targeted prospects to understand their product roadmaps and strategies. We consider design wins to be critical to our future success. We define a design win as the successful completion of the evaluation stage, where a customer has tested our product, verified that our product meets its requirements and qualified our NVM device for their products. The number of our design wins has grown from 135 in 2015 to 296 in 2016 and to 417 in 2017. The revenue that we generate, if any, from each design win can vary significantly. Our long-term sales expectations are based on forecasts from customers, internal estimates of customer demand factoring in expected time to market for end customer products incorporating our solutions and associated revenue potential and internal estimates of overall demand based on historical trends.

Pricing, product cost and gross margins of our products. Our gross margin has been and will continue to be affected by a variety of factors, including the timing of changes in pricing, shipment volumes, new product introductions, changes in product mixes, changes in our purchase price of fabricated wafers and assembly and test service costs, manufacturing yields and inventory write downs, if any. In general, newly introduced products and products with higher performance and more features tend to be priced higher than older, more mature products. Average selling prices in the semiconductor industry typically decline as products mature. Consistent with this historical trend, we expect that the average selling prices of our products will decline as they mature. In the normal course of business, we will seek to offset the effect of declining average selling prices on existing products by reducing manufacturing costs and introducing new and higher value-added products. More recently, certain of our suppliers have increased costs although this increase did not have a material impact on our results of operations for the year ended December 31, 2017. If we are unable to maintain overall average selling prices or offset any declines in average selling prices with realized savings on product costs, our gross margin will decline.

Investment in growth. We have invested, and intend to continue to invest, in expanding our operations, increasing our headcount, developing our products and differentiated technologies to support our growth and expanding our infrastructure. We expect our total operating expenses to increase in the foreseeable future to meet our growth objectives. We plan to continue to invest in our sales and support operations throughout the world, with a particular focus in adding additional sales and field applications personnel to further broaden our support and coverage of our existing customer base, in addition to developing new customer relationships and generating design wins. We also intend to continue to invest additional resources in research and development to support the development of our products and differentiated technologies. Any investments we make in our sales and marketing organization or research and development will occur in advance of experiencing any benefits from such investments, and the return on these investments may be lower than we expect. In addition, as we invest in expanding our operations internationally, our business and results will become further subject to the risks and challenges of international operations, including higher operating expenses and the impact of legal and regulatory developments outside the United States.

Components of Our Results of Operations

Revenue

We derive substantially all of our revenue through the sale of our NVM products to OEMs and ODMs, primarily through distributors. We generated 74%, 71%, and 73% of our revenue from distributors during the years ended

December 31, 2017, 2016, and 2015, respectively. We recognize revenue from product sales when persuasive evidence of an arrangement exists and all other revenue recognition criteria are met. We sell the majority of our products to distributors and generally recognize revenue when we ship the product directly to the distributors since title and risk of loss transfers at that time.

Because our distributors market and sell their products worldwide, our revenue by geographic location is not necessarily indicative of where our customers' product sales and design win activity occur, but rather of where their manufacturing operations occur.

Cost of Revenue and Gross Margin

Cost of revenue primarily consists of costs paid to our third-party manufacturers for wafer fabrication, assembly and testing of our NVM products, write-downs of inventory for excess and obsolete inventories including write-downs of inventory for products based on CBRAM technology and accruals for future losses on CBRAM wafer purchase commitments to the extent our costs exceed the market price for such products. To a lesser extent, cost of revenue also includes depreciation of test equipment and expenses relating to manufacturing support activities, including personnel-related costs, logistics and shipping.

Our gross margin has been and will continue to be affected by a variety of factors, including the timing of changes in pricing, shipment volumes, new product introductions, changes in product mix, changes in our purchase price of fabricated wafers and assembly and test service costs, manufacturing yields and inventory write downs, if any. We expect our gross margin to fluctuate over time depending on the factors described above.

Operating Expenses

Our operating expenses consist of research and development, sales and marketing and general and administrative expense. Personnel-related costs, including salaries, benefits, bonuses and stock-based compensation, are the most significant component of each of our operating expense categories. In addition, in the near term we expect to hire additional personnel, primarily in our selling and marketing functions, and increase research and development expenditures, such as prototype wafers, associated with the implementation of our technology in a manufacturing facility in Asia. Accordingly, we expect our operating expenses to increase in absolute dollars as we invest in these initiatives.

Research and Development. Our research and development expenses consist primarily of personnel-related costs for the design and development of our products and technologies. Additional research and development expenses include product prototype costs, amortization of mask expenditures and other materials costs, external test and characterization expenses, depreciation, amortization of design tool software licenses, amortization of acquisition-related intangible assets and allocated overhead expenses. We also incur costs related to outsourced research and development activities and joint venture activities. We expect research and development expenses to increase in absolute dollars for the foreseeable future as we continue to improve our product features and increase our portfolio of solutions.

Sales and Marketing. Sales and marketing expenses consist primarily of personnel-related costs for our sales, business development, marketing, and applications engineering activities, third-party sales representative commissions, promotional and other marketing expenses, amortization of acquisition-related intangible assets and travel expenses. We expect sales and marketing expenses to increase in absolute dollars for the foreseeable future as we continue to expand our direct sales teams and increase our marketing activities.

General and Administrative. General and administrative expenses consist primarily of personnel-related costs, consulting expenses and professional fees. Professional fees principally consist of legal, audit, tax and accounting services. We expect general and administrative expenses to increase in absolute dollars for the foreseeable future as we hire additional personnel, make improvements to our infrastructure and incur significant additional costs for the compliance requirements of operating as a public company, including higher legal, insurance and accounting expenses.

Other Income (Expense), Net

Other income (expense), net is comprised of interest income (expense) and other income (expense). Interest expense consists of interest on our outstanding debt. Other expense, net consists primarily of the change in fair value of our preferred stock warrant liability and foreign exchange gains or losses. Our foreign currency exchange gains and losses relate to transactions and asset and liability balances denominated in currencies other than the U.S. dollar. We expect our foreign currency gains and losses to continue to fluctuate in the future due to changes in foreign currency exchange rates.

Prior to our IPO of common stock in October 2015, we classified our preferred stock warrants as a liability on our consolidated balance sheets and recorded changes in fair value at each balance sheet date with the corresponding change recorded as other income (expense). We recorded a final adjustment to the fair value of the warrants as of the closing of our initial public offering on October 30, 2015 and the warrants will no longer be subject to fair value accounting thereafter due to their conversion into warrants to purchase common stock.

Provision for (Benefit from) Income Taxes

Provision for income taxes consists primarily of U.S. federal and state income taxes in the United States and income taxes in certain foreign jurisdictions in which we conduct business. We have a full valuation allowance for deferred tax assets, including net operating loss carryforwards, and tax credits related primarily to research and development. We expect to maintain this full valuation allowance for the foreseeable future.

Results of Operations

The following table sets forth our consolidated results of operations for the periods shown:

	Year Ended December 31,		
	2017	2016	2015
	(in thousands, except share and per share data)		
Revenue, net	$ 56,112	$ 43,968	$ 43,259
Cost of revenue	28,637	22,618	24,775
Gross profit	27,475	21,350	18,484
Operating expenses:			
Research and development	14,094	15,896	12,795
Sales and marketing	11,064	11,026	8,345
General and administrative	7,148	6,693	3,978
Gain from settlement with former foundry supplier	—	(1,962)	—
Total operating expenses	32,306	31,653	25,118
Loss from operations	(4,831)	(10,303)	(6,634)
Other (expense):			
Interest expense, net	(753)	(1,275)	(1,115)
Other (expense), net	(3)	(50)	(695)
Total other (expense), net	(756)	(1,325)	(1,810)
Loss before provision for (benefit from) for income taxes	(5,587)	(11,628)	(8,444)
Provision for (benefit from) income taxes	101	(16)	(61)
Net loss attributable to common stockholders	$ (5,688)	$ (11,612)	$ (8,383)
Net loss per share:			
Basic and diluted	$ (0.31)	$ (0.77)	$ (2.79)
Weighted average number of shares used in computing net loss per share:			
Basic and diluted	18,591,308	15,085,973	3,007,929

Comparison of Years Ended December 31, 2017, 2016 and 2015

Revenue, net

	Year ended December 31,			Change 2017 - 2016		Change 2016 - 2015	
	2017	2016	2015	Amount	%	Amount	%
	(dollars in thousands)						
Revenue, net	$ 56,112	$ 43,968	$ 43,259	$ 12,144	28 %	$ 709	2 %
Revenue by category of products:							
Legacy Products	301	427	3,385	(126)	(30)%	(2,958)	(87)%
New Products	55,811	43,541	39,874	12,270	28 %	3,667	9 %

	Year ended December 31,		
	2017	2016	2015
	(in thousands)		
United States	$ 11,667	$ 6,301	$ 8,831
Rest of Americas	245	483	602
Europe	9,546	5,809	4,817
Asia Pacific	34,263	31,051	28,711
Rest of world	391	324	298
Total	$ 56,112	$ 43,968	$ 43,259

Revenue increased by $12.1 million, or 28%, for 2017 as compared to 2016. This increase was due primarily to an increase in sales of our DataFlash and to a lesser extent, sales of our Standard Serial Flash products.

Revenue increased by $0.7 million, or 2%, for 2016 as compared to 2015. This increase was due primarily to an increase in sales of our next generation Fusion Serial Flash products, partially offset by a decrease in revenue from our Standard Serial Flash and DataFlash products.

Cost of Revenue and Gross Margin

	Year ended December 31,			Change 2017 - 2016		Change 2016 - 2015	
	2017	2016	2015	Amount	%	Amount	%
	(dollars in thousands)						
Cost of revenue	$28,637	$22,618	$24,775	$6,019	27 %	$(2,157)	(9)%

Gross Profit	27,475	21,350	18,484	6,125	29 %	2,866	16 %
Gross Margin	49 %	49 %	43 %				

Cost of revenue increased by $6.0 million, or 27%, for 2017 as compared to 2016. This increase was due primarily to increased unit volume associated with our increase in revenue during 2017.

There was no material change in gross margin in 2017 as compared to 2016.

Cost of revenue decreased by $2.2 million, or 9%, for 2016 as compared to 2015. This decrease was due primarily to reduced costs to third-party manufacturers for wafer fabrication, assembly and testing of our products of $1.4 million.

Gross margin increased by 6 percentage points in 2016 as compared to 2015 due to the same factors that caused our costs of revenue to decline over the same period which included reductions in unit costs from our manufacturing subcontractors, improved process yields, and a reduction in manufacturing support expense.

Operating Expenses

	Year ended December 31,			Change 2017 - 2016		Change 2016 - 2015	
	2017	2016	2015	Amount	%	Amount	%
	(dollars in thousands)						
Operating expenses:							
Research and development	$ 14,094	$ 15,896	$ 12,795	$ (1,802)	(11)%	$ 3,101	24 %
Sales and marketing	11,064	11,026	8,345	38	0	2,681	32
General and administrative	7,148	6,693	3,978	455	7	2,715	68
Gain from settlement with former foundry supplier	—	(1,962)	—	1,962	(100)	(1,962)	100
Total operating expenses	$ 32,306	$ 31,653	$ 25,118	$ 653	2 %	$ 6,535	26 %

Research and Development. Research and development ("R&D") expense decreased by $1.8 million or 11%, in 2017 as compared to 2016. The decrease was due primarily to a $1.2 million decrease in costs related to joint activities due to the renegotiation of our joint development agreement with TowerJazz Panasonic Semiconductor Company, a $0.4 million reduction in material costs, a $0.4 million reduction in facilities costs due to elimination of offsite lab rent expense and $0.2 million reduction in external test and characterization expenses, partially offset by a $0.4 million increase in personnel related costs.

Research and development expense increased by $3.1 million, or 24%, in 2016 as compared to 2015. This increase was due primarily to a $1.2 million increase in personnel-related costs, $1.2 million in expenditures related to our joint venture development agreement with TowerJazz Panasonic Semiconductor Company, for which there were not corresponding expenditures in 2015, and a $0.7 million increase in allocated facilities costs due to our headquarters relocation in 2016 and an investment in a new research and development lab.

Sales and Marketing. There was no material change in sales and marketing expense in 2017 as compared to 2016 as a result of our expense management efforts in 2017.

Sales and marketing expense increased $2.7 million, or 32%, in 2016 as compared to 2015. This increase was due primarily to a $2.8 million increase in personnel-related costs, a $0.5 million increase in allocated facilities costs due to our headquarters relocation in 2016, partially offset by a $0.8 million decrease in outside services such as consulting expense.

General and Administrative. General and administrative expenses increased by $0.5 million or 7% in 2017 as compared to 2016. The increase was due primarily to personnel-related costs.

General and administrative expenses increased $2.7 million, or 68%, in 2016 as compared to 2015. This increase was due primarily to a $2.2 million increase in personnel-related costs, a $0.5 increase in directors' and officers' insurance premiums, a $0.2 million increase in costs related to being a public company, partially offset by a $0.2 million decrease in outside services such as consulting expenses, and a $0.1 million decrease in accounting, audit, and tax preparation fees.

Other (Expense), Net

	Year ended December 31,			Change 2017 - 2016		Change 2016 - 2015	
	2017	2016	2015	Amount	%	Amount	%
	(dollars in thousands)						
Interest expense, net	$ (753)	(1,275)	(1,115)	$ (522)	(41)%	$ 160	14 %
Other (expense), net	(3)	(50)	(695)	(47)	(94)	(645)	(93)
Total other (expense), net	$ (756)	$ (1,325)	$ (1,810)	$ (569)	(43)%	$ (485)	(27)%

Interest expense, net decreased by $0.5 million or 41% in 2017 as compared to 2016 primarily due to a reduction in net borrowings of $4.7 million.

Interest expense, net increased by $0.2 million, or 14%, in 2016 as compared to 2015 due to an increase in our net borrowings of $4.6 million.

Other (expense), net decreased by $47,000 in 2017 as compared to 2016 due primarily to reduced foreign currency transaction costs.

Other (expense), net decreased by $0.6 million, or 93%, in 2016 as compared to 2015 as we no longer had to record the change in fair value of preferred stock warrants. All preferred stock warrants were converted to common stock warrants on the date of our IPO in 2015.

Provision for (Benefit from) Income Taxes

	Year ended December 31,			Change 2017 - 2016		Change 2016 - 2015	
	2017	2016	2015	Amount	%	Amount	%
	(dollars in thousands)						
Provision for (benefit from) income taxes	$ 101	$ (16)	$ (61)	$ 117	731 %	$ 45	74 %

Our provision for income taxes increased by $0.1 million in 2017 as compared to 2016 due primarily to provisions related to our foreign subsidiaries.

Our benefit from income taxes decreased by $45,000, or 74%, in 2016 as compared to 2015. The decrease was due primarily to a reduction in benefits related to our foreign subsidiaries as well as a reduction in benefits related to deferred taxes in the United States.

Liquidity and Capital Resources

Our principal source of liquidity as of December 31, 2017 consisted of cash and cash equivalents of $30.1 million. We had approximately $3.5 million of additional borrowing capacity under our line of credit as of December 31, 2017. Our outstanding borrowings under this credit facility as of December 31, 2017 were $13.5 million. Substantially all of our cash and cash equivalents are held in the United States.

We believe our existing cash and cash equivalents will be sufficient to meet our anticipated cash needs over 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 research and development activities, the timing and cost of establishing additional sales and marketing capabilities, the introduction of new and enhanced products and our costs to implement new manufacturing technologies. In the event that additional financing is required from outside sources, we may not be able to raise it on terms acceptable to us or at all. Any additional debt financing obtained by us in the future could also involve restrictive covenants relating to our capital-raising activities and other financial and operational matters, which may make it more difficult for us to obtain additional capital and to pursue business opportunities, including potential acquisitions. Additionally, if we raise additional funds through further issuances of equity, convertible debt securities or other securities convertible into equity, our existing stockholders could suffer significant dilution in their percentage ownership of our company, and any new equity securities we issue could have rights, preferences and privileges senior to those of holders of our common stock. If we are unable to obtain adequate financing or financing on terms satisfactory to us, when we require it, our ability to continue to grow or support our business and to respond to business challenges could be significantly limited.

Our cash flows for the periods indicated were as follows:

	Year ended December 31,		
	2017	2016	2015
	(in thousands)		
Cash flows used in operating activities	$ (189)	$(4,858)	$ (7,127)
Cash flows used in investing activities	(3,552)	(2,662)	(559)
Cash flows provided by financing activities	14,165	4,221	25,141

Cash Flows from Operating Activities

Our primary source of cash from operating activities has been from cash collections from our customers. We expect cash inflows from operating activities to be affected by increases in sales and timing of collections. Our primary uses of cash from operating activities have been for personnel costs and investments in research and development and sales and marketing. Net cash used in operating activities for the periods presented consisted of net losses adjusted for certain noncash items and changes in working capital. Within changes in working capital, changes in accounts receivable, inventory and accounts payable generally account for the largest adjustments, as we typically use more cash to fund accounts receivable and build inventory as our business grows. Increases in accounts payable typically provides more cash as we do more business with our contract foundries and other third parties, depending on the timing of payments.

During the year ended December 31, 2017, cash used in operating activities was $0.2 million and was due primarily to a net loss of $5.7 million offset by non-cash charges of $3.5 million for stock-based compensation expense, $1.4 million for depreciation and amortization, $1.2 million for the amortization of intangible assets, $82,000 for the amortization of debt discount and an increase in net assets and liabilities of $0.7 million. The increase in net assets and liabilities is due primarily to an increase in accounts receivable of $2.6 million, an increase in inventory of $0.6 million, an increase in prepaids and other current assets of $0.5 million, an increase in other non-current assets of $0.3 million and a decrease in deferred rent of $0.4 million all partially offset by an increase in accounts payable and accrued compensation and other expenses of $3.7 million.

During the year ended December 31, 2016, cash used in operating activities was $4.9 million and was due primarily to a net loss of $11.6 million and the impact of a settlement with a former foundry supplier of $2.0 million, partially offset by non-cash charges of $3.3 million related to stock-based compensation expense, $1.0 million related to depreciation and amortization, $1.2 million related to amortization of intangible assets, $0.6 million related to amortization of debt discount, and a decrease in our net assets and liabilities of $2.5 million. The decrease in assets and liabilities is due primarily to a decrease in accounts receivable of $0.4 million, a decrease in net inventories of $2.2 million, a decrease in prepaid expenses and other current assets of $1.8 million partially offset by a decrease in accounts payable and other accrued expenses of $1.9 million.

During the year ended December 31, 2015, cash used in operating activities was $7.1 million, primarily due to a net loss of $8.4 million, partially offset by non-cash charges of $4.9 million, primarily depreciation and amortization and stock-based compensation, and a net change in our net operating assets and liabilities of $3.6 million. The change in our net operating assets and liabilities was primarily due to a $4.5 million increase in accounts receivable due to the timing of revenue during the fourth quarter of 2015 and a $1.0 million increase in prepaid expenses and other current assets partially offset by a $1.9 million increase in accounts payable.

Cash Flows from Investing Activities

Our investing activities consist primarily of purchases of property and equipment. We expect to continue to make significant capital expenditures to support continued growth of our business. During the year ended December 31, 2017, cash used in investing activities was $3.6 million, of which $2.9 million was related to the purchase of equipment, $0.4 million was related to the acquisition of a technology license, and $0.3 million was related to the issuance of a note receivable. During the year ended December 31, 2016, cash used in investing activities was $2.7 million, related primarily to the purchase of equipment, an increase in leasehold improvements related to our new headquarters in Santa Clara, California, and $0.2 million related to the issuance of a note receivable. During the year ended December 31, 2015, cash used in investing activities was $0.6 million, related primarily to the purchase of equipment.

Cash Flows from Financing Activities

During the year ended December 31, 2017, cash provided by financing activities was $14.2 million, due primarily to $18.4 million received from the net proceeds of our follow-on public offering of our common stock and $0.5 million from the exercise of stock options and purchases made through the employee stock purchase plan offset by tax settlements associated with the release of restricted stock units partially offset by net repayments of $4.4 million and $0.3 million, respectively, on our term loan and revolving line of credit.

During the year ended December 31, 2016, cash provided by financing activities was $4.2 million and was due primarily to net proceeds from our term loan of $17.8 million offset by repayments of borrowings under our prior term loan of $15.7 million, net proceeds from our line of credit of $1.8 million, and proceeds from the issuance of common stock of $0.2 million.

During the year ended December 31, 2015, cash provided by financing activities was $25.1 million, due primarily to $22.1 million received from the net proceeds from our IPO and $14.9 million from our prior term loan, partially offset by payments of $11.9 million on our loans with both Bridge Bank and Opus Bank.

Off Balance Sheet Arrangements

During the periods presented, we did not have any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which would have been established for the purpose of facilitating off balance sheet arrangements or other contractually narrow or limited purpose.

Credit Facility

The Company is a party to that certain Business Financing Agreement dated July 7, 2016, by and between Western Alliance Bank and the Company, as amended (“Credit Facility”). The Credit Facility originally provided for (i) a term loan of up to $18.0 million (the “Term Loan”) and (ii) a revolving credit line advance (the “Line of Credit”) in the aggregate amount of the lower of (x) $2.0 million and (y) 80% of certain of the Company’s receivables. Prior to the Amendment (as defined below), the Term Loan bore interest at a rate per annum equal to the greater of the prime rate or 3.5%, plus 0.75% (5.00% on September 30, 2017), and was scheduled to mature in June 2019. Prior to the Amendment, the Line of Credit bore interest at a rate per annum equal to the greater of the prime rate or 3.5% plus 0.50% (4.75% on September 30, 2017), and was scheduled to mature in July 2018. Prior to the Amendment, we made interest-only payments on the Term Loan from July 2016 through September 2016 and began making interest payments and principal payments in 33 equal monthly installments starting October 2016. Prior to the Amendment, the Credit Facility provided that any indebtedness we incurred thereunder was collateralized by substantially all assets of the Company and any domestic subsidiaries, subject to certain customary exceptions. We paid a facility fee of $150,000 as well as a $25,000 diligence fee upon entry into the Credit Facility and an additional $10,000 on July 7, 2017. These fees have been recorded as a debt discount and are being amortized over the life of the agreement.

The Credit Facility contains customary representations and warranties and affirmative and negative covenants. Among other negative covenants, prior to the Amendment, the Credit Facility provided that we may not (i) permit the ratio of the balance of unrestricted cash deposited at the financial institution, plus eligible receivables, net of reserve to the total amounts owed with respect to advances under the revolving credit line to be less than 1.50 to 1.00 and (ii) permit cash held at the financial institution in a deposit account to be less than 100% of the term loan outstanding. Upon an occurrence of an event of default, under the Credit Facility we could be required to pay interest on all outstanding obligations under the agreement at a rate of 5% above the otherwise applicable interest rate, and the lender may accelerate our obligations under the agreement. As of December 31, 2017, we were in compliance with all financial covenants and restrictions.

On September 29, 2017, we amended the Credit Facility by entering into that certain Second Business Financing

Modification Agreement, dated September 29, 2017 (the "Amendment") with Western Alliance Bank. The Amendment extended the maturity dates of the Line of Credit and the Term Loan to July 2019 and September 2021, respectively, from July 2018 and June 2019, respectively. In addition, the Amendment increased the amount available under the Line of Credit in the aggregate amount to $5.0 million.

As part of this amendment we incurred additional fees of $125,000. These fees have been recorded as a debt discount and are being amortized over the life of the agreement. During the year ended December 31, 2017, the amortization of the debt discount was $82,000 and the unamortized debt discount was $0.2 million as of December 31, 2017.

The Amendment also decreased the interest rates under the Term Loan and the Line of Credit and changed the payment schedule under the Term Loan. The Term Loan bears interest at a rate per annum equal to the greater of the prime rate or 3.5% (4.5% on December 31, 2017). The Line of Credit bears interest at a rate per annum equal to the greater of the prime rate or 3.5% plus 0.25% (4.75% on December 31, 2017). Under the Amendment, we will make interest-only payments on the Term Loan from October 10, 2017 and on the 10th calendar day of each month thereafter, and will make principal and interest payments in 36 equal installments beginning on October 10, 2018, and on the 10th calendar day of each month thereafter, until the maturity date of the Term Loan. Pursuant to the Amendment, our Intellectual Property (as defined in the Amendment) is excluded from the collateral used to secure the indebtedness we incurred under the Credit Facility.

Under the Amendment, we have agreed to modified and additional negative covenants, requiring us to maintain a ratio of at least 1.25 to 1.00 with respect to either of the following: (x) the sum of our cash and certain receivables to our indebtedness under the Credit Facility; or (y) our Adjusted EBITDA (as defined in the Amendment), less certain capital expenditures, to the sum of (a) all principal payments and interest expense that we would have owed to the Lender if the Term Loan's amortization were to start on September 29, 2017, all measured on a trailing 4-quarter basis, plus (b) all principal payments and interest expense on any of our other debt. The Amendment also subjects us to the requirement that our quarterly revenues shall not negatively deviate more than 25% from the projections provided to Western Alliance Bank in accordance with the Credit Facility.

Contractual Obligations and Commitments

The following is a summary of our contractual obligations and commitments as of December 31, 2017:

		Payments due by period			
Contractual Obligations	**Total**	**Less than 1 year**	**1 – 3 Years**	**4 – 5 Years**	**More than 5 Years**
			(in thousands)		
Operating leases (1)	$ 7,117	$ 1,238	$ 2,474	$ 2,612	$ 793
Inventory-related commitments (2)	4,294	4,294	—	—	—
Financing arrangements (3)	13,500	1,000	12,500		—
Joint Development and Manufacturing Agreement (4)	400	400	—	—	—
Licensing and Development Agreement (5)	500	500	—	—	—
Total contractual cash obligations	$ 25,811	$ 7,432	$ 14,974	$ 2,612	$ 793

(1) Operating leases primarily relate to our leases of office space with terms expiring through July 31, 2023.

(2) Represents outstanding purchase orders for wafer commitments that we have placed with our suppliers as of December 31, 2017.

(3) Financing arrangements represent debt maturities under our term loan and line of credit.

(4) Represents our commitments under the third amendment of the CBRAM Joint Development and Manufacturing Agreement executed on November 22, 2017 with TowerJazz Panasonic Semiconductor Company.

(5) Represents our commitments under the Licensing and Development Agreement executed on April 21, 2016 with Semitech Semiconductor Pty, Ltd. or Semitech.

As of December 31, 2017 we had a liability of $36,000 for uncertain tax positions.

During 2017 and 2016, we made investments in Semitech as part of a license and development agreement dated April 16, 2016. Semitech has developed N-PLC products and market knowledge in the N-PLC devices space and plans to sell its products into the Smart Grid, Solar, Smart Lighting and Industrial space. Investments during 2016 through June 14, 2017 were recorded as notes receivable. On June 15, 2017, $0.4 million of notes receivable and accrued interest were converted into 233,335 shares of preferred stock in Semitech. This investment is recorded at cost in other non-current assets on the consolidated balance sheets as of December 31, 2017. As of December 31, 2017 and 2016, we recorded investments in notes receivable balance of $0.2 million and $0.2 million, respectively, which were classified in other non-current assets on the consolidated balance sheets.

ITEM 7A. Quantitative and Qualitative Disclosures about Market Risk

We are exposed to market risks in the ordinary course of our business. These risks primarily include foreign exchange rate and interest rate sensitivities as follows:

Foreign Currency Risk

Our results of operations and cash flows are subject to fluctuations due to changes in foreign currency exchange rates.

The majority of our revenue is denominated in U.S. dollars. Our expenses are generally denominated in the currencies in which our operations are located, which is primarily in the United States and to a lesser extent in Europe, Middle East and Africa, or EMEA, and APAC. Our results of operations and cash flows are, therefore, subject to fluctuations due to changes in foreign currency exchange rates and may be adversely affected in the future due to changes in foreign exchange rates. The effect of a hypothetical 10% change in foreign currency exchanges rates applicable to our business would not have a material impact on our historical consolidated financial statements.

We have not hedged exposures denominated in foreign currencies or used any other derivative financial instruments. Although we transact the substantial majority of our business in U.S. dollars, future fluctuations in the value of the U.S. dollar may affect the competitiveness of our products and thus may impact our results of operations and cash flows.

Interest Rate Sensitivity

We had cash and cash equivalents of $30.1 million as of December 31, 2017, consisting of bank deposits and money market funds. Such interest-earning instruments carry a degree of interest rate risk. To date, fluctuations in interest income have not been significant. We also had total outstanding gross debt of $13.5 million offset partially by a debt discount of $0.2 million, as of December 31, 2017. The outstanding debt relates to a new term loan and line of credit described in section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations – Credit Facility."

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, nor do we anticipate being exposed to, material risks due to changes in interest rates. Our exposure to interest rates relates to the change in the amounts of interest we must pay on our variable rate borrowings. A hypothetical 10% increase in our borrowing rates would not have a material impact on interest expense on our principal balances as of December 31, 2017.

Critical Accounting Policies and Estimates

Our consolidated financial statements and the related notes are prepared in accordance with GAAP. The preparation of our consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of our assets, liabilities, revenue, costs and expenses and related disclosures. We base our estimates on our historical experience and various other assumptions that we believe are reasonable under the circumstances. Our actual results could differ materially from these estimates. To the extent that there are material differences between our estimates and our actual results, our future financial statements will be affected.

The critical accounting policies involving judgments and estimates that we believe have the most impact on our consolidated financial statements are discussed below.

Revenue Recognition

We recognize revenue from product sales when persuasive evidence of an arrangement exists, the selling price is fixed or determinable, transfer of title occurs, and the collectibility of the resulting receivable is reasonably assured. Due to the historical immaterial level of product returns under warranty, we do not record a reserve for estimated returns under warranty at the time of revenue recognition.

Generally, we meet these conditions upon shipment because, in most cases, title and risk of loss passes to the customer at that time. In addition, we estimate and record provisions for future returns and other charges against revenue at the time of shipment, consistent with the terms of sale. We sell products to distributors at the price listed in our distributor price book. At the time of sale we record a sales reserve for ship from stock and debits ("SSDs"), stock rotation rights and any special programs approved by management. We offset the sales reserve against revenue, producing the revenue amount reported in the consolidated statements of operations.

The market price for our products can be significantly different from the book price at which we sold the product to a distributor. When the market price, as compared to our original book price, of a particular distributor's sales opportunity to their customers would result in low or negative margins for our distributor, we negotiate SSDs with the distributor. Our management analyzes our SSD history to develop current SSD rates that form the basis of the SSD revenue reserve recorded each period. We obtain the historical SSD rates from our distributor's records and our internal records.

We typically grant payment terms of between 30 and 60 days to our customers. Our customers generally pay within those terms. Distributors are invoiced for shipments at listed book price. When the distributors pay the invoice, they may claim debits for SSDs previously authorized by us when appropriate. Once claimed, we process the requests against prior authorizations and reduce reserves previously established for that customer.

The revenue we record for sales to our distributors is net of estimated provisions for these programs. Determining net revenue requires significant judgments and estimates on our part. We base our estimates on historical experience rates, the levels of inventory held by our distributors, current trends and other related factors. Because of the inherent nature of estimates, there is a risk actual amounts may differ materially from our estimates. Our consolidated financial condition and operating results depend on our ability to make reliable estimates. We believe that such estimates are reasonable.

We also monitor collectibility of accounts receivable primarily through review of our accounts receivable aging. When facts and circumstances indicate the collection of specific amounts or from specific customers is at risk, we assess the impact on amounts recorded for bad debts and, if necessary, record a charge in the period such determination is made. As of December 31, 2017 and 2016, there was no allowance for doubtful accounts.

Inventories

We record inventories at the lower of standard cost (which generally approximates actual cost on a first-in, first-out basis) or net realizable value ("NRV"). NRV is the estimated selling price in the ordinary course of business less reasonably predictable costs of completion, disposal and transportation. On a quarterly basis, we analyze inventories on a part-by-part basis. The carrying value of inventory is adjusted for excess and obsolete inventory based on inventory age, shipment history and the forecast of demand over a specific future period. At the point of loss recognition, a new lower cost basis for that inventory is established and subsequent changes in facts and circumstances do not result in the restoration or increase in that new cost basis. The semiconductor markets that we serve are volatile and actual results may vary from forecast or other assumptions, potentially affecting our assessment of excess and obsolete inventory which could have a material effect on our results of operations.

Income Taxes

We account for income taxes using an asset and liability approach, which requires recognition of deferred 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 our taxable income. Valuation allowances are established to reduce deferred tax assets as necessary when in management's estimate, based on available objective evidence, it is more likely than not that we will not generate sufficient taxable income in future periods to realize the benefit of our deferred tax assets. We include interest and penalties related to unrecognized tax benefits in income tax expense. We recognize in our consolidated financial statements the impact of a tax position that based on its technical merits is more likely than not to be sustained upon examination. The valuation allowance as of December 31, 2017 was approximately $26.5 million.

Stock-based Compensation

Stock-based compensation costs related to stock options granted to employees are measured at the date of grant based on the estimated fair value of the award, net of estimated forfeitures. We estimate the grant date fair value, and the resulting stock-based compensation expense, using the Black-Scholes option-pricing model. We recognize compensation costs for awards with service and performance vesting conditions on an accelerated method under the graded vesting method over the requisite service period of the award. For stock options with no performance condition, we recognize compensation costs on a straight-line basis over the requisite service period of the award, which is generally the vesting term of four years.

The Black-Scholes option-pricing model requires the use of highly subjective assumptions which determine the fair value of stock-based awards.

The assumptions used in our option-pricing model represent management's best estimates. These estimates are complex, involve a number of variables, uncertainties and assumptions and the application of management's judgment, so that they are inherently subjective. If factors change and different assumptions are used, our stock-based compensation expense could be materially different in the future.

These assumptions are estimated as follows:

- *Fair Value of Common Stock.* We used the publicly quoted price as the fair value of our common stock.
- *Risk-Free Interest Rate.* We base the risk-free interest rate used in the Black-Scholes option-pricing model on the implied yield available on U.S. Treasury zero-coupon issues with an equivalent remaining term of the options for each option group.
- *Expected Term.* The expected term represents the period that our stock-based awards are expected to be outstanding. Because of the limitations on the sale or transfer or our common stock as a privately held company, we do not believe our historical exercise pattern is indicative of the pattern we will experience as a publicly traded company. We have consequently used the Staff Accounting Bulletin, or SAB 110, Simplified Method to calculate the expected term, which is the average of the contractual term and vesting period. We plan to continue to use the SAB 110 Simplified Method until we have sufficient trading history as a publicly traded company.
- *Volatility.* We determine the price volatility factor based on the historical volatilities of our peer group as we did not have a sufficient trading history for our common stock. Industry peers consist of several public companies in the technology industry that provide similar services with comparable characteristics including enterprise value, risk profiles and position within the industry. We intend to continue to consistently apply this process using the same or similar public companies until a sufficient amount of historical information regarding the volatility of our own common stock share price becomes available, or unless circumstances change such that the identified companies are no longer similar to us, in which case, more suitable companies whose share prices are publicly available would be utilized in the calculation.
- *Dividend Yield.* The expected dividend assumption is based on our current expectations about our anticipated dividend policy. We currently do not expect to issue any dividends.

In addition to assumptions used in the Black-Scholes option-pricing model, we must also estimate a forfeiture rate to calculate the stock-based compensation for our awards. We will continue to use judgment in evaluating the assumptions related to our stock-based compensation on a prospective basis. As we continue to accumulate additional data, we may have refinements to our estimates, which could materially impact our future stock-based compensation expense.

We estimate the fair value of the restricted stock units, or RSUs, using the closing market price of our common stock on the date of grant. Our grants of RSUs typically vest over a two-year period.

During 2017, our compensation committee granted RSUs that do not begin vesting until certain performance goals are met. All performance goals must be met in order for the shares to begin vesting. Vesting would begin on the one year anniversary of the grant date. As a result of these performance based vesting conditions we valued these RSUs using Monte Carlo simulation techniques to establish a fair value per share at the time of the grant.

The fair value of the employee stock options was estimated using the following assumptions for the periods presented:

	Year Ended December 31,		
	2017	2016	2015
Volatility	86 %	52 %	40 %
Expected dividend yield	—	—	—
Risk-free rate	2.15 %	1.34 %	1.59 %
Expected term (in years)	6	6	5

For the years ended December 31, 2017, 2016 and 2015, stock-based compensation expense was $3.5 million, $3.3 million and $0.8 million respectively. As of December 31, 2017, we had approximately $2.0 million of total unrecognized compensation expense related to stock options, net of related forfeiture estimates, which we expect to recognize over a weighted-average period of approximately 2.9 years. The intrinsic value of all outstanding options as of December 31, 2017 was $4.6 million based on the market price of our common stock of $6.45 per share. As of December 31, 2017 the total unrecognized compensation cost related to RSU's and our 2015 Employee Stock Purchase Plan was $1.1 million and $14,000, respectively, and these amounts are expected to be recognized over 2.1 years and 0.1 years, respectively.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and Board of Directors of
Adesto Technologies Corporation

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Adesto Technologies Corporation and its subsidiaries (the "Company") as of December 31, 2017 and 2016, the related consolidated statements of operations, comprehensive loss, convertible preferred stock and stockholders' equity (deficit) and cash flows for each of the three years in the period ended December 31, 2017, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2017 and 2016, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2017, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting, 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.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ BPM LLP

We have served as the Company's auditor since 2015.

San Jose, California
March 13, 2018

ADESTO TECHNOLOGIES CORPORATION
CONSOLIDATED BALANCE SHEETS
(in thousands, except share and per share data)

	December 31, 2017	December 31, 2016
Assets		
Current assets:		
Cash and cash equivalents	$ 30,078	$ 19,719
Accounts receivable, net	8,668	6,111
Inventories	5,814	5,182
Prepaid expenses	993	462
Other current assets	52	105
Total current assets	45,605	31,579
Property and equipment, net	6,833	5,962
Intangible assets, net	7,452	8,324
Other non-current assets	900	296
Goodwill	22	22
Total assets	$ 60,812	$ 46,183
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 7,075	$ 5,167
Accrued compensation and benefits	2,614	1,599
Accrued expenses and other current liabilities	2,359	2,176
Line of credit, current	1,500	1,807
Term loan, current	926	6,466
Total current liabilities	14,474	17,215
Term loan, non-current	10,908	9,775
Other non-current liabilities	75	—
Deferred rent, non-current	2,404	2,826
Deferred tax liability, non-current	1	2
Total liabilities	27,862	29,818
Commitments and contingencies (See Note 8)		
Stockholders' equity:		
Preferred stock, $0.0001 par value, 5,000,000 shares authorized as of December 31, 2017 and December 31, 2016; no shares issued and outstanding as of December 31, 2017 and December 31, 2016	—	—
Common stock, $0.0001 par value, 100,000,000 shares authorized; 21,291,833 and 15,494,308 shares issued and outstanding as of December 31, 2017 and December 31, 2016 respectively	2	2
Additional paid-in capital	133,087	110,749
Accumulated other comprehensive loss	(295)	(230)
Accumulated deficit	(99,844)	(94,156)
Total stockholders' equity	32,950	16,365
Total liabilities and stockholders' equity	$ 60,812	$ 46,183

See accompanying Notes to Consolidated Financial Statements

ADESTO TECHNOLOGIES CORPORATION
CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except share and per share data)

	Year Ended December 31, 2017	2016	2015
Revenue, net	$ 56,112	$ 43,968	$ 43,259
Cost of revenue	28,637	22,618	24,775
Gross profit	27,475	21,350	18,484
Operating expenses:			
Research and development	14,094	15,896	12,795
Sales and marketing	11,064	11,026	8,345
General and administrative	7,148	6,693	3,978

Gain from settlement with former foundry supplier	—	(1,962)	—
Total operating expenses	32,306	31,653	25,118
Loss from operations	(4,831)	(10,303)	(6,634)
Other (expense):			
Interest expense, net	(753)	(1,275)	(1,115)
Other (expense), net	(3)	(50)	(695)
Total other (expense), net	(756)	(1,325)	(1,810)
Loss before provision for (benefit from) income taxes	(5,587)	(11,628)	(8,444)
Provision for (benefit from) income taxes	101	(16)	(61)
Net loss	$ (5,688)	$ (11,612)	$ (8,383)
Net loss per share:			
Basic and diluted	$ (0.31)	$ (0.77)	$ (2.79)
Weighted average number of shares used in computing net loss per share:			
Basic and diluted	18,591,308	15,085,973	3,007,929

See accompanying Notes to Consolidated Financial Statements

ADESTO TECHNOLOGIES CORPORATION
CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
(in thousands)

	Year Ended December 31,		
	2017	2016	2015
Net loss	$ (5,688)	$ (11,612)	$ (8,383)
Other comprehensive loss, net of tax:			
Foreign currency translation adjustment	(65)	(84)	(143)
Comprehensive loss	$ (5,753)	$ (11,696)	$ (8,526)

See accompanying Notes to Consolidated Financial Statements

ADESTO TECHNOLOGIES CORPORATION
CONSOLIDATED STATEMENTS OF CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' EQUITY (DEFICIT)
(in thousands, except share data)

	Convertible Preferred Stock		Stockholders' Equity (Deficit)					
			Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Stockholders' Equity (Deficit)
	Shares	Amount	Shares	Amount				
Balances as of December 31, 2014	4,419,853	$ 78,467	559,554	$ —	$ 3,912	$ (3)	$ (74,161)	$ (70,252)
Proceeds from initial public offering, net of issuance costs	—	—	5,192,184	1	22,100	—	—	22,101
Conversion of convertible preferred stock upon completion of initial public offering	(4,419,853)	(78,467)	9,114,739	1	78,466	—	—	78,467
Reclassification of warrant liability to additional paid-in capital upon closing of initial public offering	—	—	—	—	1,892	—	—	1,892
Cashless exercise of common stock warrants upon completing of initial public offering	—	—	102,289	—	—	—	—	—
Options exercised	—	—	5,952	—	10	—	—	10
Stock-based compensation	—	—	—	—	787	—	—	787
Foreign currency translation adjustments	—	—	—	—	—	(143)	—	(143)
Net loss	—	—	—	—	—	—	(8,383)	(8,383)
Balances as of December 31, 2015	—	—	14,974,718	2	107,167	(146)	(82,544)	24,479
Options exercised	—	—	13,112	—	24	—	—	24
Employee stock purchase plan	—	—	68,392	—	215	—	—	215
Restricted stock units	—	—	438,086	—	—	—	—	—
Stock-based compensation	—	—	—	—	3,343	—	—	3,343

Foreign currency translation adjustments	—	—	—	—	—	(84)	—	(84)
Net loss	—	—	—	—	—	—	(11,612)	(11,612)
Balances as of December 31, 2016	—	—	15,494,308	2	110,749	(230)	(94,156)	16,365
Proceeds from follow-on offering, net of issuance costs	—	—	5,000,000	—	18,363	—	—	18,363
Cashless exercise of common stock warrants	—	—	10,223	—	—	—	—	—
Options exercised	—	—	230,123	—	442	—	—	442
Employee stock purchase plan	—	—	110,711	—	339	—	—	339
Restricted stock units, net of taxes paid related to net settlement of equity awards	—	—	446,468	—	(308)	—	—	(308)
Stock-based compensation	—	—	—	—	3,502	—	—	3,502
Foreign currency translation adjustments	—	—	—	—	—	(65)	—	(65)
Net loss	—	—	—	—	—	—	(5,688)	(5,688)
Balances as of December 31, 2017	—	$ —	21,291,833	$ 2	$ 133,087	$ (295)	$ (99,844)	$ 32,950

See accompanying Notes to Consolidated Financial Statements

ADESTO TECHNOLOGIES CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Year Ended December 31,		
	2017	**2016**	**2015**
Cash flows from operating activities:			
Net loss	$ (5,688)	$ (11,612)	$ (8,383)
Adjustments to reconcile net loss to net cash used in operating activities:			
Stock-based compensation expense	3,502	3,343	787
Depreciation and amortization	1,384	987	1,453
Amortization of intangible assets	1,222	1,235	1,236
Amortization of debt discount	82	646	504
Deferred income taxes	(1)	1	(26)
Gain from settlement with former foundry supplier	—	(1,962)	—
Changes in fair value of preferred stock warrant liability	—	—	907
Changes in assets and liabilities:			
Accounts receivable	(2,557)	425	(4,542)
Inventories	(632)	2,186	85
Prepaid expenses and other current assets	(478)	1,761	(1,004)
Other non-current assets	(270)	(1)	—
Accounts payable	2,521	(3,584)	1,866
Accrued compensation and benefits	1,015	706	(42)
Accrued expenses and other current liabilities	58	711	32
Other non-current liabilities	75	—	—
Deferred rent	(422)	300	—
Net cash used in operating activities	(189)	(4,858)	(7,127)
Cash flows from investing activities:			
Acquisition of property and equipment	(2,868)	(2,481)	(559)
Acquisition of intangible assets	(350)	—	—
Issuance of note receivable	(334)	(181)	—
Net cash used in investing activities	(3,552)	(2,662)	(559)
Cash flows from financing activities:			
Proceeds from public offering, net of underwriting discounts and commissions	18,363	—	22,101
Proceeds from exercise of stock options and employee stock purchase plan	781	239	10
Tax withholdings related to net share settlement of restricted stock units	(308)	—	—
Proceeds from revolving line of credit	30,598	7,415	—
Payments on revolving line of credit	(30,905)	(5,608)	(4,273)
Proceeds from term loan, net of fees	12,000	17,825	14,903
Payments on term loan	(16,364)	(15,650)	(7,600)
Net cash provided by financing activities	14,165	4,221	25,141
Effect of exchange rates on cash and equivalents	(65)	(71)	(338)
Net increase (decrease) in cash and cash equivalents	10,359	(3,370)	17,117
Cash and cash equivalents - beginning of period	19,719	23,089	5,972
Cash and cash equivalents - end of period	$ 30,078	$ 19,719	$ 23,089
Supplemental disclosures of other cash flow information:			
Cash paid for interest expense	$ 695	$ 688	$ 521

Supplemental disclosures of non-cash investing and financing information:

Purchase of property and equipment included in accounts payable	$	420	$	1,033	$	—
Conversion of note receivable into investment in preferred shares of unconsolidated affiliate		363		—		—
Accrued deferred financing costs		125		—		—
Issuance of preferred stock warrants in connection with term loan Conversion of convertible preferred stock to common stock		—		—		863
Conversion of convertible preferred stock to common stock		—		—		78,467
Reclassification of warrant liability to additional paid-in-capital upon closing of initial public offering		—		—		1,892

See accompanying Notes to Consolidated Financial Statements

ADESTO TECHNOLOGIES CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 1. Organization and Summary of Significant Accounting Policies.

Organization and Nature of Operations.

Adesto Technologies Corporation (together with its subsidiaries; "Adesto", "we", "our", "us" or the "Company") was incorporated in the state of California in January 2006 and reincorporated in Delaware in October 2015. We are a leading provider of application-specific, ultra-low power non-volatile memory ("NVM") products. Our corporate headquarters are located in Santa Clara, California.

On September 28, 2012, we purchased certain flash memory product assets from Atmel Corporation and our financial results include the operating results of those assets from the date of acquisition.

The Company completed its initial public offering ("IPO") of common stock on October 30, 2015. The Company sold 5,192,184 shares, including 192,184 shares for the underwriters' option to purchase additional shares. The shares were sold at an initial public offering price of $5.00 per share for net proceeds of $22.1 million to the Company, after deducting underwriting discounts and commissions and offering expenses.

The Company completed a follow-on offering of common stock in June 2017. The Company sold 5,000,000 shares, including 625,000 shares upon exercise of the underwriters' option to purchase additional shares. The shares were sold at a public offering price of $4.00 per share for net proceeds of $18.4 million to the Company, after deducting underwriting discounts and commissions and offering expenses.

Liquidity.

Since inception we have funded our operations primarily through sales of common and preferred stock and borrowing arrangements. As of December 31, 2017, our principal sources of liquidity consisted of cash and cash equivalents of $30.1 million and $3.5 million of additional borrowing capacity under our revolving line of credit. In addition, we have incurred net losses since our inception, and as of December 31, 2017 have an accumulated deficit of approximately $99.8 million. We expect to continue to incur operating losses and negative cash flows from operations through March 31, 2018.

Borrowings under our term loan are subject to certain restrictive covenants and we were not in compliance with those covenants during the months of August, September, October and November 2016. In February 2017, we entered into a First Business Financing Modification agreement with Western Alliance Bank which as of December 31, 2016 (i) waived the Company's default as a result of the non-compliance referred to above and (ii) reduced the ratio of unrestricted cash deposited at the financial institution to the term debt outstanding to not less than 1.00 to 1.00 (see Note 6. Borrowings.). We believe that our existing cash and cash equivalents, together with available resources from our revolving line of credit and our forecasted operating results, will be sufficient to fund our operations and provide adequate working capital for the next twelve months.

In the future, we expect to fund our ongoing operations with cash flows from our operations. We expect to require additional capital to respond to business opportunities, challenges, acquisitions or unforeseen circumstances and may decide to engage in equity or debt financings or enter into credit facilities; however, we may not be able to timely secure additional debt or equity financing or raise additional capital in the public markets on favorable terms or at all. If we are unable to obtain adequate financing or financing on terms satisfactory to us, when we require it, our ability to continue to grow or support our business and to respond to business challenges could be significantly limited.

Basis of Presentation.

The consolidated financial statements include the results of our operations, and the operations of our wholly owned subsidiaries. All intercompany balances and transactions have been eliminated.

Reclassifications.

Certain reclassifications have been made to prior periods' consolidated financial statements to conform to the current period presentation. These reclassifications did not result in any change in previously reported total assets, stockholders' equity or net loss.

Reverse Stock Split.

On October 1, 2015, we effected a 1-for-33 reverse stock split of our common stock and convertible preferred stock (collectively, "Capital Stock"). On the effective date of the reverse stock split, (i) each 33 shares of outstanding Capital Stock were reduced to one share of Capital Stock; (ii) the number of shares of Capital Stock into which each outstanding warrant or option to purchase Capital Stock is exercisable were proportionately reduced on a 33-to-1 basis; (iii) the exercise price of each outstanding warrant or option to purchase Capital Stock were proportionately increased on a 1-to-33 basis; and (iv) each 33 shares of authorized Capital Stock were reduced to one share of Capital Stock. All of the share numbers, share prices, and exercise prices have been adjusted, on a retroactive basis, to reflect this 1-for-33 reverse stock split. The par value of the common stock and convertible preferred stock were not adjusted as a result of the reverse stock split.

Use of Estimates.

The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States of America ("U.S. GAAP") requires management to make estimates, judgments and assumptions that affect the reported amount of assets, liabilities, revenue and expenses and related disclosures of contingent assets and liabilities. On an on-going basis, we evaluate those estimates, including those related to allowances for doubtful accounts, reserves for sales, warranty accrual, inventory write-downs, valuation of long-lived assets, including property and equipment and identifiable intangible assets and goodwill, loss on purchase commitments, valuation of deferred taxes and contingencies. In addition, we use assumptions when employing the Black-Scholes option-pricing model to calculate the fair value of stock options granted and Monte Carlo simulation techniques to value certain restricted stock units with performance-based vesting conditions. We base our estimates of the carrying value of certain assets and liabilities on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, when these carrying values are not readily available from other sources. Actual results could differ from these estimates.

Revenue Recognition and Accounts Receivable Allowances.

We recognize revenue from product sales when persuasive evidence of an arrangement exists, the selling price is fixed or determinable, transfer of title occurs, and the collectibility of the resulting receivable is reasonably assured. Due to the historical immaterial level of product returns under warranty, we do not record a reserve for estimated returns under warranty at the time of revenue recognition.

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We typically grant payment terms of between 30 and 60 days to our customers. Our customers generally pay within those terms. Distributors are invoiced for shipments at listed book price. When the distributors pay the invoice, they may claim debits for SSDs previously authorized by us when appropriate. Once claimed, we process the requests against prior authorizations and adjust reserves previously established for that customer.

The revenue we record for sales to our distributors is net of estimated provisions for these programs. Determining net revenue requires significant judgments and estimates on our part. We base our estimates on historical experience rates, the levels of inventory held by our distributors, current trends and other related factors. Because of the inherent nature of estimates, there is a risk actual amounts may differ materially from our estimates. Our consolidated financial condition and operating results depend on our ability to make reliable estimates. We believe that such estimates are reasonable.

We also monitor collectibility of accounts receivable primarily through review of our accounts receivable aging. When facts and circumstances indicate the collection of specific amounts or from specific customers is at risk, we assess the impact on amounts recorded for bad debts and, if necessary, record a charge in the period such determination is made. As of December 31, 2017 and 2016, there was no allowance for doubtful accounts.

Shipping Costs.

We charge shipping costs to cost of revenue as incurred.

Product Warranty.

Our products are sold with a limited warranty for a period of one year, warranting that the product conforms to specifications and is free from material defects in design, materials and workmanship. To date, we have had insignificant returns of any defective production parts. During the year ended December 31, 2015, we recorded $250,000 for a specific potential warranty claim. During the year ended December 31, 2016 $41,000 has been incurred relating to this potential warranty claim. During the year ended December 31, 2017, $185,000 has been incurred relating to this potential warranty claim and we recorded $27,000 for an additional potential warranty claim. As of December 31, 2017 and 2016, the warranty accrual was $51,000 and $209,000, respectively, and is included in accrued expenses and other current liabilities on the consolidated balance sheets.

Income Taxes.

We account for income taxes using an asset and liability approach, which requires recognition of deferred 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 our taxable income. Valuation allowances are established to reduce deferred tax assets as necessary when in management's estimate, based on available objective evidence, it is more likely than not that we will not generate sufficient taxable income in future periods to realize the benefit of our deferred tax assets. We include interest and penalties related to unrecognized tax benefits in income tax expense. We recognize in our consolidated financial statements the impact of a tax position that based on its technical merits is more likely than not to be sustained upon examination.

Foreign Currency Translation.

The functional currency of our foreign subsidiaries is the local currency. In consolidation, we translate assets and liabilities at exchange rates in effect at the consolidated balance sheet date. We translate revenue and expense accounts at the average exchange rates during the period in which the transaction takes place. Net losses from foreign currency translation of assets and liabilities were $0.1 million, $0.1 million, and $0.1 million for the years ended December 31, 2017, 2016, and 2015, respectively, and are included in the cumulative translation adjustment component of accumulated other comprehensive loss, net of tax, a component of stockholders' equity. Net losses arising from transactions denominated in currencies other than the functional currency were $4,000, $0.1 million, and $0.1 million for the years ended December 31, 2017, 2016, and 2015, respectively, and are included in other income (expense), net in the consolidated statements of operations.

Cash and Cash Equivalents.

We consider all highly liquid investments with an initial maturity of 90 days or less at the date of purchase to be cash equivalents. We maintain such funds in overnight cash deposits.

Property and Equipment.

Property and equipment are carried at cost less accumulated depreciation and amortization. Depreciation and amortization are computed using the straight-line method over the estimated useful lives of the assets or the term of the related lease, whichever is shorter. Estimates of useful lives are as follows:

	Estimated useful lives
Machinery and equipment	2-5 years
Furniture and fixtures	3 years
Leasehold improvements	Shorter of lease term or 7 years
Computer software	3 years

Inventories.

We record inventories at the lower of standard cost (which generally approximates actual cost on a first-in, first-out basis) or net realizable value. Net realizable value is the estimated selling price in the ordinary course of business less reasonably predictable costs of completion, disposal and transportation. On a quarterly basis, we analyze inventories on a part-by-part basis. The carrying value of inventory is adjusted for excess and obsolete inventory based on the forecast of demand over a specific future period. At the point of loss recognition, a new lower cost basis for that inventory is established and subsequent changes in facts and circumstances do not result in the restoration or increase in that new cost basis. The semiconductor markets that we serve are volatile and actual results may vary from forecast or other assumptions, potentially affecting our assessment of excess and obsolete inventory which could have a material effect on our results of operations.

Long-Lived Assets.

We evaluate our long-lived assets, including property and equipment, for impairment whenever events or changes in circumstances indicate that the carrying value of these assets may not be recoverable. We recognize an impairment loss when the net book value of such assets exceeds the estimated future undiscounted cash flows attributable to the asset. If impairment is indicated, we write the asset down to its estimated fair value. For all periods presented, we have not recognized any impairment losses on our long-lived assets.

Purchased Intangible Assets.

Purchased intangible assets are amortized over their useful lives unless these lives are determined to be indefinite. Purchased intangible assets with definite lives are carried at cost less accumulated amortization. Amortization is computed using the straight-line method over the estimated useful lives of the respective assets as follows:

	Years
Developed technology	10
Customer relationships	12
Customer backlog	1
Non-compete agreement	5

Goodwill.

Goodwill represents the excess of the cost of an acquisition over the sum of the amounts assigned to tangible and identifiable intangible assets acquired less liabilities assumed.

We evaluate our goodwill, at a minimum, on an annual basis and whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. We perform our annual goodwill impairment test as of November 1 of each year.

When evaluating goodwill for impairment, we may initially perform a qualitative assessment which includes a review and analysis of certain quantitative factors to estimate if a reporting units' fair value significantly exceeds its carrying value. When the estimate of a reporting unit's fair value appears more likely than not to be less than its carrying value based on this qualitative assessment, we continue to the first step of two steps impairment test. The first step requires a comparison of the fair value of the reporting unit to its net book value, including goodwill. The fair value of the reporting units is determined based on a weighting of income and market approaches. Under the income approach, we calculate the fair value of a reporting unit based on the present value of estimated future cash flows. Under the market approach, we estimate the fair value based on market multiples of revenue or earnings for comparable companies. Determining the fair value of a reporting unit is judgmental in nature and involves the use of significant estimates and assumptions. These estimates and assumptions include revenue growth rates and operating margins used to calculate projected future cash flows, risk-adjusted discount rates, and future economic and market conditions and determination of appropriate market comparables. We base these fair value estimates on reasonable assumptions but that are unpredictable and inherently uncertain. Actual future results may differ from those estimates. A potential impairment exists if the fair value of the reporting unit is lower than its net book value. The second step of the process is only performed if a potential impairment exists, and it involves determining the difference between the fair values of the reporting unit's net assets, other than goodwill, and the fair value of the reporting unit, and, if the difference is less than the net book value of goodwill, an impairment charge is recorded. In the event that we determine that the value of goodwill has become impaired, we record a charge for the amount of impairment during the fiscal quarter in which the determination is made. We operate in one reporting unit. We conducted our annual goodwill impairment analysis in the fourth quarters of 2017, 2016, and 2015 and no goodwill impairment was indicated.

Research and Development Expenses.

Research and development expenditures are expensed as incurred.

Stock-based Compensation.

We account for stock-based compensation using the fair value method. We determine fair value for stock options awarded to employees at the grant date using the Black-Scholes option-pricing model, which requires us to make various assumptions, including the fair value of the underlying common stock, expected future share price volatility and expected term. We determine the fair value of stock options awarded to non-employees at each vesting date using the Black-Scholes option-pricing model, and re-measure fair value at each reporting period until the services required under the arrangement are completed. Fair value is recognized as an expense on a straight-line basis over the requisite service period, which is generally the vesting period. We are required to estimate the expected forfeiture rate and only recognize expense for those stock-based awards expected to vest. We estimate the forfeiture rate based on historical experience of our stock-based awards that are granted, exercised and cancelled. If the actual forfeiture rate is materially different from our estimate, stock-based compensation expense in future periods could be significantly different from what was recorded in the current period.

Time-based restricted stock units ("RSUs") are valued at the grant date fair value of the underlying common shares. Performance-based RSUs are valued using the Monte Carlo simulation technique. The Monte Carlo simulation model incorporates assumptions for the holding period, risk-free interest rate, stock price volatility and dividend yield.

Concentration of Risk.

Our products are primarily manufactured, assembled and tested by third-party foundries and other contractors in Asia and we are heavily dependent on a single foundry in Taiwan for the manufacture of wafers and a single contractor in the Philippines for assembly and testing of our products. We do not have long-term agreements with either of these suppliers. A significant disruption in the operations of these parties would adversely impact the production of our products for a substantial period of time, which could have a material adverse effect on our business, financial condition, operating results and cash flows.

Financial instruments that potentially subject us to significant concentrations of credit risk consist principally of cash and cash equivalents and accounts receivables. We place substantially all of our cash and cash equivalents on deposit with a reputable, high credit quality financial institution in the United States of America. We believe that the bank that holds substantially all of our cash and cash equivalents is financially sound and, accordingly, subject to minimal credit risk. Deposits held with the bank may exceed the amount of insurance provided on such deposits.

We generally do not require collateral or other security in support of accounts receivable. We periodically review the need for an allowance for doubtful accounts by considering factors such as historical experience, credit quality, the age of the accounts receivable balances and current economic conditions that may affect a customer's ability to pay. As a result of our favorable collection experience and customer concentration, there was no allowance for doubtful accounts as of December 31, 2017 and 2016.

Customer concentrations as a percentage of revenue, net were as follows:

	Year Ended December 31,		
	2017	2016	2015
Customer A	18 %	14 %	17 %
Customer B	10 %	11 %	12 %
Customer C	*	*	11 %

* less than 10%

Customer concentrations as a percentage of gross accounts receivable were as follows:

	Year Ended December 31,		
	2017	2016	2015
Customer A	31 %	18 %	16 %
Customer B	*	*	14 %
Customer C	*	13 %	13 %
Customer D	*	*	10 %

* less than 10%

Net Loss per Share.

Basic net loss per share is calculated by dividing the net loss by the weighted average number of common shares outstanding during the period, without consideration for potentially dilutive securities. Diluted net loss per share is computed by dividing the net loss by the weighted average number of common shares and potentially dilutive common stock equivalents outstanding for the period determined using the treasury-stock and if-converted methods. For purposes of the diluted net loss per share calculation, common stock options, RSUs, and common stock warrants are considered to be potentially dilutive securities.

Loss Contingencies.

We are or have been subject to claims arising in the ordinary course of business. We evaluate contingent liabilities, including threatened or pending litigation, for potential losses. If the potential loss from any claim or legal proceedings is considered probable and the amount can be estimated, we accrue a liability for the estimated loss. Because of uncertainties related to these matters, accruals are based upon the best information available. For potential losses for which there is a reasonable possibility (meaning the likelihood is more than remote but less than probable) that a loss exists, we will disclose an estimate of the potential loss or range of such potential loss or include a statement that an estimate of the potential loss cannot be made. As additional information becomes available, we reassess the potential liability related to pending claims and litigation and may revise our estimates, which could materially impact our consolidated financial statements.

Recent Accounting Pronouncements.

In May 2014, the Financial Accounting Standards Board ("FASB") issued an Accounting Standard Update ("ASU") on revenue from contracts with customers, ASU No. 2014-09, "Revenue from Contracts with Customers" ("ASC 606") which outlines a comprehensive revenue recognition model and supersedes most current revenue recognition standards. The new standard requires a company to recognize revenue as control of goods or services transfers to a customer at an amount that reflects the expected consideration to be received in exchange for those goods or services. It defines a five-step approach for recognizing revenue, which may require a company to use more judgment and make more estimates than under the current standard. The new standard will be effective for the Company starting in the first quarter of fiscal 2018. Two methods of adoption are permitted: (a) full retrospective adoption, meaning this standard is applied to all periods presented, or (b) modified retrospective adoption, meaning the cumulative effect of applying the new standard is recognized as an adjustment to the opening retained earnings balance.

The Company has selected full retrospective adoption as it has recognized revenue consistent with the standard since it started shipping product. The Company does not anticipate that the adoption of this standard will have a material impact on its consolidated financial statements including the potential impact of the additional disclosure requirement primarily because the Company has always recorded revenue on a sell-in basis. The Company is implementing changes to its accounting policies, internal controls, and disclosures to support the new standard; however, these changes will not be material.

In February 2016, the FASB issued ASU 2016-02, Leases. This ASU requires lease assets and lease liabilities arising from leases, including operating leases, to be recognized on the balance sheet, ASU 2016-02 will become effective for the Company on January 1, 2019. Adesto is currently evaluating the impact of this guidance on its consolidated financial statements.

In September 2017, the FASB issued ASU 2017-13, Revenue Recognition (Topic 605), Revenue from Contracts with Customers (Topic 606), Leases (Topic 840), and Leases (Topic 842): Amendment to SEC Paragraphs Pursuant to the Staff Announcement at the July 20, 2017 EITF Meeting and Rescission of Prior SEC Staff Announcements and Observer Comments (SEC Update). The amendments in ASU No. 2017-13 amends the early adoption date option for certain companies related to the adoption of ASU No. 2014-09 and ASU No. 2016-02.

Note 2. Balance Sheet Components.

Accounts Receivable, Net.

Accounts receivable, net consisted of the following (in thousands):

	December 31,

	2017	2016
Accounts receivable	$ 12,500	$ 8,800
Allowance for SSDs, price protection, rights of return and other activities	(3,832)	(2,689)
Total accounts receivable, net	$ 8,668	$ 6,111

Inventories.

Inventories consisted of the following (in thousands):

	December 31,	
	2017	2016
Raw materials	$ 2,213	$ 212
Work-in-process	2,408	3,793
Finished goods	1,193	1,177
Total inventories	$ 5,814	$ 5,182

For the years ended December 31, 2017, 2016 and 2015, we realized a benefit of $1.3 million, $1.1 million and $0.9 million, respectively, from sales of previously written-down products. Inventory write-downs were primarily associated with products built in excess of customer demand which resulted in excess inventory levels, legacy products for which no demand exists and lower of cost or net realizable value write-downs associated with CBRAM products for which costs exceeded net realizable value.

Property and Equipment, Net.

Property and equipment, net consisted of the following (in thousands):

	December 31,	
	2017	2016
Machinery and equipment	$ 9,457	$ 7,351
Furniture and fixtures	83	77
Leasehold improvements	4,252	4,252
Computer software	675	668
Construction in progress	1,301	1,098
Property and equipment, at cost	15,768	13,446
Accumulated depreciation and amortization	(8,935)	(7,484)
Property and equipment, net	$ 6,833	$ 5,962

Depreciation and amortization expense of property and equipment for the years ended December 31, 2017, 2016, and 2015 was $1.4 million, $1.0 million, and $1.5 million, respectively.

Accrued Expenses and Other Current Liabilities.

Accrued expenses and other current liabilities consisted of the following (in thousands):

	December 31,	
	2017	2016
Accrued sales commission payable	$ 310	$ 366
Accrued manufacturing expenses	265	149
Deferred rent, current portion	422	388
Liabilities to certain customers	468	663
Other accrued liabilities	894	610
Total accrued expenses and other current liabilities	$ 2,359	$ 2,176

Note 3. Fair Value Measurements.

Fair value is defined as the exchange price that would be received from selling an asset or paid to transfer a liability in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. We measure financial assets and liabilities at fair value at each reporting period using a fair value hierarchy which requires us to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. A financial instrument's classification within the fair value hierarchy is based upon the lowest level of input that is significant to the fair value measurement. Three levels of inputs may be used to measure fair value:

Level 1. Quoted prices in active markets for identical assets or liabilities.

Level 2 . Quoted prices for similar assets and liabilities in active markets or inputs other than quoted prices which are observable for the assets or liabilities, either directly or indirectly through market corroboration, for substantially the full term of the financial instruments.

Level 3. Unobservable inputs which are supported by little or no market activity and which are significant to the fair value of the assets or liabilities.

Financial liabilities measured at fair value on a recurring basis were as follows:

	Fair Value Measurement at Reporting Date Using			
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
	(in thousands)			
As of December 31, 2017				
Assets:				
Money market funds	$ 11,501	$ —	$ —	$11,501
As of December 31, 2016				
Assets:				
Money market funds	$ 16,540	$ —	$ —	$16,540

As of December 31, 2017 and 2016, we had no financial liabilities measured at fair value on a recurring basis.

The following table sets forth a reconciliation the changes in fair value of preferred stock warrants (in thousands):

Balance as of December 31, 2014	$ 122
Issuance of preferred stock warrants	863
Change in fair value of preferred stock warrants	907
Conversion of warrants upon IPO	(1,892)
Balance as of December 31, 2015	$ —

Note 4. Purchased Intangible Assets.

In 2012, in connection with our purchase of the serial flash memory product line assets from Atmel Corporation, we recorded $16.4 million of intangible assets. In 2017, we entered into a license agreement with TowerJazz Panasonic Semiconductor Company in the amount of $0.4 million.

Intangible assets, net are as follows (in thousands):

	December 31, 2017			
	Estimated Useful Life (in Years)	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Developed technology	10	$ 4,282	$ 2,249	$ 2,033
Customer relationships	12	9,011	3,942	5,069
Customer backlog	1	2,779	2,779	—
Non-compete agreement	5	282	282	—
TowerJazz license	2	350	—	350
Total intangible assets subject to amortization		$ 16,704	$ 9,252	$ 7,452

	December 31, 2016			
	Estimated Useful Life (in Years)	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Developed technology	10	$ 4,282	$ 1,820	$ 2,462
Customer relationships	12	9,011	3,191	5,820
Customer backlog	1	2,779	2,779	—
Non-compete agreement	5	282	240	42
Total intangible assets subject to amortization		$ 16,354	$ 8,030	$ 8,324

We recorded amortization expense related to the acquisition-related intangible assets as follows (in thousands):

	Year Ended December 31,		
	2017	2016	2015
Operating expense category:			
Research and development	$ 471	$ 484	$ 484
Sales and marketing	751	751	752
Total	$ 1,222	$ 1,235	$ 1,236

The estimated future amortization expense of acquisition-related intangible assets subject to amortization as of December 31, 2017 is as follows (in thousands):

Year Ended December 31,	
2018	$ 1,354
2019	1,354

2020	1,179
2021	1,179
2022	1,072
Thereafter	1,314
Total	$ 7,452

Note 5. Investment in Unconsolidated Affiliates

During 2017 and 2016, we made investments in Semitech Semiconductor Pty. Ltd., an Australian corporation (“Semitech”), as part of a license and development agreement dated April 16, 2016. Semitech has developed N-PLC products and market knowledge in the N-PLC devices space and plans to sell its products into the Smart Grid, Solar, Smart Lighting and Industrial space. Investments during 2016 through June 14, 2017 were recorded as notes receivable. On June 15, 2017, $0.4 million of notes receivable and accrued interest were converted into 233,335 shares of preferred stock in Semitech. This investment is recorded at cost in other non-current assets on the consolidated balance sheets as of December 31, 2017. As of December 31, 2017 and 2016, we held investments in notes receivable in the amount of $0.2 million and $0.2 million, respectively, which were classified in other non-current assets on the consolidated balance sheets.

Note 6. Borrowings.

Opus Bank Term Loan.

In April 2015, we entered into a three-year $15.0 million credit agreement, or the term loan facility. The agreement provided for a senior secured term loan facility, in an aggregate principal amount of up to $15.0 million to be used for general corporate purposes including working capital, to repay certain indebtedness and for capital expenditures and other expenses. Interest accrued on outstanding borrowings at a rate equal to (a) the higher of (i) the prime rate (as publicly announced from time to time by the Wall Street Journal) and (ii) 3.25% plus (b) (i) 1.00% if our cash equivalents are greater than 125% of the outstanding principal of our borrowings under the term loan facility, or (ii) 2.00% if our cash and cash equivalents are less than or equal to 125% of such borrowings. Indebtedness we incurred under this agreement was collateralized by substantially all of our assets and the agreement contained financial covenants requiring us to maintain a monthly asset coverage ratio after September 30, 2015 of not less than 1.10 to 1.00, and quarterly adjusted EBITDA (measured on a trailing three-month basis) of $1 through March 31, 2016 and increasing to higher levels thereafter. Under the agreement, the quarterly EBITDA covenant was not applicable if the asset coverage ratio was met at all times during any particular quarter. The agreement contained customary affirmative and negative covenants, including covenants that limited or restricted our ability to, among other things, incur additional indebtedness, grant liens, make investments, repurchase stock, pay dividends, transfer assets, merge or consolidate and make acquisitions. Upon an occurrence of an event of default, we could have been required to pay interest on all outstanding obligations under the agreement at a rate of 5% above the otherwise applicable interest rate, and the lender could accelerate our obligations under the agreement.

Borrowings of $14.0 million under this facility were repaid in full in July 2016.

In connection with the term loan facility, Opus Bank received a warrant to purchase 31,897 shares of Series E convertible preferred stock. Upon the completion of our IPO on October 30, 2015 the preferred stock warrants were converted into 315,282 of our common stock warrants. In addition, we paid financing costs of $0.1 million. The financing costs and the value of the warrant, $1.0 million, were recorded as a debt discount and were being amortized over the life of the agreement. Amortization of debt discount was $0.2 million and $0.4 million for the years ended December 31, 2016 and 2015, respectively. In connection with the repayment of this facility, the remaining unamortized debt discount of $0.4 million was recorded as interest expense in the consolidated statements of operations.

Western Alliance Bank Term Loan.

The Company is a party to that certain Business Financing Agreement dated July 7, 2016, by and between Western Alliance Bank and the Company, as amended (“Credit Facility”). The Credit Facility originally provided for (i) a term loan of up to $18.0 million (the “Term Loan”) and (ii) a revolving credit line advance (the “Line of Credit”) in the aggregate amount of the lower of (x) $2.0 million and (y) 80% of certain of the Company’s receivables. Prior to the Amendment (as defined below), the Term Loan bore interest at a rate per annum equal to the greater of the prime rate or 3.5%, plus 0.75% (5.00% on September 30, 2017), and was scheduled to mature in June 2019. Prior to the Amendment, the Line of Credit bore interest at a rate per annum equal to the greater of the prime rate or 3.5% plus 0.50% (4.75% on September 30, 2017), and was scheduled to mature in July 2018. Prior to the Amendment, we made interest-only payments on the Term Loan from July 2016 through September 2016 and began making interest payments and principal payments in 33 equal monthly installments starting October 2016. Prior to the Amendment, the Credit Facility provided that any indebtedness we incurred thereunder was collateralized by substantially all assets of the Company and any domestic subsidiaries, subject to certain customary exceptions. We paid a facility fee of $150,000 as well as a $25,000 diligence fee upon entry into the Credit Facility and an additional $10,000 on July 7, 2017. These fees have been recorded as a debt discount and are being amortized over the life of the agreement.

The Credit Facility contains customary representations and warranties and affirmative and negative covenants. Among other negative covenants, prior to the Amendment, the Credit Facility provided that we may not (i) permit the ratio of the balance of unrestricted cash deposited at the financial institution, plus eligible receivables, net of reserve to the total amounts owed with respect to advances under the revolving credit line to be less than 1.50 to 1.00 and (ii) permit cash held at the financial institution in a deposit account to be less than 100% of the term loan outstanding. Upon an occurrence of an event of default, under the Credit Facility we could be required to pay interest on all outstanding obligations under the agreement at a rate of 5% above the otherwise applicable interest rate, and the lender may accelerate our obligations under the agreement. In addition, the Credit Facility requires us to maintain a Lockbox Agreement with Western Alliance Bank. Due to the existence of the Lockbox Agreement and the lender’s ability to accelerate our obligations under the Credit Facility upon an event of default, we have classified the line of credit as a current liability.

On September 29, 2017, we amended the Credit Facility by entering into that certain Second Business Financing Modification Agreement, dated September 29, 2017 (the "Amendment") with Western Alliance Bank. The Amendment extended the maturity dates of the Line of Credit and the Term Loan to July 2019 and September 2021, respectively, from July 2018 and June 2019, respectively. In addition, the Amendment increased the amount available under the Line of Credit in the aggregate amount to $5.0 million.

As part of this amendment we incurred additional fees of $125,000. These fees have been recorded as a debt discount and are being amortized over the life of the agreement. During the year ended December 31, 2017, the amortization of the debt discount was $82,000 and the unamortized debt discount was $0.2 million as of December 31, 2017.

The Amendment also decreased the interest rates under the Line of Credit and the Term Loan and changed the payment schedule under the Term Loan. The Term Loan bears interest at a rate per annum equal to the greater of the prime rate or 3.5% (4.5% on December 31, 2017). The Line of Credit bears interest at a rate per annum equal to the greater of the prime rate or 3.5% plus 0.25% (4.75% on December 31, 2017). Under the Agreement, we will make interest-only payments on the Term Loan from October 10, 2017 and on the 10th calendar day of each month thereafter, and will make principal and interest payments in 36 equal installments beginning on October 10, 2018, and on the 10th calendar day of each month thereafter, until the maturity date of the Term Loan. Pursuant to the Amendment, our Intellectual Property (as defined in the Amendment) is excluded from the collateral used to secure the indebtedness we incurred under the Credit Facility.

Under the Amendment, we have agreed to modified and additional negative covenants, requiring us to maintain a ratio of at least 1.25 to 1.00 with respect to either of the following: (x) the sum of our cash and certain receivables to our indebtedness under the Credit Facility; or (y) our Adjusted EBITDA (as defined in the Amendment), less certain capital expenditures, to the sum of (a) all principal payments and interest expense that we would have owed to the Lender if the Term Loan's amortization were to start on September 29, 2017, all measured on a trailing 4-quarter basis, plus (b) all principal payments and interest expense on any of our other debt. The Amendment also subjects us to the requirement that our quarterly revenues shall not negatively deviate more than 25% from the projections provided to Western Alliance Bank in accordance with the Credit Facility. As of December 31, 2017, we were in compliance with all the financial covenants and restrictions.

Outstanding borrowings consisted of the following (in thousands):

	December 31,	
	2017	2016
Term loan, current	$ 926	$ 6,466
Term loan, non-current	10,908	9,775
Line of credit	1,500	1,807
Total	$ 13,334	$ 18,048

Future repayments on outstanding borrowings (excluding unamortized discount of $0.2 million as of December 31, 2017) are as follows: (in thousands)

Year ended December 31,	
2018	$ 1,000
2019	5,500
2020	4,000
2021	3,000
	$ 13,500

Interest expense incurred under our borrowings was $0.8 million, $1.3 million, and $1.1 million for the years ended December 31, 2017, 2016, and 2015, respectively.

Note 7. Segment Information.

We operate in one business segment, application-specific, ultra-low power NVM products. Our chief decision-maker, the President and Chief Executive Officer, evaluates our performance based on company-wide consolidated results. Revenue is evaluated based on product category and by geographic region.

Product revenue from customers is designated based on the geographic region to which the product is delivered. Revenue by geographic region was as follows (in thousands):

	Year Ended December 31,		
	2017	2016	2015
United States	$ 11,667	$ 6,301	$ 8,831
Rest of Americas	245	483	602
Europe	9,546	5,809	4,817
Asia Pacific	34,263	31,051	28,711
Rest of world	391	324	298
Total	$ 56,112	$ 43,968	$ 43,259

Long-lived assets are attributed to the geographic region were they are located. Long-lived assets by geographic region were as follows (in thousands):

	December 31,	
	2017	2016
United States	$ 5,074	$ 5,489

Asia Pacific	1,759	472
Europe	—	1
Total property and equipment, net	$ 6,833	$ 5,962

Note 8. Commitments and Contingencies.

Operating Leases.

The Company leases office facilities under various non-cancelable operating lease agreements. Certain lease agreements contain free or escalating rent payment provisions. The Company recognizes rent expense under such leases on a straight-line basis over the term of the lease with the difference between the expense and the payments recorded as deferred rent on the consolidated balance sheets. Any reimbursements by the landlord for tenant improvements are considered lease incentives, the balance of which is recorded as a lease incentive obligation within deferred rent on the consolidated balance sheets, and amortized as a reduction of rent expense over the life of the lease. Lease renewal periods are considered on a lease-by-lease basis in determining the lease term.

On November 2, 2015, the Company extended the lease for its former headquarters by six months to July 2016 by entering into that certain Amendment to Commercial Sublease, dated November 2, 2015, between the Company and eGain Corporation. The Amendment provided for a base rent during the extension period of $47,000 per month. Subsequently, we extended the lease to August 31, 2016.

Additionally, on November 2, 2015, the Company entered into a lease with Peterson Ridge LLC pursuant to which the Company leased a new headquarters facility, consisting of an aggregate of approximately 34,000 square feet of space in Santa Clara, California. The initial term of the lease commenced on November 2, 2015 and is scheduled to end on July 31, 2023 and may be extended, at the Company's option, for an additional five-year period following the initial lease term.

Pursuant to the lease, monthly base rental payments due under the lease are expected to be approximately $93,000 per month between August 1, 2016 and February 27, 2017, with annual increases of approximately 3% thereafter. The Company must also pay for certain other operating costs under the lease, including operating expenses, taxes, assessments, insurance, utilities, securities and property management fees. Peterson Ridge LLC is obligated to reimburse the Company for up to approximately $2.5 million of the Company's out-of-pocket costs associated with any tenant improvements, as defined in the lease. The Company was reimbursed for this amount during the year ended December 31, 2016. As of December 31, 2017 and 2016, the Company recorded a lease incentive obligation of $2.0 million and $2.4 million, respectively, of which $0.4 million and $0.4 million is included in accrued liabilities and $1.6 million and $2.0 million is included in deferred rent, non-current on the consolidated balance sheets.

Rent expense under operating leases for 2017, 2016, and 2015 was $1.0 million, $1.6 million, and $1.0 million, respectively. Future minimum lease payments under operating leases are as follows:

	Total	2018	2019	2020	2021	2022	Thereafter
				(in thousands)			
Operating leases	$ 7,117	$ 1,238	$ 1,225	$ 1,249	$ 1,287	$ 1,325	$ 793

Purchase Commitments.

As of December 31, 2017, we had purchase commitments with our third-party foundries of $4.3 million due within one year, $0.5 million for a licensing and development agreement, and $0.4 million in conjunction with an agreement with TowerJazz Panasonic Semiconductor Company.

Litigation.

We may be subject to legal proceedings, claims and litigation, including intellectual property litigation, arising in the ordinary course of business. Such matters are subject to many uncertainties and outcomes and are not predictable with assurance. We accrue amounts that we believe are adequate to address any liabilities related to legal proceedings and other loss contingencies that we believe will result in a probable loss that is reasonably estimable.

Indemnification.

During the normal course of business, we may make certain indemnities, commitments and guarantees which may include intellectual property indemnities to certain of our customers in connection with the sales of our products and indemnities for liabilities associated with the infringement of other parties' technology based upon our products. Our exposure under these indemnification provisions is generally limited to the total amount paid by a customer under the agreement. However, certain agreements include indemnification provisions that could potentially expose us to losses in excess of the amount received under the agreement. In addition, we indemnify our officers, directors and certain key employees while they are serving in good faith in such capacities.

We have not recorded any liability for these indemnities, commitments and guarantees in the accompanying consolidated balance sheets. Where necessary, we accrue for losses for any known contingent liabilities, including those that may arise from indemnification provisions, when future payment is probable.

Note 9. Common Stock, Common Stock Warrants and Stock Option Plan.

Common Stock.

We were authorized to issue 100,000,000 shares of common stock with $0.0001 par value per share as of December 31, 2017 and 2016. Each holder of common stock is entitled to one vote per share. As of December 31, 2017, no dividends have been declared by the Board of Directors, however, the holders of common stock are also entitled to receive dividends, when and if declared by our Board of Directors.

We completed a follow-on offering of our common stock in June 2017. We sold 5,000,000 shares, including 625,000 shares upon exercise of the underwriters' option to purchase additional shares. The shares were sold at a public offering price of $4.00 per share for net proceeds of $18.4 million to us, after deducting underwriting discounts and commissions and offering expenses.

Common Stock Reserved for Future Issuance.
As of December 31, 2017 and 2016, we had reserved shares of common stock for future issuances as follows:

	December 31,	
	2017	2016
Warrants to purchase common stock	389,423	411,514
Stock option plan:		
Options outstanding	1,560,453	991,895
Restricted stock units outstanding	509,894	490,954
Shares available for future grants/RSU grants	580,827	1,275,685
Shares available for ESPP	275,587	231,355
Total	3,316,184	3,401,403

Common Stock Warrants.

In connection with the conversion of preferred stock warrants upon the completion of our IPO on October 30, 2015, the following common stock warrants were outstanding:

As of December 31, 2017 Total amount of securities issuable under the outstanding warrants	Exercise Price		Issuance Date	Expiration Date
74,141	$	30.35	2012-2013	2019
315,282	$	2.38	2014-2015	2022-2024
389,423	$	7.71		

As of December 31, 2016 Total amount of securities issuable under the outstanding warrants	Exercise Price		Issuance Date	Expiration Date
74,141	$	30.35	2012-2013	2019
7,378	$	12.20	2012 - 2013	2017
329,995	$	2.38	2014-2015	2022-2024
411,514	$	7.60		

Common stock warrants are exercisable at the option of the holder any time after the date of issuance into shares of our common stock. During 2017, 7,378 common stock warrants expired and 14,713 common stock warrants were cashless exercised resulting in the issuance of 10,223 shares of common stock.

Employee Benefit Plans.

2007 Equity Incentive Plan.

In 2007, our Board of Directors and shareholders approved the 2007 Equity Incentive Plan (the "2007 Plan") under which 272,727 shares of common stock were reserved and available for the issuance of stock options and restricted stock to eligible participants. The 2007 Plan was subsequently amended to increase the number of shares of common stock reserved for issuance under the 2007 Plan to 787,878 and during the year ended December 31, 2015, the number of shares reserved for issuance under the 2007 Plan was increased to 2,651,515. Options and restricted stock awards were granted at a price per share not less than the 85% of the fair value at the date of grant or award, respectively. Restricted stock awarded to persons controlling more than 10% of our stock were granted at a price per share not less than the 100% of the fair value at the date of the award. Options that were granted to new employees generally vest over a four-year period with 25% vesting at the end of one year and the remaining to vest monthly thereafter, while options that were granted to existing employees generally vest over a four-year period. Options granted generally are exercisable up to 10 years from the date of grant. As of October 26, 2015, no shares were available for grant under the 2007 Plan and all outstanding options would continue to be governed and remain outstanding in accordance with their existing terms. In addition, any shares subject to outstanding awards under the 2007 Plan that are issuable upon the exercise of options that expire or become unexercisable for any reason without having been exercised in full will be available for future grant and issuance under the 2015 Plan (as defined below).

2015 Equity Incentive Plan.

In September 2015, our Board of Directors adopted, and in October 2015 our stockholders approved, our 2015 Equity Incentive Plan. The 2015 Equity Incentive Plan became effective on the date immediately prior to the date of our IPO. As a result, 1,813,272 shares of common stock previously reserved but unissued under the 2007 Plan on the effective date of the 2015 Equity Incentive Plan became reserved for issuance under our 2015 Equity Incentive Plan, and we ceased granting awards under our 2007 Plan. The number of shares reserved for issuance under our 2015 Equity Incentive Plan will increase automatically on the 1st day of January of each of 2016 through 2025 by the number of shares equal to 4% of the total outstanding shares of our common stock as of the immediately preceding December 31. However, our Board of Directors may reduce the amount of the increase in any particular year.

Our 2015 Equity Incentive Plan authorizes the award of stock options, restricted stock awards, stock appreciation rights, RSUs, performance awards and stock bonuses. No person will be eligible to receive more than 2,000,000 shares in any calendar year under our 2015 Equity Incentive Plan other than a new employee of ours, who will be eligible to receive no more than 4,000,000 shares under the plan in the calendar year in which the employee commences employment. The aggregate number of shares of our common stock that may be subject to awards granted to any one non-employee director pursuant to the 2015 Equity Incentive Plan in any calendar year shall not exceed 300,000. Our 2015 Equity Incentive Plan provides that no more than 25,000,000 shares will be issued as incentive stock options.

2015 Employee Stock Purchase Plan.

In September 2015, our Board of Directors adopted, and in October 2015 our stockholders approved, our 2015 Employee Stock Purchase Plan ("ESPP"). The 2015 Employee Stock Purchase Plan became effective on the date of our IPO. We reserved 150,000 shares of our common stock for issuance under our 2015 Employee Stock Purchase Plan. The number of shares reserved for issuance under our 2015 Employee Stock Purchase Plan will increase automatically on the 1st day of January following the first offering date by the number of shares equal to 1% of the total outstanding shares of our common stock as of the immediately preceding December 31 (rounded to the nearest whole share). However, our Board of Directors may reduce the amount of the increase in any particular year. The aggregate number of shares issued over the term of our 2015 Employee Stock Purchase Plan will not exceed 2,250,000 shares of our common stock.

Under our 2015 Employee Stock Purchase Plan, eligible employees will be able to acquire shares of our common stock by accumulating funds through payroll deductions. Eligible employees will be able to select a rate of payroll deduction up to 15% of their base cash compensation. The purchase price for shares of our common stock purchased under our 2015 Employee Stock Purchase Plan will be 85% of the lesser of the fair market value of our common stock on (i) the first trading day of the applicable offering period and (ii) the last trading day of each purchase period in the applicable offering period. Except for the first offering period, each offering period will run for no more than six months, with purchases occurring every six months. The first offering period began upon the effective date of our IPO and was originally set to end on June 30, 2016. On May 25, 2016, the Board of Directors extended the initial offering period to July 31, 2016. Subsequent purchase periods will be 6 months in duration beginning on August 1, 2016. On July 29, 2016, we issued 68,392 shares of common stock in conjunction with the end date of the initial purchase window. During 2017, we issued 110,711 shares of common stock in conjunction with the ESPP.

No participant will have the right to purchase shares of our common stock in an amount that has a fair market value greater than $25,000, determined as of the first day of the applicable purchase period, for each calendar year in which that right is outstanding. In addition, no participant will be permitted to purchase more than 2,500 shares during any one purchase period or a lesser amount determined by our compensation committee.

Our 2015 Employee Stock Purchase Plan will continue until the earlier to occur of its termination by our Board of Directors, the issuance of all shares reserved for issuance under it or the tenth anniversary of its effective date.

A summary of stock option and RSUs activity under the 2007 Plan and the 2015 Equity Incentive Plan is as follows:

	Stock Options			
	Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value
	(aggregate intrinsic value in thousands)			
Outstanding as of December 31, 2014	604,412	$ 1.57	6.8	$ —
Granted	202,662	5.18		
Exercised	(5,952)	1.67		
Canceled	(4,766)	2.31		
Outstanding as of December 31, 2015	796,356	2.49	6.5	$ 4,157
Granted	230,200	3.38		
Exercised	(13,112)	1.80		
Canceled	(21,549)	3.73		
Outstanding as of December 31, 2016	991,895	$ 2.68	6.3	$ 161
Granted	835,480	4.30		
Exercised	(230,123)	1.92		
Canceled	(36,799)	4.16		
Outstanding as of December 31, 2017	1,560,453	$ 3.63	7.6	$ 4,632
Options vested and expected to vest as of December 31, 2017	1,500,983	$ 3.60	7.5	$ 4,501
Options vested and exercisable as of December 31, 2017	792,235	$ 2.95	6.2	$ 2,895

	Restricted Stock Units		
	Weighted-Average	Weighted-Average Remaining	Aggregate

	Shares	Grant Date Fair Value	Contractual Term (Years)	Intrinsic Value
	(aggregate intrinsic value in thousands)			
Outstanding as of December 31, 2014	—	—		
Granted	880,072	$ 5.95		
Released	—	—		
Forfeited/expired	(5,564)	5.95		
Outstanding as of December 31, 2015	874,508	$ 5.95	1.8	$ 6,742
Granted	69,414	4.82		
Released	(438,086)	5.95		
Forfeited/expired	(14,882)	5.70		
Outstanding as of December 31, 2016	490,954	5.80	0.5	$ 908
Granted	541,513	2.88		
Released	(497,009)	5.64		
Forfeited/expired	(25,564)	5.98		
Outstanding as of December 31, 2017	509,894	$ 2.84	1.4	$ 3,288

Certain of the RSUs that were released in fiscal year 2017 were net-share settled such that we withheld shares with value equivalent to the employees' minimum statutory obligation for the applicable income and other employment taxes, and remitted the cash to the appropriate taxing authorities. The total shares withheld were based on the value of the RSUs on their release date as determined by our closing stock price. These net-share settlements had the effect of share repurchases as they reduced and retired the number of shares that would have otherwise been issued as a result of the release and did not represent an expense to us. During the year ended December 31, 2017, 134,541 shares of RSUs were released and, of those, we withheld 50,541 shares to satisfy $0.1 million of employees' minimum tax obligation on the released RSUs.

Additional information regarding stock options outstanding and vested as of December 31, 2017 is summarized below:

	Options Outstanding			Options Vested and Exercisable	
Exercise Prices	Number of Stock Options Outstanding	Weighted-Average Remaining Contractual Life (Years)	Weighted-Average Exercise Price per Share	Shares subject to Stock Options	Weighted-Average Exercise Price per Share
$1.60	11,759	8.8	$ 1.60	6,424	$ 1.60
$1.65	398,988	4.4	1.65	383,572	1.65
$3.30	115,984	6.8	3.30	115,913	3.30
$3.48	170,238	8.0	3.48	114,715	3.48
$3.55	370,275	9.2	3.55	58,578	3.55
$3.60	132,100	9.1	3.60	32,407	3.60
$5.25	281,852	9.1	5.25	45,273	5.25
$7.85	25,500	9.8	7.85	—	—
$10.00	53,757	7.8	10.00	35,353	10.00
$1.60-$10.00	1,560,453	7.6	3.63	792,235	2.95

Note 10. Stock-based Compensation.

We record stock-based compensation based on fair value as of the grant date using the Black-Scholes option-pricing model for stock options granted and the Monte Carlo simulation techniques for certain RSUs with performance-based vesting conditions. We recognize such costs as compensation expense on a straight-line basis over the employee's requisite service period, which is generally four years. Our valuation assumptions are as follows:

Fair value of common stock. Prior to our IPO in October 2015, we estimated the fair value of our common stock using various valuation methodologies, including valuation analyses performed by third-party valuation firms. After the initial public offering, we used the publicly quoted price as the fair value of our common stock.

Risk-free interest rate. We base the risk-free interest rate used in the Black-Scholes option-pricing model on the implied yield available on U.S. Treasury zero-coupon issues with an equivalent expected term of the options for each option group.

Expected term. The expected term represents the period that our stock-based awards are expected to be outstanding. The expected term assumption is based on the simplified method in which the expected term is equal to the average of the stock-based award's weighted-average vesting period and its contractual term. We expect to continue using the simplified method until sufficient information about historical behavior is available.

Volatility. We determine volatility based on the historical stock volatilities of a group of publicly listed guideline companies over a period equal to the expected terms of the options, as we do not have sufficient trading history to determine the volatility of our common stock.

Dividend yield. We have never declared or paid any cash dividend and do not currently plan to pay a cash dividend in the foreseeable future. Consequently, we used an expected dividend yield of zero.

The following table summarizes the weighted-average assumptions used in the Black-Scholes option-pricing model to determine fair value of stock options:

	Year Ended December 31,		
	2017	2016	2015
Volatility	86 %	52 %	40 %
Expected dividend yield	—	—	—
Risk-free rate	2.15 %	1.34 %	1.59 %
Expected term (in years)	6	6	5

The weighted-average grant date fair value of the options granted under the 2015 Equity Incentive Plan as calculated using the Black-Scholes option-pricing model was $3.11, $1.63 and $2.76 per share for the years ended December 31, 2017, 2016 and 2015, respectively.

On April 1, 2017, our compensation committee granted 204,220 RSUs that do not begin vesting unless certain performance goals are met. All performance goals must be met in order for the shares to begin vesting. Vesting would begin on the one-year anniversary of the grant date. These performance goals relate to a) the price performance of our common stock one year from the grant date as compared to a threshold established by our compensation committee and b) revenue, gross profit and EBITDA performance relative to plan targets for fiscal 2017 established by our compensation committee. As a result of these performance-based vesting conditions we valued these RSUs using Monte Carlo simulation techniques to establish a fair value per share of $0.81 at the time of grant.

The following table presents the effects of stock-based compensation for stock options, RSUs, and ESPP (in thousands):

	Year Ended December 31,		
	2017	2016	2015
Cost of revenue	$ 112	$ 81	$ 19
Research and development	1,172	1,038	263
Sales and marketing	764	706	153
General and administrative	1,454	1,518	352
Total	$ 3,502	$ 3,343	$ 787

Stock-based compensation expense capitalized to inventories was not material during the years ended December 31, 2017, 2016 and 2015.

We did not realize any income tax benefit from stock option exercises in any of the periods presented due to recurring losses and valuation allowances.

As of December 31, 2017, the total unrecognized compensation cost related to stock options, net of estimated forfeitures, was approximately $2.0 million, and this amount is expected to be recognized over a weighted-average period of approximately 2.9 years.

As of December 31, 2017 the total unrecognized compensation cost related to RSUs and ESPP was $1.1 million and $14,000, respectively, and these amounts are expected to be recognized over 2.1 years and 0.1 years, respectively.

Note 11. Income Taxes.

The components of our income (loss) before provision for (benefit from) income taxes are as follows (in thousands):

	Year Ended December 31,		
	2017	2016	2015
United States	$ (5,974)	$ (11,843)	$ (9,232)
Foreign	387	215	788
Loss before provision for (benefit from) income taxes	$ (5,587)	$ (11,628)	$ (8,444)

The provision for (benefit from) income taxes consisted of the following (in thousands):

	Year Ended December 31,		
	2017	2016	2015
Current:			
Federal	$ —	$ —	$ —
State	3	2	3
Foreign	98	(19)	(38)
Total current provision for (benefit from) income taxes	101	(17)	(35)
Deferred:			
Federal	—	1	(26)
State	—	—	—
Total deferred provision for (benefit from) income taxes	—	1	(26)
Total	$ 101	$ (16)	$ (61)

The reconciliation of the federal statutory income tax to our effective tax is as follows (in thousands):

	Year Ended December 31,		
	2017	2016	2015
Federal tax at statutory rate	$ (1,896)	$ (3,954)	$ (2,871)
State taxes	(877)	(184)	(155)

Foreign rate differential	(46)	(14)	(233)
Nondeductible expenses	453	(48)	161
Research and development credit	(174)	(180)	(153)
Stock compensation	218	784	109
Change in federal rate	12,231	—	—
Change in valuation allowance	(9,808)	3,580	3,081
Total	$ 101	$ (16)	$ (61)

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of our deferred tax assets and liabilities are as follows (in thousands):

	December 31,	
	2017	**2016**
Deferred tax assets:		
Net operating loss carryforwards	$ 20,017	$ 27,541
Accruals and reserves	2,234	4,502
Amortization of intangible assets	802	1,248
Tax credit carryforwards	3,443	2,808
Depreciation	(75)	602
Other	104	226
Gross deferred tax assets	26,525	36,927
Valuation allowance	(26,525)	(36,333)
Total deferred tax assets	—	594
Deferred tax liabilities:		
Change in tax accounting method for reserves and allowances	—	(594)
Amortization of intangible assets	(1)	(2)
Total deferred tax liabilities	(1)	(596)
Net deferred tax liability	$ (1)	$ (2)

In accordance with Accounting Standards Codification ("ASC") 740, *Income Taxes,* a valuation allowance is provided when it is more likely than not that the deferred tax assets will not be realized. Based on our review of both the positive and negative evidence, which includes our historical operating performance, reported cumulative net losses since inception and difficulty in accurately forecasting its results, we have concluded that it is more likely than not that the we will not be able to realize all of our U.S. deferred tax assets. Therefore, we have established a valuation allowance to offset net deferred tax assets as of December 31, 2017, 2016 and 2015 due to the uncertainty of realizing future tax benefits from our net operating loss ("NOL") carryforwards and other deferred tax assets. The net change in the total valuation allowance for the years ended December 31, 2017, 2016, and 2015 was a decrease of $9.8 million, and an increase of $3.6 million, and $3.1 million, respectively.

Our foreign deferred tax assets are immaterial and have not been included in the provision calculations. We reassess the need for our valuation allowance on a quarterly basis.

Based on our review discussed above, the realization of deferred tax assets is dependent on improvements over present levels of consolidated pre-tax income. Until we are consistently profitable in the U.S., we will not realize our deferred tax assets. Deferred income taxes have not been provided on the cumulative undistributed earnings of foreign subsidiaries. The amount of such earnings as of December 31, 2017 was $0.8 million. These earnings have been permanently reinvested and we do not plan to initiate any action that would precipitate the payment of income tax thereon. It is not practicable to estimate the amount of additional tax that might be payable on undistributed foreign earnings.

As of December 31, 2017, we had federal and state NOL carryforwards of $79.1 million and $48.8 million available to offset future taxable income. The federal NOL carryforwards will expire at various dates beginning in 2027, if not utilized. The state NOL carryforward will expire at various dates beginning in 2017, if not utilized. In addition, as of December 31, 2017, we had federal and state research and development tax credit carryforwards of $3.5 million and $4.3 million. The federal research and development credit carryforwards will expire beginning in 2027 if not utilized. The state research and development tax credit carryforwards do not expire.

Utilization of NOL carryforwards and credits may be subject to substantial annual limitation due to the ownership change limitations provided by the Internal Revenue Code of 1986, as amended and similar state provisions. The annual limitation may result in the expiration of NOLs and credits before utilization.

ASC 740-10 clarifies the accounting for uncertainties in income taxes by prescribing guidance for the recognition, de-recognition and measurement in our financial statements of income tax positions taken in previously filed tax returns or tax positions expected to be taken in tax returns, including a decision whether to file or not to file in a particular jurisdiction. ASC 740-10 requires the disclosure of any liability created for unrecognized tax benefits. The application of ASC 740-10 may also affect the tax bases of assets and liabilities and therefore may change or create deferred tax liabilities or assets.

A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows (in thousands):

Balance as of December 31, 2014	$ 2,984
Tax positions related to the current year:	
Additions	436

Tax positions related to the prior year:	
Reductions	(285)
Balance as of December 31, 2015	3,135
Tax positions related to the current year:	
Additions	462
Tax positions related to the prior year:	
Reductions	(7)
Balance as of December 31, 2016	3,590
Tax positions related to the current year:	
Additions	665
Tax positions related to the prior year:	
Reductions	(8)
Balance as of December 31, 2017	$ 4,247

Our total amounts of unrecognized tax benefits that, if recognized, would affect our tax rate are $36,000 and $11,000 as of December 31, 2017 and 2016, respectively.

While it is often difficult to predict the final outcome of any particular uncertain tax position, we do not believe it is reasonably possible that the total amount of unrecognized tax benefit as of December 31, 2017 will materially change in the next twelve months.

Our policy is to classify interest and penalties associated with unrecognized tax positions, if any, as components of our income tax provision. Interest and penalties were not significant during the year ended December 31, 2017.

We file federal, state and foreign income tax returns in jurisdictions with varying statutes of limitations. Due to our net operating loss and credit carryforwards, our income tax returns generally remain subject to examination by federal, state and international authorities.

In December 2017, the Tax Cuts and Jobs Act (the "2017 Tax Act") was enacted. The 2017 Tax Act includes a number of changes to existing U.S. tax laws that impact us, most notably a reduction of the U.S. corporate income tax rate from 35 percent to 21 percent for tax years beginning after December 31, 2017. We measure deferred tax assets and liabilities using enacted tax rates that will apply in the years in which the temporary differences are expected to be recovered or paid. Accordingly, our deferred tax assets and liabilities were remeasured to reflect the reduction in the U.S. corporate income tax rate from 35 percent to 21 percent, resulting in a $12.2 million decrease in net deferred tax assets for the year ended December 31, 2017 and a corresponding $12.2 million decrease in the valuation allowance as of December 31, 2017.

On December 22, 2017, Staff Accounting Bulletin No. 118 ("SAB 118") was issued to address the application of U.S. GAAP in situations when a registrant does not have the necessary information available, prepared, or analyzed (including computations) in reasonable detail to complete the accounting for certain income tax effects of the 2017 Tax Act. In accordance with SAB 118, we have determined that the provisional amount related to the mandatory deemed repatriation of deferred foreign income was $0.2 million based on cumulative foreign earnings of $0.8 million. Additional work is necessary to do a more detailed analysis of historical foreign earnings as well as potential correlative adjustments. We are continuing to gather additional information to more precisely compute the amount of deferred foreign income to be included in U.S. taxable income. Any subsequent adjustment to these amounts will be recorded in the quarter of 2018 when the analysis is complete.

In January 2018, the FASB released guidance on the accounting for tax on the global intangible low-taxed income ("GILTI") provisions of the 2017 Tax Act. The GILTI provisions impose a tax on foreign income in excess of a deemed return on tangible assets of foreign corporations. The guidance indicates that either accounting for deferred taxes related to GILTI inclusions or to treat any taxes on GILTI inclusions as period cost are both acceptable methods subject to an accounting policy election. Effective the first quarter of 2018, we will elect to treat any potential GILTI inclusions as a period cost as we are not projecting any material impact from GILTI inclusions and any deferred taxes related to any inclusion would be immaterial.

Note 12. Net Loss Per Share.

The following 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,		
	2017	**2016**	**2015**
Stock options	1,560,453	991,895	796,356
Restricted stock units	509,894	490,954	874,508
Common stock warrants	389,423	411,514	411,514
	2,459,770	1,894,363	2,082,378

Note 13. Other (Expense), Net.

Other (expense), net consisted of the following (in thousands):

	Year Ended December 31,		
	2017	**2016**	**2015**
Revaluation of convertible preferred stock warrant liability	$ —	$ —	$ (907)
Other income (expense)	(3)	(50)	212

Other (expense), net	$ (3)	$ (50)	$ (695)

Note 14. Related Party Transactions

The Company purchases certain wafers from Altis Semiconductor S.N.C., which was acquired by X-FAB Silicon Foundries in 2016, who is a stockholder of the Company. Total payments made during the years ended December 31, 2017, 2016 and 2015 were $200,000, $314,000 and $446,000, respectively. As of December 31, 2017 and 2016, invoices totaling $0 and $195,000, respectively, were included within accounts payable on the consolidated balance sheets.

Note 15. Subsequent Events.

None.

Note 16. Selected Unaudited Quarterly Financial Data.

The following tables show a summary of the Company's unaudited quarterly financial information:

	Three Months Ended			
	December 31, 2017	September 30, 2017	June 30, 2017	March 31, 2017
Revenue, net	$ 16,154	$ 15,239	$ 13,412	$ 11,307
Gross profit	$ 7,732	$ 7,466	$ 6,723	$ 5,554
Net loss	$ (165)	$ (997)	$ (1,751)	$ (2,775)
Net loss per share - Basic and diluted	$ (0.01)	$ (0.05)	$ (0.11)	$ (0.18)

	Three Months Ended			
	December 31, 2016	September 30, 2016	June 30, 2016	March 31, 2016
Revenue, net	$ 12,330	$ 11,180	$ 10,282	$ 10,176
Gross profit	$ 6,243	$ 5,377	$ 4,734	$ 4,996
Net loss	$ (1,722)	$ (4,078)	$ (4,272)	$ (1,540)
Net loss per share - Basic and diluted	$ (0.11)	$ (0.27)	$ (0.29)	$ (0.10)

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

We maintain "disclosure controls and procedures," as such term is defined in Rule 13a-15(e) under the Securities Exchange Act of 1934 (the "Exchange Act"), that are designed to ensure that information required to be disclosed by us in reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in Securities and Exchange Commission rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO"), as appropriate, to allow timely decisions regarding required disclosure.

Our management is responsible for establishing and maintaining our disclosure controls and procedures. Under the supervision and with the participation of our management, including our CEO and CFO, we conducted an evaluation of the effectiveness of our disclosure controls and procedures as of December 31, 2017. Based on this evaluation, our CEO and CFO concluded that our disclosure controls and procedures were effective as of December 31, 2017.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) of the Exchange Act. Under the supervision and with the participation of the CEO and CFO, our management conducted an assessment of the effectiveness of internal control over financial reporting based upon the framework in "Internal Control — Integrated Framework (2013)" issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on that assessment, our management concluded that the Company's internal control over financial reporting was effective as of December 31, 2017 to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with U.S. GAAP.

Changes in Internal Control over Financial Reporting

As required by Rule 13a-15(d) of the Exchange Act, our management, including our CEO and CFO, conducted an evaluation of our "internal control over financial reporting" as defined in Exchange Act Rule 13a-15(f) to determine whether any changes in our internal controls over financial reporting occurred during the three months ended December 31, 2017 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. Based on that evaluation, other than as described above, there have been no such changes during the three months ended December 31, 2017.

ITEM 9B. OTHER INFORMATION

None

PART III

Item 10. ***Directors, Executive Officers and Corporate Governance***

Our Board of Directors

Our board of directors currently consists of five directors and is divided into three classes with each class serving for three years, and with the terms of office of the respective classes expiring in successive years. Our board of directors currently expects to nominate two Class III directors for election at our 2018 annual meeting of stockholders. The terms of office of directors in Class I and Class II do not expire until the annual meetings of stockholders held in 2019 and 2020, respectively. The members of our board of directors are identified below, along with their ages at January 31, 2018 and other information.

Name of Director	Age	Director Since
Class III Directors —		
Terms Expiring 2018:		
Nelson Chan(1)(2)(4)	56	September 2010
Narbeh Derhacobian	55	January 2006
Class I Director —		
Terms Expiring 2019:		
Keith Crandell(2)(3)	57	February 2007
Class II Directors —		
Terms Expiring 2020:		
Francis Lee(1)(3)	65	July 2015
Kevin Palatnik(1)(2)	60	August 2015

(1) Member of the audit committee

(2) Member of the compensation committee

(3) Member of the nominating and corporate governance committee

(4) Chairman of the board of directors

Nelson Chan has been a director of our company since September 2010 and has served as Lead Independent Director since September 2015 and Chairman of the Board of Directors since June 2017. From December 2006 until August 2008, Mr. Chan served as Chief Executive Officer of Magellan Navigation, Inc., a leader in the consumer, survey, GIS and OEM GPS navigation and positioning markets. From 1992 through 2006, Mr. Chan held various senior management positions at SanDisk Corporation, a leader in flash memory cards, including most recently as Executive Vice President and General Manager, Consumer Business. From 1983 to 1992, Mr. Chan held marketing and engineering positions at Chip and Technologies, Signetics, and Delco Electronics. Mr. Chan is a director and a member of the Audit Committee of Deckers Outdoor Corporation, a footwear, apparel and accessories design, marketing and distribution company and a director and Chair of the Compensation Committee of Socket Mobile, a company that creates data capture and delivery solutions for enhanced productivity in retail point of sale, field service, healthcare and other mobile markets. Mr. Chan previously served as a director of Affymetrix, a genetic analysis company from 2010 to until it was acquired in 2016 by Thermo Fisher. He also served as a director of Outerwall, a provider of automated retail solutions offering services from July 2011 until it was acquired in September 2016 by Apollo Global Management, a private equity firm. Mr. Chan also currently serves as a member of the Board of Directors of several privately-held companies. Mr. Chan holds a B.S. degree in electrical and computer engineering from the University of California at Santa Barbara and a M.B.A. from Santa Clara University. Our board of directors believes that Mr. Chan’s experience as the Chief Executive Officer of Magellan, his senior management positions with other leading companies, and his service as a director of multiple public and private companies provide the requisite qualifications, skills, perspectives, and experiences that qualify him to serve on our board of directors.

Keith Crandell has been a director of our company since February 2007. Since July 1994, Mr. Crandell has served as a managing director of ARCH Venture Partners, a venture capital firm focused on early-stage technology companies. He is a director of several private companies and he also serves as a director of the Illinois Venture Capital Association. Mr. Crandell holds a B.S. degree in chemistry and mathematics from St. Lawrence University, an M.S degree in chemistry from the University of Texas at Arlington and an M.B.A. from the University of Chicago. Our board of directors believes that Mr. Crandell’s extensive knowledge of the semiconductor industry and his financial and investment expertise qualify him to serve on our board of directors.

Narbeh Derhacobian co-founded our company in January 2006, and has served as our President and Chief Executive Officer and as a member of our board of directors since January 2006. During the twelve years prior to founding our company, he served in technical and managerial roles sequentially at Silicon Storage Technology, Inc., a flash memory company, Advanced Micro Devices, Inc., a semiconductor company, Virage Logic Corporation, a semiconductor company, and Cswitch Corporation, a semiconductor company. Mr. Derhacobian has a B.S. degree and M.S. degree in physics and a Ph.D. in solid state physics from the University of California, Los Angeles and an M.B.A. from San Jose State University. Our board of directors believes that Mr. Derhacobian is qualified to serve as a member of our board of directors because of the perspective and experience he brings as our President and Chief Executive Officer and his management and leadership experience.

Francis Lee has been a director of our company since July 2015. Mr. Lee has served as the Chairman of the Board of Directors of Synaptics Incorporated, a semiconductor company, since October 2008 and a director of that company since December 1998. Mr. Lee served as Chief Executive Officer of Synaptics from December 1998 until July 2009 and as President of Synaptics from December 1998 to July 2008. Mr. Lee was a consultant from August 1998 to November 1998. From May 1995 until July 1998, he served as General Manager of NSM, a Hong Kong-based joint venture between National Semiconductor Corporation and S. Megga. Mr. Lee held a variety of executive positions for National Semiconductor from 1988 until August 1995. These positions included Vice President of Communication and Computing Group, Vice President of Quality and Reliability, Director of Standard Logic Business Unit, and various other operations and engineering management positions. Mr. Lee holds a B.S. degree in electrical engineering from the University of California, Davis. Our board of directors believes that Mr. Lee's extensive knowledge of the semiconductor industry and his extensive business experience qualify him to serve on our board of directors.

Kevin Palatnik has been a director of our company since August 2015. Since February 2016, Mr. Palatnik has served as the Chief Financial Officer of Coherent, Inc., a supplier of laser systems and components. He served as the Chief Financial Officer of Audience, Inc., a provider of voice and audio solutions, from August 2011 until July 2015 when it was acquired by Knowles Corporation. From 1994 to 1999 and June 2001 to November 2010, he held various positions at Cadence Design Systems, Inc., an electronic design automation software company, including Corporate Controller and most recently Senior Vice President and Chief Financial Officer. Mr. Palatnik also spent 14 years at IBM where he held various engineering and executive financial positions. Mr. Palatnik holds a B.S. degree in industrial engineering and operations research, as well as an M.B.A. from Syracuse University. Our board of directors believes that Mr. Palatnik's extensive business and financial experience over the past two decades qualify him to serve on our board of directors.

There are no familial relationships among our directors and officers.

Our Executive Officers

The following table provides information regarding our executive officers as of January 31, 2018.

Name	Age	Position
Narbeh Derhacobian	55	President, Chief Executive Officer and Director
Ron Shelton	56	Chief Financial Officer
Shane Hollmer	50	Vice President, Engineering
Gideon Intrater	57	Chief Technology Officer
Raphael Mehrbians	58	Vice President, Marketing
Ishai Naveh	59	Vice President, Business Development
Tom Spade	51	Vice President, Worldwide Sales
Janet Wang	49	Vice President, Discrete Products Group

Our board of directors chooses executive officers, who then serve at the board of directors' discretion. There is no family relationship between any of the directors or executive officers and any other director or executive officer of Adesto.

Narbeh Derhacobian co-founded our company in January 2006, and has served as our President and Chief Executive Officer and as a member of our board of directors since January 2006. For biographical information regarding Mr. Derhacobian, please refer to "Our Board of Directors," above.

Ron Shelton has served as our Chief Financial Officer since December 2011. Prior to joining our company, he served as Senior Vice President and Chief Financial Officer of GigOptix Inc., a fabless semiconductor company, from 2009 to January 2011. During the thirteen years prior to joining GigOptix, Inc., Mr. Shelton served as Chief Financial Officer sequentially at Cirrus Logic, Inc, a fabless semiconductor company, Lara Technology Inc., a network technologies company, Alliance Semiconductor Corporation, a semiconductor company, Alien Technology LLC, an RFID company, and IML, Inc., a semiconductor company. Mr. Shelton has a B.A. in economics from Stanford University.

Shane Hollmer co-founded our company in January 2006, and has served as our Vice President of Engineering since April 2007. During the fifteen years prior to founding our company, he served in engineering and engineering management roles at Advanced Micro Devices, Inc., a semiconductor company, Emosyn LLC, a fabless semiconductor company, and Monolithic Power Systems, Inc., a semiconductor company. Mr. Hollmer has a B.S. degree in electrical engineering from the University of California, Berkeley, and an M.B.A. from San Jose State University.

Gideon Intrater has served as our Chief Technology Officer since September 2015. Prior to joining our company, he served as an advisor to a number of companies including Adesto from April 2013 to September 2015. From June 1998 to August 2008 and December 2010 to February 2013, he served in a variety of capacities at MIPS Technologies, Inc., a semiconductor IP company including most recently as Vice President of Marketing from November 2011 to 2013. Prior to rejoining MIPS in December 2010, Mr. Intrater was Vice President of Architecture at Symwave Inc., a supplier of analog/mixed signal semiconductor solutions for consumer devices from October 2008 to December 2010. From August 1987 to June 1998, Mr. Intrater held positions of increasing responsibility at National Semiconductor Corporation, including

Director of the Core Technology Unit. Mr. Intrater has a BSEE degree and a MSEE degree in electrical engineering from the Technion, Israel Institute of Technology, and an M.B.A. from San Jose State University.

Raphael Mehrbians has served as our Vice President of Marketing since February 2017. Prior to that, Mr. Mehrbians served as our General Manager of Communications Products from October 2015 to February 2017. Prior to joining our company, he served as an independent business development and executive management consultant to a variety of companies including Adesto from July 2015 to April 2016 and Vice President of Marketing and Sales at Saankhya Labs Inc., a fabless semiconductor company, from January 2012 to September 2014. Over his more than 25 years of experience, he has also held leadership roles at Lexar Media, Cirrus Logic, Inc. and National Semiconductor Corporation and Genesis Microchip, where he was Sr. Vice President of Product Marketing. Mr. Mehrbians has a B.S. degree and M.S. degree in electrical engineering from University of Michigan, Ann Arbor.

Ishai Naveh co-founded our company in January 2006, served as our Vice President of Marketing and Business Development from April 2007 to February 2017 and has served as our Vice President of Business Development since February 2017. Prior to founding our company, he served in various roles at Tower Semiconductor Ltd., a semiconductor company, from March 1993 to September 2007, including most recently as Vice President of Marketing for Non-volatile Memories and Mixed Signal Technologies from October 2002 to September 2007. Previously, he served in various roles at National Semiconductor Corporation, a semiconductor company, from September 1984 to March 1993. Mr. Naveh has a B.Sc. degree in physics from the Hebrew University and an M.B.A. from Heriott-Watt University.

Tom Spade has served as our Vice President Worldwide Sales since December 2014. Prior to joining our company, he served as Vice President of Worldwide Sales at Audience, Inc., a semiconductor company, from August 2010 to August 2014, and at Boston-Power, Inc., a battery systems company, from August 2009 to August 2010. Prior to that, he served as Vice President of Worldwide Sales at Validity, Inc., a sensor technology company, from June 2007 to August 2009. Mr. Spade served as Vice President of Worldwide Sales at Synaptics, a mobile interface solutions company, from March 1998 to June 2007. Prior to that, he served as the Director of Sales at Alliance Semiconductor from May 1993 until March 1998. Mr. Spade has a B.A. degree in economics and management from Albion College.

Janet Wang has served as our Vice President of the Discrete Products Group since August 2012. Prior to that, Ms. Wang served as our Vice President of CBRAM Technology Development from December 2009 to August 2012. From November 2007 to December 2009, she served as our Director of Technology Development. Prior to joining our company, Ms. Wang served in managerial and engineering roles sequentially at Broadcom Corporation, a network and communications company, from 2002 to 2007, Transmeta Corporation, a fabless semiconductor company, from 2000 to 2002, Advanced Micro Devices, Inc., a semiconductor company, from 1997 to 2000, and Aerospace Corporation, an aerospace research corporation, from 1995 to 1997. Ms. Wang has a B.Sc. degree, a M.Sc. degree and a Ph.D. degree in electrical engineering from the University of California, Los Angeles.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16 of the Exchange Act requires our directors, executive officers and any persons who own more than 10% of our common stock, to file initial reports of ownership and reports of changes in ownership with the SEC. Such persons are required by SEC regulation to furnish us with copies of all Section 16(a) forms that they file. Based solely on its review of the copies of such forms furnished to us and written representations from the directors and executive officers, we believe that all Section 16(a) filing requirements were met in fiscal 2017, except that on June 9, 2017 Forms 4 covering the vesting of restricted stock units on June 6, 2017 and, in some cases, related sales of stock to cover taxes due upon vesting were filed late for the following officers and directors: Narbeh Derhacobian, Shane Hollmer, Gideon Intrater, Raphael Mehrbians, Ishai Naveh, Ron Shelton, Tom Spade and Janet Wang.

Code of Ethics

We have adopted codes of ethics, our Code of Business Conduct and Ethics, which applies to all employees, including our principal executive officers, our principal financial officer and all other executive officers, and our board of directors. The Code of Business Conduct and Ethics is available on our website at www.ir.adestotech.com under “Corporate Governance.” We intend to satisfy the disclosure requirement under Item 5.05 of Form 8-K regarding amendment to, or waiver from, a provision of our Code of Business Conduct and Ethics by posting such information on our website at the address and location specified above.

Identification of Audit Committee and Financial Expert

We have a separately-designated Audit Committee established in accordance with Section 3(a)(58)(A) of the Exchange Act. The members of the Audit Committee, including each member that our Board has determined is an “audit committee financial expert” under SEC rules and regulations, are identified below.

Members:	Nelson Chan Francis Lee Kevin Palatnik (Chair)
Financial Experts:	Our Board has unanimously determined that all Audit Committee members are financially literate under current listing standards of the NASDAQ Stock Market (“NASDAQ”), and at least one member has financial sophistication under NASDAQ listing standards. In addition, our Board has unanimously determined that Kevin Palatnik qualifies as an “audit committee financial expert” under SEC rules and regulations. Mr. Palatnik is independent as defined by current NASDAQ listing standards for Audit Committee membership.

Item 11. *Executive Compensation*

Executive Compensation and Related Information

The following tables and accompanying narrative disclosure set forth information about the compensation provided to certain of our executive officers during the years ended December 31, 2017, 2016 and 2015. These executive officers, who include our principal executive officer and the two most highly-compensated executive officers (other than our principal executive officer) who were serving as executive officers at the end of the fiscal year ended December 31, 2017, were

- Narbeh Derhacobian, our President, Chief Executive Officer and Director (our "CEO");
- Ron Shelton, our Chief Financial Officer (our "CFO"); and
- Gideon Intrater, Chief Technology Officer.

We refer to these individuals as our "named executive officers."

Executive Compensation Tables

Summary Compensation Table

The following table provides information regarding the total compensation for services rendered in all capacities that was earned by our named executive officers during the years ended December 31, 2017, 2016 and 2015. Mr. Intrater was not a named executive officer during the years ended December 31, 2016 and 2015 and therefore his compensation for such years is not presented in the table below.

Name and Principal Position	Year	Salary	Bonus(1)	Option Awards(2)	Stock Awards(3)	Non-Equity Incentive Plan Compensation(4)	All Other Compensation	Total(5)
Narbeh Derhacobian	2017	$360,000	$ 1,333	$213,125	$ 285,450 (6)	$ 161,116	$ —	$1,021,024
President and Chief Executive Officer	2016	360,000	—	—	—	28,035	—	388,035
	2015	303,807	2,033	10,564	1,471,500	—	—	1,787,904
Ron Shelton	2017	300,000	__	177,602	237,875 (6)	136,154	—	851,631
Chief Financial Officer	2016	300,000	__	__	__	24,938	—	324,938
	2015	272,921	__	31,019	507,868	—	—	811,808
Gideon Intrater	2017	275,000	3,146	148,472	205,709 (6)	85,704	__	718,031
Chief Technology Officer								

(1) Represents cash bonuses under our Patent Award Plan which rewards employees for invention of patentable ideas approved by the Patent Award Committee.

(2) The amounts reported in this column represent the aggregate grant date fair value of stock options granted to our named executive officers during the years ended December 31, 2017, 2016 and 2015 as computed in accordance with Accounting Standards Codification Topic 718 ("ASC 718"). For information on the valuation assumptions with respect to stock option grants, refer to Note 10 to our Consolidated Financial Statements under Part II, Item 8. The amounts reported in this column reflect the accounting cost for these stock options, and do not correspond to the actual economic value that may be received by our named executive officers from the stock options.

(3) The amounts reported in this column represent the aggregate grant date fair value of restricted stock units granted to our named executive officers for the periods indicated as computed in accordance with ASC 718 and as further described in Note 10 to our Consolidated Financial Statements under Part II, Item 8. The amounts reported in this column reflect the accounting cost for restricted stock units, and do not correspond to the actual economic value that may be received by our named executive officers from the restricted stock units.

(4) The amounts in this column represent total performance-based bonuses under our 2017 Bonus Plan earned for services rendered in the applicable period. See the "2017 Incentive Bonuses" below for information on awards made under our 2017 Executive Officer Incentive Bonus Plan.

(5) The amounts in this column represent the sum of the compensation amounts reflected in the other columns of this table.

(6) Includes the aggregate grant date fair value, computed in accordance with ASC 718 of performance-based restricted stock units ("PRSUs") awarded during 2017. The PRSUs are based on a one-year performance period from March 31, 2017 to March 30, 2018 and conditioned on (x) achievement of financial performance goals and (y) the average closing price per share of common stock for the 30 consecutive trading days prior to and including March 30, 2018 meeting or exceeding a pre-established price per share, as adjusted for any cumulative appreciation of the Nasdaq Composite Index over the performance period. The stock price performance condition of these awards constitutes a "market condition" under ASC 718 because the vesting is tied to a calculated stock return and therefore, the PRSUs constitute a performance grant with market conditions under Topic 718. Consistent with ASC 718, the full grant date fair value for the entire twelve-month performance period is included in the amounts shown for the year of grant and was determined for both the stock return condition and the financial performance condition using a Monte Carlo simulation option pricing model ("Monte Carlo model") on the date the PRSUs were awarded.

The table below sets forth the grant date fair value determined in accordance with ASC 718 for the award using the Monte Carlo model. Consistent with ASC 718, the full grant date fair value for the entire twelve-month performance period is included in the amounts shown for the year of grant and was determined using a Monte Carlo simulation model.

Name	Fiscal Year	Grant Date	Market-Related Component Grant Date Fair Value ($)
Narbeh Derhacobian	2017	4/1/2017	$ 36,450
Ron Shelton	2017	4/1/2017	30,375
Gideon Intrater	2017	4/1/2017	7,880

(7) Represents grant date fair value in connection with company-wide awards made in October 2015 to address the dilution of our employees' and certain non-employee directors' equity interests in our company as a result of the conversion of the Series E convertible preferred stock in connection with our initial public offering.

2017 Incentive Bonuses

2017 Executive Officer Incentive Bonus Plan. In March 2017, our compensation committee approved a bonus plan for 2017 ("Bonus Plan") for our named executive officers, with target bonus amounts thereunder of 35% of 2017 annual base salary for Messrs. Derhacobian and Shelton and 25% for Mr. Intrater (each, the "on-target bonus payment"). Under the Bonus Plan, following completion of 2017, participants were eligible to receive a bonus equal to the applicable on-target bonus payment multiplied by the Bonus Multiplier (as defined below), in each case based on attainment of performance objectives derived from our financial plan for 2017 and the non-financial management and business objectives ("MBOs") established for each participant by our compensation committee. The "Bonus Mulitplier" (which may be less than or more than 100%) is calculated as follows:

((Financial objective weighting x (Financial objective performance percentage)) + MBO performance percentage

Performance objectives included achievement of financial goals and MBOs, which were weighted at 70% for Messrs. Derhacobian and Shelton and 60% for Mr. Intrater, respectively, with the balance weighting percentage allocated to MBOs (which in the aggregate may not exceed 100% of such percentage). The financial objectives for all are expressed in terms of revenue, gross margin, and adjusted EBITDA (as defined in our earnings release) and are measured independently and weighted at target level at 35% (53.8% maximum), 35% (53.8% maximum) and 30% (60% maximum), respectively. Specific MBOs for each participant were established by our compensation committee to align with our operational and strategic objectives and participant's area of responsibility. Following the end of 2017, our compensation committee reviewed the achievement of Mr. Derhacobian's, Mr. Shelton's, and Mr. Intrater's objectives and approved the cash incentive amount earned by them, each as described in the "Non-Equity Incentive Plan Compensation" column of Summary Compensation Table. The table below sets forth the bonus calculation for the Bonus Multplier for each named executive officer under the Bonus Plan:

Name	Financial Objective Weighting	Financial Performance Percentage	MBO Performance Percentage	Bonus Multiplier
Narbeh Derhacobian	70 %	155.1 %	19.3 %	1.28
Ron Shelton	70	155.1	21.1	1.30
Gideon Intrater	60	155.1	31.6	1.25

2017 Equity Award

In February 2017, we granted Mr. Intrater an option to purchase 40,000 shares of common stock, at an exercise price of $3.60 per share. This stock option vests in 24 monthly installments beginning February 9, 2017.

In addition, we granted Mr. Intrater 40,000 restricted stock units. These restricted stock units vest quarterly over two years.

In March 2017, we granted Mr. Derhacobian an option to purchase 82,418 shares of common stock, Mr. Shelton an option to purchase 68,681 shares of common stock and Mr. Intrater an option to purchase 17,818 shares of common stock, each at an exercise price of $3.55 per share. Each of these stock options vests in 48 equal monthly installments beginning on May 1, 2017 until such time as the option is fully vested.

In addition, effective April 1, 2017, we granted Mr. Derhacobian, Mr. Shelton and Mr. Intrater 60,000, 50,000 and 12,971 restricted stock units, respectively. Each of these restricted stock units vests quarterly over four years, beginning on July 1 2017. Also, effective April 1, 2017, our compensation committee approved grants of PRSUs under our 2015 Equity Incentive Plan to each of our named executive officers for the following target number of shares of common stock ("target shares"): 45,000 shares for Mr. Derhacobian; 37,500 shares for Mr. Shelton; and 9,728 shares for Mr. Intrater. The target shares shall become earned under the PRSUs only if (x) our financial performance meets or exceeds all three of the goals for our revenue, gross profit and EBITDA contained in our financial plan for 2017 and (y) the average closing price per share of common stock for the 30 consecutive trading days prior to and including March 30, 2018 meets or exceeds a pre-established price per share, as adjusted for any cumulative appreciation of the Nasdaq Composite Index from March 31, 2017 to March 30, 2018. If any target shares become earned ("earned shares") as a result of achievement of all of the performance metrics described above, then 20% of the earned shares shall vest on the date that our compensation committee determines the actual achievement of the performance metrics and the remainder will vest in equal quarterly installments on June 30, 2018 and at the end of each of the next seven quarters thereafter until all of the earned shares have completed vested. If we fail to meet or exceed any of the performance metrics described above, then no shares will be earned under the awards and all shares will be forfeited under the awards. Subject to certain exceptions, the awards shall vest, if at all, only following the end of March 30, 2018, and the executive officers must be employed by us at the time of vesting for the award to vest.

2017 Outstanding Equity Awards at Fiscal Year-End Table

The following table presents, for each of our named executive officers, information regarding outstanding stock options and stock awards held as of December 31, 2017.

	Option Awards					Restricted Stock Awards			
Name	Option Awards Grant Date of Option Award	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Options Exercise Price ($)(1)	Stock Awards Option Expiration Date	Stock Awards – Number of Shares of Units of Stock That have Not Vested (#)	Stock Awards – Market Value of Shares or Units of Stock That Have Not Vested ($)(8)	Equity Incentive Plan Awards - Number of Unearned Shares, Units or Other Rights That Have Not Vested (#)	Equity Incentive Plan Awards - Market or Payout Value of Unearned Shares, Units or Other Rights That Have Not Vested ($)(8)
Narbeh Derhacobian	5/11/2010 (2)	4,545	– (3)	1.65	5/10/2020				
	12/14/2010 (2)	121	– (3)	1.65	12/13/2020				
	12/13/2011 (2)	45	– (3)	1.65	12/12/2021				
	6/18/2013 (2)	20,181	– (3)	1.65	6/17/2023				
	8/11/2014 (2)	40	– (4)	1.65	8/10/2024				
	10/14/2014 (2)	50	– (4)	1.65	10/13/2024				
	4/29/2015 (2)	4,545	– (3)	3.30	4/28/2025				
	4/29/2015 (2)	50	– (4)	3.30	4/28/2025				
	9/29/2015 (2)	30	– (4)	10.00	9/28/2025				
	3/10/2017 (2)	13,736	68,682 (6)	3.55	3/9/2027				
	4/1/2017					52,500 (2) (7)	338,625	45,000	290,250
Ron Shelton	2/7/2012 (2)	1,393	– (3)	1.65	2/6/2022				
	6/18/2013 (2)	84,954	– (3)	1.65	6/17/2023				
	4/29/2015 (2)	13,636	– (3)	3.30	4/28/2025				
	3/10/2017 (2)	11,446	57,235 (6)	3.55	3/9/2027				
	4/1/2017					43,750 (2) (7)	282,188	37,500	241,875
Gideon Intrater	8/11/2014 (2)	1,090	– (5)	1.65	8/10/2024				
	12/16/2014 (2)	1,090	– (5)	1.65	12/15/2014				
	9/29/2015 (2)	14,917	10,779 (5)	10.00	3/9/2027				
	2/9/2017 (2)	16,666	23,334 (4)	3.60	2/8/2027	1,972 (5)	12,719		
	2/9/2017 (2)					25,000 (9)	161,250		
	3/10/2017 (2)	2,969	14,849 (6)	3.55	3/9/2027				
	4/1/2017					11,350 (7)	73,208	9,728	62,746

(1) Represents the fair market value of a share of our common stock, as determined by our board of directors, on the option's grant date

(2) The stock option, restricted stock unit award or PRSU is subject to 100% accelerated vesting (in the cash of PRSUs "at target") upon a qualifying termination of the executive's employment with us within three months prior to or within 12 months after a change of control. See "—Potential Payments upon Termination or Change in Control below.

(3) Fully vested as of the grant date.

(4) The option vested or vests over a two-year period as follows: 1/24th of the shares of our common stock underlying the option vest each month following the grant date.

(5) The option or restricted stock unit vests over a four-year period as follows: 25% of the shares of our common stock underlying the award vest on the first anniversary of the date of grant and, thereafter, the remaining shares of our common stock underlying the options vest in 36 equal monthly installments over the next three years.

(6) Each of these stock options vests in 48 equal monthly installments beginning on May 1, 2017 until such time as the option is fully vested.

(7) Each of these restricted stock units vests quarterly over four years, beginning on July 1, 2017.

(8) Represents the fair market value of the unvested restricted stock units as of December 29, 2017 and assumes the fair market value of our common stock was $6.45 per share, the closing price of our common stock on December 29, 2017.

(9) PRSUs that are earned and settled if: (x) our financial performance meets or exceeds all three of the goals for the Company's revenue, gross profit and EBITDA contained in our financial plan for 2017 and (y) the average closing price per share of common stock for the 30 consecutive trading days prior to and including March 30, 2018 meets or exceeds a pre-established price per share, as adjusted for any cumulative appreciation of the Nasdaq Composite Index from March 31, 2017 to March 30, 2018. If any target shares become earned ("earned shares") as a result of achievement of all of the performance metrics described above, then 20% of the earned shares shall vest on the date that our compensation committee determines the actual achievement of the performance metrics and the remained will vest in equal quarterly installments on June 30, 2018 and at the end of each of the next seven quarters thereafter until all of the earned shares have completed vested.

(10) Each of these restricted stock units vests quarterly over two years beginning on February 9, 2017.

Employment Agreements, Offer Letters and Arrangements

The employment of our named executive officers is at will and may be terminated at any time, with or without formal cause. As discussed in "—Potential Payments Upon Termination or Change in Control" below, our named executive officers are entitled to severance pay and other benefits under certain circumstances. The annual base salary and on-target bonus amount of each of our named executive officers as of December 31, 2017 are as follows:

Name	Annual Base Salary	On-Target Bonus	Bonus Plan
Narbeh Derhacobian	$ 360,000	$ 126,000	2018 Executive Officer Incentive Bonus Plan
Ron Shelton	$ 300,000	$ 105,000	2018 Executive Officer Incentive Bonus Plan
Gideon Intrater	$ 275,000	$ 68,750	2018 Executive Officer Incentive Bonus Plan

Potential Payments Upon Termination or Change in Control

Pursuant to the terms of agreements with these executive officers, we have agreed to provide the following benefits to each of them if the executive officer is subject to a "Qualifying Termination" (as such term is defined in the agreements):

- payment of his base salary for 12 months in the case of Mr. Derhacobian and Mr. Shelton and six months in the case of Mr. Intrater in the event the Qualifying Termination does not constitute a CIC qualifying termination (as defined below). In the event the Qualifying Termination occurs within three months prior to or within 12 months after a qualifying change in control of our company (a "CIC qualifying termination"), his base salary and target bonus for 12 months in the case of Mr. Derhacobian and Mr. Shelton, and his base salary for 6 months and the pro-rated portion of his annual target bonus in the case of Mr. Intrater;

- payment of the monthly benefits premium under COBRA for up to 12 months in the case of Messrs. Derhacobian and Shelton and six months in the case of Mr. Intrater in the event of a qualifying termination at any time; and

- full acceleration of vesting with respect to all unvested equity awards (including performance-based equity awards "at target") in the event the qualifying termination occurs within three months prior to or within 12 months after a qualifying change in control of our company.

These agreements provide for three-year terms, subject to automatic renewal under certain circumstances, and supersede our prior agreements with the named executive officers.

Compensation Committee Interlocks and Insider Participation

The members of the compensation committee during 2017 were Nelson Chan, Keith Crandell and Kevin Palatnik. None of the members of our compensation committee in 2017 were at any time during 2017 or at any other time an officer or employee of Adesto or any of its subsidiaries, and none had or have any relationships with Adesto that are required to be disclosed under Item 404 of Regulation S-K. None of our current executive officers has served as a member of the board of directors, or as a member of the compensation or similar committee, of any entity that has one or more executive officers who served on our board of directors or compensation committee during the year ended December 31, 2017.

Director Compensation

During 2017 our non-employee directors were compensated in the following manner under our existing director compensation program.

Annual and Meeting Fees. During 2017, our non-employee directors received the following cash compensation for their service on the board of directors and its committees:

- $35,000 annual cash retainer;
- $19,000 for the chair of our audit committee and $8,000 for each of its other members;
- $19,000 for the chair of our compensation committee and $8,000 for each of its other members; and
- $6,000 for the chair of our nominating and corporate governance committee and $3,000 for each of its other members.

In addition, our Chairman of the Board receives an additional $25,000 annual fee for serving in that capacity. We pay this fee, the annual retainer fee and any additional fees to each director in equal quarterly installments in arrears.

Equity Awards. Our current non-employee director equity compensation policy provides that each newly-elected or appointed non-employee director will be granted stock option having a fair market value on the grant date equal to approximately $50,000 and, immediately following each annual meeting of our stockholders, each non-employee director will automatically be granted additional restricted stock units ("RSUs") having a fair market value on the date of grant equal to approximately $30,000 if the non-employee director has served continuously as a member of our board of directors for at least six months. Each initial stock option award will have a ten-year term and will vest monthly over four years. Each RSU award will fully vest on the one-year anniversary of the grant date. Vesting of the stock options and RSUs is subject to the director's continuous service on our board of directors. In addition to the awards provided for above, non-employee directors are eligible to receive discretionary equity awards.

Non-employee directors receive no other form of remuneration, perquisites or benefits, but are reimbursed for their expenses in attending meetings, including travel, meal and other expenses incurred to attend meetings solely among the non-employee directors.

The following table provides information for the fiscal year ended December 31, 2017regarding all compensation awarded to, earned by or paid to each person who served as a director for some portion or all of fiscal 2017. Mr. Derhacobian, our President and Chief Executive Officer, and Mr. Barry Cox, our former Chairman of the Board (an executive officers (other than a named executive officer), did not receive compensation for director service during 2017.

Director Compensation —2017

Name	Fees Earned or Paid in Cash ($)	Stock Awards ($)(1)	Option Awards ($)(1)	All Other Compensation ($)	Total ($)
Nelson Chan	$ 83,500	$ 30,000	$ —	$ —	$ 113,500
Keith Crandell	45,250	30,000	—	—	75,250
Francis Lee	49,000	30,000	—	—	79,000
Kevin Palatnik	61,250	30,000	—	—	91,250

(1) Amounts shown in this column reflect the aggregate full grant date fair value calculated in accordance with ASC 718 for RSU and/or stock option awards. The grant date fair value was determined using the closing price of our common stock on the date of grant. The amount reported in the Stock Awards and the Option Awards columns reflect the accounting cost for these stock-based awards, and do not correspond to the actual economic value that may be received by the directors from the awards. For information regarding the number of stock options and restricted stock units held by each director as of December 31, 2017, see the table below.

Each person who served as a member of our board of directors during 2017 held the following aggregate number of shares of our common stock subject to outstanding stock options and restricted stock units as of December 31, 2017. For the holdings of Mr. Derhacobian, our President and Chief Executive Officer, please refer to "Executive Compensation—2017 Outstanding Equity Awards at Fiscal Year-End Table," above.

Name	Number of Shares Underlying Stock Options Held as of December 31, 2017	Number of Shares Underlying Restricted Stock Units Held as of December 31, 2017
Nelson Chan	24,735	6,250
Keith Crandell	—	14,491
Francis Lee	3,030	6,250
Kevin Palatnik	3,030	6,250

Adesto stock ownership information for each of our directors is shown under the heading "Security Ownership of Certain Beneficial Owners and Management" in Item 12 of this annual report.

Item 12. *Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters*

Security Ownership of Certain Beneficial Owners and Management

The following table sets forth certain information with respect to the beneficial ownership of our common stock as of January 31, 2018 by:

- each stockholder known by us to be the beneficial owner of more than 5% of our common stock;

- each of our directors;
- each of our named executive officers; and
- all of our directors and executive officers as a group.

Percentage ownership of our common stock is based on 21,793,417 shares of our common stock outstanding on January 31, 2018. We have determined beneficial ownership in accordance with the rules of the SEC, and thus it represents sole or shared voting or investment power with respect to our securities. Unless otherwise indicated below, to our knowledge, the persons and entities named in the table have sole voting and sole investment power with respect to all shares that they beneficially owned, subject to community property laws where applicable. We have deemed shares of our common stock subject to options or restricted stock units that are currently exercisable or exercisable or will settle within 60 days of January 31, 2018 to be outstanding and to be beneficially owned by the person holding the option for the purpose of computing the percentage ownership of that person but have not treated them as outstanding for the purpose of computing the percentage ownership of any other person.

Unless otherwise indicated, the address of each of the individuals and entities named below that owns 5% or more of our common stock is c/o Adesto Technologies Corporation, 3600 Peterson Way, Santa Clara, CA 95054.

Name of Beneficial Owner	Shares Beneficially Owned	Percent Owned
Directors and Named Executive Officers		
Narbeh Derhacobian	573,065 (1)	2.6 %
Ron Shelton	298,815 (2)	1.4
Gideon Intrater	115,424 (3)	*
Nelson Chan	59,242 (4)	*
Keith Crandell	2,291,002 (5)	10.5
Francis Lee	19,973 (6)	*
Kevin Palatnik	19,973 (7)	*
All executive officers and directors as a group (12 persons)	3,999,493 (8)	18.4 %
Greater than 5% Beneficial Owners		
ARCH Venture Fund VI, L.P.	2,276,511 (9)	10.4 %
AWM Investment Company, Inc.	1,800,200 (10)	8.3
Gilder, Gagnon, Howe & Co. LLC	1,641,221 (11)	7.5
180 Degree Capital Corp.	1,539,983 (12)	7.1

* Represents beneficial ownership of less than 1% of our outstanding shares of common stock.

(1) Includes 50,211 shares subject to options that are exercisable within 60 days of January 31, 2018.

(2) Includes 107,153 shares subject to options that are exercisable within 60 days of January 31, 2018.

(3) Includes 42,572 shares subject to options that are exercisable within 60 days of January 31, 2018.

(4) Includes 24,735 shares subject to options that are exercisable within 60 days of January 31, 2018.

(5) Represents 2,276,511 shares held by ARCH Venture Fund VI, L.P. as noted in footnote 10. Keith L. Crandell, one of our directors, is a managing director of ARCH Venture Partners VI, LLC, the sole general partner of ARCH Venture Partners VI, L.P., the sole general partner of ARCH Venture Fund VI, L.P., and may be deemed to share voting and investment power over the shares held by ARCH Venture Fund VI, L.P.

(6) Includes 3,030 shares subject to options that are exercisable within 60 days of January 31, 2018.

(7) Includes 3,030 shares subject to options that are exercisable within 60 days of January 31, 2018.

(8) Includes (1) 468,784 shares subject to options held by all executive officers and directors that are exercisable within 60 days of January 31, 2018 and (2) 15,027 shares subject to restricted stock units held by all executive officers and directors that vest within 60 days of January 31, 2018.

(9) Represents 2,276,511 shares held by ARCH Venture Fund VI, L.P. ARCH Venture Partners VI, L.P. is the sole general partner of ARCH Venture Fund VI, L.P., and may be deemed to beneficially own certain of the shares held of record by ARCH Venture Fund VI, L.P. ARCH Venture Partners VI, L.P. disclaims beneficial ownership of all shares held of record by ARCH Venture Fund VI, L.P. in which ARCH Venture Partners VI, L.P. does not have an actual pecuniary interest. ARCH Ventures Partners VI, LLC, as the sole general partner of ARCH Venture Partners VI, L.P., may be deemed to beneficially own certain of the shares held of record by ARCH Venture Fund VI, L.P. ARCH Venture Partners VI, LLC disclaims beneficial ownership of all shares held of record by ARCH Venture Fund VI, L.P. in which ARCH Venture Partners VI, LLC does not have an actual pecuniary interest. Clinton W. Bybee, Keith L. Crandell and Robert T. Nelsen are the managing directors of ARCH Venture Partners VI, LLC and may be deemed to share voting and investment power over the shares held by ARCH Venture Fund VI, L.P. The managing directors disclaim beneficial ownership of all shares held of record by ARCH Venture Fund VI, L.P. in which they do not have an actual pecuniary interest. Mr. Crandell is a member of our board of directors. The address for ARCH Venture Fund VI, L.P. is 8725 W. Higgins Road, Suite 290, Chicago, Illinois 60631.

(10) Based solely on a Schedule 13G filing by AWM Investment Company on February 13, 2018 reflecting ownership as of December 31, 2017. The address for AWM Investment Company is c/o Special Situation Funds, 527 Madison Avenue, Suite 2600, New York, NY 10022.

(11) Based solely on a Schedule 13G/A filing by Gilder, Gagnon, Howe & Co. LLC on February 14, 2018 reflecting ownership as of December 31, 2017. The address is for Gilder, Gagnon, Howe & Co. LLC is 475 10th Avenue, New York, NY 10018.

(12) Based solely on a Schedule 13D/A filing by 180 Degree Capital Corp. on November 17, 2017 reflecting ownership as of November 9, 2017. The address for 180 Degree Capital Corp. is 7 North Willow Street, Suite 4B, Montclair, NJ 07042.

Equity Compensation Plan Information

The following table presents information as of December 31, 2017 with respect to compensation plans under which shares of our common stock may be issued. The category "Equity compensation plans approved by security holders" in the table below consists of the 2007 Equity Incentive Plan, 2015 Equity Incentive Plan and 2015 Employee Stock Purchase Plan.

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
	(a)	(b)	(c)
Equity compensation plans approved by security holders	2,070,347 (1)	$ 3.63 (2)	856,414 (3)
Equity compensation plans not approved by security holders	389,423 (4)	7.71	—
Total	2,459,770		856,414

(1) Excludes purchase rights accruing under the 2015 Employee Stock Purchase Plan and includes 305,674 shares subject to outstanding RSUs and 204,220 shares subject to outstanding PRSUs.

(2) The weighted average exercise price relates solely to outstanding stock option shares since shares subject to RSUs and PRSUs have no exercise price.

(3) Includes 275,587 shares that remain available for purchase under the 2015 Employee Stock Purchase Plan and excludes 568,729 shares of common stock that are subject to outstanding awards under the 2007 Equity Incentive Plan. Any such shares of common stock that are subject to outstanding awards under the 2007 Equity Incentive Plan that are issuable upon the exercise of options that expire or become unexercisable for any reason without having been exercised in full will be available for future grant and issuance under the 2015 Equity Incentive Plan. In addition, the number of shares reserved for issuance under our 2015 Equity Incentive Plan will increase automatically on the first day of January of each of 2016 through 2025 by the number of shares equal to 4% of the total outstanding shares of our common stock as of the immediately preceding December 31. Similarly, the number of shares reserved for issuance under our 2015 Employee Stock Purchase Plan will increase automatically on the first day of January of each of 2016 through 2025 by the number of shares equal to 1% of the total outstanding shares of our common stock as of the immediately preceding December 31 (rounded to the nearest whole share).

(4) Represents warrants granted as compensation for capital lease or financing transactions to commercial lenders.

Item 13. *Certain Relationships and Related Transactions, and Director Independence*

From January 1, 2017 to the present, there have been no transactions, and there are currently no proposed transactions, in which the amount involved exceeds $120,000 to which we or any of our subsidiaries was (or is to be) a party and in which any director, director nominee, executive officer, holder of more than 5% of our capital stock, or any immediate family member of or person sharing the household with any of these individuals, had (or will have) a direct or indirect material interest, except for payments set forth under Item 11 above.

Policies and Procedures for Related-Party Transactions

We have adopted a written related-person transactions policy that provides that our executive officers, directors, nominees for election as a director, beneficial owners of more than 5% of our common stock, and any members of the immediate family of the foregoing persons, are not permitted to enter into a material related-person transaction with us without the review and approval of our audit committee, or a committee composed solely of independent directors in the event it is inappropriate for our audit committee to review such transaction due to a conflict of interest. The policy provides that any request for us to enter into a transaction with an executive officer, director, nominee for election as a director, beneficial owner of more than 5% of our common stock or with any of their immediate family members or affiliates, in which the amount involved exceeds $120,000 will be presented to our audit committee for review, consideration and approval. In approving or rejecting any such proposal, we expect that our audit committee will consider the relevant facts and circumstances available and deemed relevant to the audit committee, including, but not limited to, whether the transaction is on terms no less favorable than terms generally available to an unaffiliated third party under the same or similar circumstances and the extent of the related person's interest in the transaction.

Independence of Directors

Our board of directors determines the independence of our directors by applying the independence principles and standards established by NASDAQ. These provide that a director is independent only if the board of directors affirmatively determines that the director does not have a relationship with the company which, in the opinion of the board of directors, would interfere with the exercise of his independent judgment in carrying out the responsibilities of a director. They also specify various relationships that preclude a determination of director independence. Material relationships may include employment, commercial, accounting, family and other business, professional and personal relationships.

Applying these standards, the board of directors annually reviews the independence of the company's directors, taking into account all relevant facts and circumstances. In its most recent review, the board of directors considered, among other things, the relationships that each non-employee director has with our company and all other facts and circumstances our board of directors deemed relevant in determining their independence, including the beneficial ownership of our capital stock by each non-employee director.

Based upon this review, our board of directors has determined that the following director nominee and members of our board of directors are currently independent as determined under the rules of the NASDAQ:

Nelson Chan	Francis Lee
Keith Crandell	Kevin Palatnik

All members of our audit committee, compensation committee, and nominating and corporate governance committee must be independent directors as defined by our Corporate Governance Guidelines. Members of the audit committee must also satisfy a separate SEC independence requirement, which provides that they may not accept directly or indirectly any consulting, advisory or other compensatory fee from Adesto or any of its subsidiaries other than their directors' compensation. Our board of directors has determined that all members of our audit committee, compensation committee and nominating and corporate governance committee are independent and all members of our audit committee satisfy the relevant additional SEC independence requirements for the members of such committee.

Item 14. *Principal Accountant Fees and Services*

We regularly review the services and fees from our independent registered public accounting firm, BPM LLP. These services and fees are also reviewed with our audit committee annually. In accordance with SEC rules and regulations, BPM LLP periodically rotates the individuals who are responsible for Adesto's audit.

The aggregate fees for fiscal years 2017 and 2016 for each of the following categories of services are as follows:

Fees Billed to Adesto	Fiscal Year 2017	Fiscal Year 2016
Audit fees(1)	$ 464,799	$ 371,434
Audit related fees(2)	—	—
Tax fees(3)	—	—
All other fees	—	—
Total fees	$ 464,799	$ 371,434

(1) *"Audit fees"* include fees for professional services rendered in connection with the audit of our annual consolidated financial statements, review of our quarterly condensed consolidated financial statements and advisory services on accounting matters that were addressed during the annual audit and quarterly reviews. This category also includes fees for services that were incurred in connection with statutory and regulatory filings or engagements, such as consents and review of documents filed with the SEC.

(2) *"Audit related fees"* include fees for professional services rendered that are reasonably related to the performance of the audit or review of our consolidated financial statements and are not reported under "Audit Fees."

(3) *"Tax fees"* include fees for tax advice. Tax advice fees encompass a variety of permissible services, including technical tax advice related to federal and state income tax matters, and assistance with tax audits.

Policy on Audit Committee Pre-Approval of Audit and Permissible Non-Audit Services of Independent Registered Public Accounting Firm

Our audit committee's policy is to pre-approve all audit and permissible non-audit services provided by the independent registered public accounting firm. These services may include audit services, audit-related services, tax services and other services. Pre-approval is detailed as to the particular service or category of services and is generally subject to a specific budget. The independent registered public accounting firm and management are required to periodically report to the audit committee regarding the extent of services provided by the independent registered public accounting firm in accordance with this pre-approval, and the fees for the services performed to date. Our audit committee may also pre-approve particular services on a case-by-case basis.

All of the services relating to the fees described in the table above were approved by our audit committee.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

We have filed the following documents as a part of this Annual Report on Form 10-K:

(a) Financial Statements

(b) Financial Statement Schedules

All schedules have been omitted because the required information is either not required, not applicable or because the information required is included in the Consolidated Financial Statements or notes thereto.

(c) Exhibits

Exhibit Number	Description of Exhibit	Form	File No.	Incorporated by Reference Exhibit	Incorporated by Reference Filing Date	Filed Herewith
3.1	Restated Certificate of Incorporation.	S-1/A	333206940	3.02	10/5/2015	
3.2	Amended and Restated Bylaws.	S-1/A	333206940	3.04	10/5/2015	
4.2	Fourth Amended and Restated Investors' Rights Agreement	S-1	333206940	4.01	9/14/2015	
10.1+	Form of Indemnification Agreement.	S-1/A	333206940	10.01	10/5/2015	
10.2+	2007 Equity Incentive Plan and form of option grant.	S-1	333206940	10.02	9/14/2015	
10.3+	2015 Equity Incentive Plan and form of equity awards.	S-1/A	333206940	10.03	10/5/2015	
10.4+	2015 Employee Stock Purchase Plan.	S-1/A	333206940	10.04	10/5/2015	
10.5+	Amended and Restated Employment Agreement, by and between the Registrant and Narbeh Derhacobian, dated August 16, 2013.	S-1	333206940	10.08	9/14/2015	
10.6+	Offer Letter, dated May 30, 2013, by and between the Registrant and Ron Shelton.	S-1	333206940	10.09	9/14/2015	
10.7+	Offer Letter, dated August 28, 2015, by and between the Registrant and Gideon Intrater.					X
10.8	Lease by and between the Registrant and Peterson Ridge LLC, dated November 2, 2015.	8-K	00137582	10.2	11/6/2015	
10.9	Business Financing Agreement by and between the Registrant and Western Alliance Bank, dated July 7, 2016.	10-Q	00137582	10.1	11/14/2016	
10.10	First Business Financing Modification Agreement between the Registrant and Western Alliance Bank, dated July 7, 2016.	10-K	00137582	10.10	3/24/2017	
10.11	Cell Library License Agreement by and between the Registrant and Atmel Corporation, dated September 28, 2012.	S-1	333206940	10.12	9/14/2015	
10.12	Process Technology and IP License Agreement by and between the Registrant and Atmel Corporation, dated September 28, 2012.	S-1	333206940	10.13	9/14/2015	
10.13	Second-Business Financing Modification Agreement between the Registrant and Western Alliance Bank, dated September 29, 2017	8-K	00137582	10.1	10/05/2017	
10.14+	Form of Principal Officer Change in Control and Severance Agreement	8-K	00137582	10.1	8/04/2017	

10.15+	Form of Executive Officer Change in Control and Severance Agreement					X
10.16+	Form of executive officer performance-based restricted stock units award agreement	10-Q	00137582	10.3	5/15/2017	
23.1	Consent of Independent Registered Public Accounting Firm.					X
24.1	Power of Attorney (see page 103 of this report).					X
31.1	Certification of Periodic Report by Principal Executive Officer under Section 302 of the Sarbanes-Oxley Act of 2002.					X
31.2	Certification of Periodic Report by Principal Financial Officer under Section 302 of the Sarbanes-Oxley Act of 2002.					X
32.1*	Certification of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350 as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					X
32.2*	Certification of Chief Financial Officer Pursuant to 18 U.S.C. Section 1350 as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					X
101.INS	XBRL Instance Document.					X
101.SCH	XBRL Taxonomy Extension Schema Document.					X
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.					X
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document.					X
101.LAB	XBRL Taxonomy Extension Label Linkbase Document.					X
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document.					X

+ Indicates a management contract or compensatory plan.

* As contemplated by Securities Exchange Commission Release No. 33-8212, these exhibits are furnished with this Annual Report on Form 10-K and are not deemed filed with the Securities and Exchange Commission and are not incorporated by reference in any filing of Adesto Technologies Corporation under the Securities Act of 1933, as amended, or the Exchange Act of 1934, whether made before or after the date hereof and irrespective of any general incorporation language in such filings..

Item 16. Form 10-K Summary

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this Annual Report on Form 10-K to be signed on its behalf by the undersigned, thereunto duly authorized, in Santa Clara, California, on the 13th day of March 2018.

ADESTO TECHNOLOGIES CORPORATION

By: /s/ Narbeh Derhacobian
Narbeh Derhacobian
Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Narbeh Derhacobian and Ron Shelton, and each of them, as his true and lawful attorneys-in-fact, proxies and agents, each with full power of substitution, for him in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact, proxies and agents full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully for all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact, proxies and agents, or their or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Narbeh Derhacobian Narbeh Derhacobian	President, Chief Executive Officer and Director *(Principal Executive Officer)*	March 13, 2018
/s/ Ron Shelton Ron Shelton	Chief Financial Officer *(Principal Accounting and Financial Officer)*	March 13, 2018
/s/ Nelson Chan Nelson Chan	Director	March 13, 2018
/s/ Keith Crandell Keith Crandell	Director	March 13, 2018
/s/ Francis Lee Francis Lee	Director	March 13, 2018
/s/ Kevin Palatnik Kevin Palatnik	Director	March 13, 2018

Exhibit 10.15

CHANGE IN CONTROL AND SEVERANCE AGREEMENT

This Change in Control and Severance Agreement (the "**Agreement**") is entered into by and between [____] (the "**Executive**") and Adesto Technologies., a Delaware corporation (the "**Company**"), and is effective as of [•], 201[__] (the "**Effective Date**").

1. **Term of Agreement.**

Except to the extent renewed as set forth in this Section 1, this Agreement shall terminate the earlier of the third (3rd) anniversary of the Effective Date (the "**Expiration Date**") or the date the Executive's employment with the Company terminates for a reason other than a Qualifying Termination or CIC Qualifying Termination; *provided however*, if a definitive agreement relating to a Change in Control has been signed by the Company on or before Expiration Date, then this Agreement shall remain in effect through the earlier of:

(a) The date the Executive's employment with the Company terminates for a reason other than a Qualifying Termination or CIC Qualifying Termination, or

(b) The date the Company has met all of its obligations under this Agreement following a termination of the Executive's employment with the Company due to a Qualifying Termination or CIC Qualifying Termination.

This Agreement shall renew automatically and continue in effect for three (3) year periods measured from the initial Expiration Date, unless the Company provides Executive notice of non-renewal at least three (3) months prior to the date on which this Agreement would otherwise renew. For the avoidance of doubt, and notwithstanding anything to the contrary in Section 2 or 3 below, the Company's non-renewal of this Agreement shall not constitute a Qualifying Termination or CIC Qualifying Termination.

2. **Qualifying Termination.** If the Executive is subject to a Qualifying Termination, then, subject to Sections 4, 8, and 9 below, Executive will be entitled to the following benefits:

(a) **Severance Benefits**. The Company shall pay the Executive six (6) months of his or her monthly base salary (at the rate in effect immediately prior to the actions that resulted in the Qualifying Termination). The Executive will receive his or her severance payment in a cash lump-sum which will be made on the first business day occurring after the sixtieth (60th) day following the Separation, *provided that* the Release Conditions have been satisfied.

(b) **Continued Employee Benefits**. If Executive timely elects continued coverage under the Consolidated Omnibus Budget Reconciliation Act ("**COBRA**"), the Company shall pay the full amount of Executive's COBRA premiums on behalf of the Executive for the Executive's continued coverage under the Company's health, dental and vision plans, including coverage for the Executive's eligible dependents, for the six (6) month period following the Executive's Separation or, if earlier, until Executive is eligible to be covered under another substantially equivalent medical insurance plan by a subsequent employer; provided that if the Company determines that it cannot provide the payment of COBRA coverage on behalf of the Executive without violating applicable law or incurring additional expense under applicable law (including, without limitation, Section 2716 of the Public Health Service Act), the Company will provide to Executive in lieu thereof a taxable lump sum payment for the balance of the COBRA period.

(c) **Extension of Post-Termination Exercise Period**. The period of time in which to exercise Executive's stock options to purchase shares of Company common stock vested as of the date of

Separation will be extended to nine (9) months from the date of Separation, but in any event such period shall not extend beyond the maximum term of the stock option, provided that at the time of such Separation Executive has provided continuous services to the Company for not less than three (3) years.

3 . **CIC Qualifying Termination.** If the Executive is subject to a CIC Qualifying Termination, then, subject to Sections 4, 8, and 9 below, Executive will be entitled to the following benefits:

(a) **Severance and Bonus Payments**. The Company or its successor shall pay the Executive (i) six (6) months of his or her monthly base salary (at the rate in effect immediately prior to the actions that resulted in the Separation) and (ii) an amount equal to the pro-rated portion of the Executive's annual target bonus (with such proration to commence on January 1 of the year in which the Executive incurs a Separation and ending on the date of the Executive's Separation). Such payment will be paid in a cash lump sum payment, which payment will be made on the first business day occurring after the sixtieth (60^{th}) day following the Separation, *provided that* the Release Conditions have been satisfied.

(b) **Equity Vesting Acceleration**. Each of Executive's then outstanding unvested Equity Awards, including awards that would otherwise vest only upon satisfaction of performance criteria, shall accelerate and become vested and exercisable with respect to 100% of the then unvested shares subject to all Equity Awards. "**Equity Awards**" means all options to purchase shares of Company common stock, Restricted Stock Units as well as any and all other stock-based awards granted to the Executive, including but not limited to stock bonus awards, restricted stock or stock appreciation rights. Subject to Section 4, the accelerated vesting described above shall be effective as of the Separation. In the event an Equity Award is subject to performance metrics or factors then the vesting acceleration provided for herein shall be deemed to have been met based on achievement of such performance award "at-target."

(c) **Continued Employee Benefits**. If Executive timely elects continued coverage under the Consolidated Omnibus Budget Reconciliation Act ("**COBRA**"), the Company shall pay the full amount of Executive's COBRA premiums on behalf of the Executive for the Executive's continued coverage under the Company's health, dental and vision plans, including coverage for the Executive's eligible dependents, for the six (6) month period following the Executive's Separation or, if earlier, until Executive is eligible to be covered under another substantially equivalent medical insurance plan by a subsequent employer; provided that if the Company determines that it cannot provide the payment of COBRA coverage on behalf of the Executive without violating applicable law or incurring additional expense under applicable law (including, without limitation, Section 2716 of the Public Health Service Act), the Company will provide to Executive in lieu thereof a taxable lump sum payment for the balance of the COBRA period.

(d) **Extension of Post-Termination Exercise Period**. The period of time in which to exercise Executive's stock options to purchase shares of Company common stock that are vested as of the date of Separation will be extended to nine (9) months from the date of Separation, but in any event such period shall not extend beyond the maximum term of the stock option, provided that at the time of such Separation Executive has provided continuous services to the Company for not less than three (3) years.

4 . **General Release.** Any other provision of this Agreement notwithstanding, the benefits under Section 2 and 3 shall not apply unless the Executive (i) has executed a general release (in a form prescribed by the Company) of all known and unknown claims that he or she may then have against the Company or persons affiliated with the Company and such release has become effective and (ii) has agreed not to prosecute any legal action or other proceeding based upon any of such claims. The release must be in the form prescribed by the Company, without alterations (this document effecting the foregoing, the "**Release**"). The Company will deliver the form of Release to the Executive within thirty (30) days after the Executive's Separation. The Executive must execute and return the Release within the time period specified in the form, and in all events within 61 days following the termination event described in Section 2 or 3 as applicable.

5 . **Accrued Compensation and Benefits.** Notwithstanding anything to the contrary in Section 2 and 3 above, the Company shall pay Executive's earned but unpaid base salary and other vested but unpaid cash entitlements for the period through and including the termination of employment, including unused earned vacation pay and unreimbursed documented business expenses incurred by Executive prior to the date of termination (collectively "**Accrued Compensation and Expenses**"). In addition, Executive shall be entitled to any other vested benefits earned by Executive for the period through and including the termination date of Executive's employment under any other employee benefit plans and arrangements maintained by the Company, in accordance with the terms of such plans and arrangements, except as may be modified herein (collectively "**Accrued Benefits**"). Any Accrued Compensation and Expenses to which the Executive is entitled shall be paid to the Executive in cash as soon as administratively practicable after the termination, and, in any event, no later than two and one-half (2-1/2) months after the end of the taxable year of the Executive in which the termination occurs or at such earlier time as may be required by applicable law. Any Accrued Benefits to which the Executive is entitled shall be paid to the Executive as provided in the relevant plans and arrangements.

6. **Definitions.**

(a) **"Cause"** means (i) any willful, material violation by the Participant of any law or regulation applicable to the business of the Company or a Parent or Subsidiary of the Company, the Participant's conviction for, or guilty plea to, a felony or a crime involving moral turpitude, or any willful perpetration by the Participant of a common law fraud, (ii) the Participant's commission of an act of personal dishonesty which involves personal profit in connection with the Company or any other entity having a business relationship with the Company, (iii) any material breach by the Participant of any provision of any agreement or understanding between the Company or any Parent or Subsidiary of the Company and the Participant regarding the terms of the Participant's service as an employee, officer, director or consultant to the Company or a Parent or Subsidiary of the Company, including without limitation, the willful and continued failure or refusal of the Participant to perform the material duties required of such Participant as an employee, officer, director or consultant of the Company or a Parent or Subsidiary of the Company, other than as a result of having a Disability, or a breach of any applicable invention assignment and confidentiality agreement or similar agreement between the Company or a Parent or Subsidiary of the Company and the Participant, (iv) Participant's disregard of the policies of the Company or any Parent or Subsidiary of the Company so as to cause loss, damage or injury to the property, reputation or employees of the Company or a Parent or Subsidiary of the Company, or (v) any other misconduct by the Participant which is materially injurious to the financial condition or business reputation of, or is otherwise materially injurious to, the Company or a Parent or Subsidiary of the Company. The determination as to whether a Participant is being terminated for Cause shall be made in good faith by the Company and shall be final and binding on the Participant. The foregoing definition does not in any way limit the Company's ability to terminate a Participant's employment or consulting relationship at any time as provided in Section 20 above, and the term "Company" will be interpreted to include any Parent, Subsidiary or Affiliate, as appropriate. Notwithstanding the foregoing, the foregoing definition of "Cause" may, in part or in whole, be modified or replaced in each individual employment agreement or Award Agreement with any Participant, provided that such document supersedes the definition provided in this Agreement.

(b) “**Code**” means the Internal Revenue Code of 1986, as amended.

(c) **“Change in Control.”** means a “Corporate Transaction,” as such term is defined in the Company’s 2015 Equity Incentive Plan, as may be amended from time to time, *provided that* the transaction (including any series of transactions) also qualifies as a change in control under U.S. Treasury Regulation 1.409A-3(i)(5)(v) or 1.409A-3(i)(5)(vii).

(d) **“CIC Qualifying Termination”** means a Separation (i) within twelve (12) months following a Change in Control or (ii) within three (3) months preceding a Change in Control, but as to part (ii) only if the Separation occurs following a Potential Change in Control resulting from (i) the Company terminating the Executive’s employment for any reason other than Cause or (ii) the Executive voluntarily resigning his or her employment for Good Reason. A termination or resignation due to the Executive’s death or Disability shall not constitute a CIC Qualifying Termination. A “**Potential Change in Control**” means the date of execution of a definitive agreement for a corporate transaction which, if consummated, would constitute the applicable Change in Control. In the case of a termination following a Potential Change in Control and before the consummation of a Change in Control, solely for purposes of benefits under this Agreement, the date of Separation will be deemed the date the Executive’s employment terminated.

(e) **“Disability”** means disability as defined in Section 22(e)(3) of the Code.

(f) **“Good Reason”** means, without the Executive’s consent, (i) a material and adverse reduction in the Executive’s authority, duties or responsibilities as existed immediately prior to such reduction, (ii) a material reduction (which for purposes of this Agreement means a reduction of greater than ten percent (10%), of Executive’s then current annual base salary (other than a reduction generally applicable to executive officers of the Company and in generally the same proportion as for the Executive), or (iii) relocation of the Executive’s principal workplace by more than thirty-five (35) miles from Executive’s then current place of employment. For the purpose of clause (i), a change in responsibility shall not be deemed to occur (A) solely because Executive is part of a larger organization or (B) solely because of a change in title. For the Executive to receive the benefits under this Agreement as a result of a voluntary resignation under this subsection (e), all of the following requirements must be satisfied: (1) the Executive must provide notice to the Company of his or her intent to assert Good Reason within thirty (30) days of the initial existence of one or more of the conditions set forth in subclauses (i) through (iii); (2) the Company will have thirty (30) days (the “**Company Cure Period**”) from the date of such notice to remedy the condition and, if it does so, the Executive may withdraw his or her resignation or may resign with no benefits; and (3) any termination of employment under this provision must occur within ten (10) days of the earlier of expiration of the Company Cure Period or written notice from the Company that it will not undertake to cure the condition set forth in subclauses (i) through (iii) above. Should the Company remedy the condition as set forth above and then one or more of the conditions arises again within twelve months following the occurrence of a Change in Control, the Executive may again assert Good Reason subject to the notice and cure periods set forth herein.

(g) “**Release Conditions**” means (i) the Company has received the Executive’s executed Release and (ii) any rescission period applicable to the Executive’s executed Release has expired such that the Release is effective.

(h) **“Qualifying Termination”** means a Separation that is not a CIC Qualifying Termination, but which results from the Company terminating the Executive’s employment for any reason other than Cause. A termination or resignation due to the Executive’s death or Disability shall not constitute a Qualifying Termination.

(i) **"Separation"** means a "separation from service," as defined in the regulations under Section 409A of the Code.

7. **Successors.**

(a) **Company's Successors**. The Company shall require any successor (whether direct or indirect and whether by purchase, lease, merger, consolidation, liquidation or otherwise) to all or substantially all of the Company's business and/or assets, by an agreement in substance and form satisfactory to the Executive, to assume this Agreement and to agree expressly to perform this Agreement in the same manner and to the same extent as the Company would be required to perform it in the absence of a succession. For all purposes under this Agreement, the term "Company" shall include any successor to the Company's business and/or assets or which becomes bound by this Agreement by operation of law.

(b) **Executive's Successors**. This Agreement and all rights of the Executive hereunder shall inure to the benefit of, and be enforceable by, the Executive's personal or legal representatives, executors, administrators, successors, heirs, distributees, devisees and legatees.

8. **Golden Parachute Taxes.**

(a) **Best After-Tax Result**. In the event that any payment or benefit received or to be received by Executive pursuant to this Agreement or otherwise ("**Payments**") would (i) constitute a "parachute payment" within the meaning of Section 280G of the Code and (ii) but for this subsection (a), be subject to the excise tax imposed by Section 4999 of the Code, any successor provisions, or any comparable federal, state, local or foreign excise tax ("**Excise Tax**"), then such Payments shall be either (A) provided in full pursuant or (B) provided as to such lesser extent which would result in no portion of such Payments being subject to the Excise Tax ("**Reduced Amount**"), whichever of the foregoing amounts, taking into account the applicable federal, state, local and foreign income, employment and other taxes and the Excise Tax (including, without limitation, any interest or penalties on such taxes), results in the receipt by Executive, on an after-tax basis, of the greatest amount of payments and benefits provided for hereunder or otherwise, notwithstanding that all or some portion of such Payments may be subject to the Excise Tax. Unless the Company and Executive otherwise agree in writing, any determination required under this Section shall be made by independent tax counsel designated by the Company and reasonably acceptable to Executive ("**Independent Tax Counsel'**), whose determination shall be conclusive and binding upon Executive and the Company for all purposes. For purposes of making the calculations required under this Section, Independent Tax Counsel may make reasonable assumptions and approximations concerning applicable taxes and may rely on reasonable, good faith interpretations concerning the application of Sections 280G and 4999 of the Code; *provided that* Independent Tax Counsel shall assume that Executive pays all taxes at the highest marginal rate. The Company and Executive shall furnish to Independent Tax Counsel such information and documents as Independent Tax Counsel may reasonably request in order to make a determination under this Section. The Company shall bear all costs that Independent Tax Counsel may reasonably incur in connection with any calculations contemplated by this Section. In the event that the above clause (ii)(B) of this Section 8 applies, then based on the information provided to Executive and the Company by Independent Tax Counsel, Executive may, in Executive's sole discretion and within thirty (30) days of the date on which Executive is provided with the information prepared by Independent Tax Counsel, determine which and how much of the Payments (including the accelerated vesting of equity compensation awards) to be otherwise received by Executive shall be eliminated or reduced (as long as after such determination the value (as calculated by Independent Tax Counsel in accordance with the provisions of Sections 280G and 4999 of the Code) of the amounts payable or distributable to Executive equals the Reduced Amount).

9. **Miscellaneous Provisions.**

(a) **Section 409A**. To the extent (i) any payments to which Executive becomes entitled under this Agreement, or any agreement or plan referenced herein, in connection with Executive's termination of employment with the Company constitute deferred compensation subject to Section 409A of the Code and (ii) Executive is deemed at the time of such termination of employment to be a "specified" employee under Section 409A of the Code, then such payment or payments shall not be made or commence until the earlier of (i) the expiration of the six (6)-month period measured from the Executive's Separation; or (ii) the date of Executive's death following such Separation; *provided, however*, that such deferral shall only be effected to the extent required to avoid adverse tax treatment to Executive, including (without limitation) the additional twenty percent (20%) tax for which Executive would otherwise be liable under Section 409A(a)(1)(B) of the Code in the absence of such deferral. Upon the expiration of the applicable deferral period, any payments which would have otherwise been made during that period (whether in a single sum or in installments) in the absence of this paragraph shall be paid to Executive or Executive's beneficiary in one lump sum (without interest). Except as otherwise expressly provided herein, to the extent any expense reimbursement or the provision of any in-kind benefit under this Agreement (or otherwise referenced herein) is determined to be subject to (and not exempt from) Section 409A of the Code, the amount of any such expenses eligible for reimbursement, or the provision of any in-kind benefit, in one calendar year shall not affect the expenses eligible for reimbursement or in kind benefits to be provided in any other calendar year, in no event shall any expenses be reimbursed after the last day of the calendar year following the calendar year in which Executive incurred such expenses, and in no event shall any right to reimbursement or the provision of any in-kind benefit be subject to liquidation or exchange for another benefit. To the extent that any provision of this Agreement is ambiguous as to its exemption or compliance with Section 409A, the provision will be read in such a manner so that all payments hereunder are exempt from Section 409A to the maximum permissible extent, and for any payments where such construction is not tenable, that those payments comply with Section 409A to the maximum permissible extent. To the extent any payment under this Agreement may be classified as a "short-term deferral" within the meaning of Section 409A, such payment shall be deemed a short-term deferral, even if it may also qualify for an exemption from Section 409A under another provision of Section 409A. Payments pursuant to this Agreement (or referenced in this Agreement) are intended to constitute separate payments for purposes of Section 1.409A-2(b)(2) of the regulations under Section 409A. Notwithstanding anything to the contrary in this Agreement, if the period of time comprising (x) the time to consider and make effective the Release and (y) the time after the expiration or cessation of any cure period or attempt to cure Good Reason spans two calendar years, then, any payments that constitute deferred compensation subject to Section 409A will be made in the second calendar year.

(b) **Other Arrangements**. This Agreement supersedes any and all cash severance arrangements and vesting acceleration arrangements on change in control under any prior option agreement, restricted stock unit agreement, severance and salary continuation arrangements, programs and plans which were previously offered by the Company to the Executive, including change in control severance arrangements pursuant to an employment agreement or offer letter, and Executive hereby waives Executive's rights to such other benefits. In no event shall any individual receive cash severance benefits under both this Agreement and any other severance pay or salary continuation program, plan or other arrangement with the Company. For the avoidance of doubt, in no event shall Executive receive benefits under both Sections 2 and Section 3 with respect to Executive's Separation.

(c) **Dispute Resolution**. To ensure rapid and economical resolution of any and all disputes that might arise in connection with this Agreement, Executive and the Company agree that any and all disputes, claims, and causes of action, in law or equity, arising from or relating to this Agreement or its enforcement, performance, breach, or interpretation, will be resolved solely and exclusively by final, binding, and confidential arbitration, by a single arbitrator, in Santa Clara County, and conducted by Judicial Arbitration & Mediation Services, Inc. ("**JAMS**") under its then-existing employment rules and procedures. Nothing in this section, however, is intended to prevent either party from obtaining injunctive relief in court to prevent irreparable harm pending the conclusion of any such arbitration. Each party to an arbitration or litigation hereunder shall be responsible for the payment of its own attorneys' fees.

(d) **Notice**. Notices and all other communications contemplated by this Agreement shall be in writing and shall be deemed to have been duly given when personally delivered or when mailed by U.S. registered or certified mail, return receipt requested and postage prepaid or deposited with Federal Express Corporation, with shipping charges prepaid. In the case of the Executive, mailed notices shall be addressed to him or her at the home address which he or she most recently communicated to the Company in writing. In the case of the Company, mailed notices shall be addressed to its corporate headquarters, and all notices shall be directed to the attention of its Secretary.

(e) **Waiver**. No provision of this Agreement shall be modified, waived or discharged unless the modification, waiver or discharge is agreed to in writing and signed by the Executive and by an authorized officer of the Company (other than the Executive). No waiver by either party of any breach of, or of compliance with, any condition or provision of this Agreement by the other party shall be considered a waiver of any other condition or provision or of the same condition or provision at another time.

(f) **Withholding Taxes**. All payments made under this Agreement shall be subject to applicable withholding and income taxes.

(g) **Severability**. The invalidity or unenforceability of any provision or provisions of this Agreement shall not affect the validity or enforceability of any other provision hereof, which shall remain in full force and effect.

(h) **At-Will Employment**. Nothing in this Agreement shall confer upon the Executive any right to continue in service for any period of specific duration or interfere with or otherwise restrict in any way the rights of the Company or any subsidiary of the Company or of the Executive, which rights are hereby expressly reserved by each, to terminate his or her service at any time and for any reason.

(i) **Choice of Law**. The validity, interpretation, construction and performance of this Agreement shall be governed by the laws of the State of California (other than its choice-of-law provisions).

[Signature Page to Change In Control Severance Agreement Follows]

IN WITNESS WHEREOF, each of the parties has executed this Agreement, in the case of the Company by its duly authorized officer, as of the day and year first above written. This Agreement may be signed in two or more counterparts, each of which shall be deemed an original and all of which together shall constitute one and the same instrument.

EXECUTIVE	ADESTO TECHNOLOGIES, INC.
________________________	________________________
Name: [Name]	By: Narbeh Derhacobian Title: Chief Executive Officer
Date: ____________________	Date: ____________________

[Signature Page to Change In Control and Severance Agreement]

August 28, 2015

Gideon Intrater
1626 Kamsack Drive.
Sunnyvale, CA 94087

Re: Offer of Employment by Adesto Technologies Corporation

Dear Gideon:

I am very pleased to confirm our offer to you of employment with Adesto Technologies Corporation ("the Company"). You will report to Narbeh Derhacobian and your position will have the title of Chief Technology Officer. The terms of our offer and the benefits currently provided by the Company are as follows:

1. **Start Date.** Your expected 1st day of employment with the Company is September 9, 2015.

2. **Compensation**. Your base salary will be at an annualized rate of Two Hundred and Twenty Thousand ($220,000) Dollars per year, less payroll deductions and required taxes and withholdings, and will be based on an average of 32 hours per week. This is an exempt position and you are expected to work those hours necessary to get the job done.

3. **Annual Bonus**. You will have the opportunity to earn an annual cash bonus of up to fifteen percent (15%) of your base salary for each fiscal year based on the achievement of certain objectives, which you and the Board will mutually establish. Such bonus payment is subject to your continued employment through and until the date of payment. The bonus will be paid no later than March 15 of the year following the year in which such bonus was earned.

4. **Stock Options**. We will recommend to the Board of Directors of the Company that you be granted the opportunity to purchase up to Eight Hundred Twelve Thousand (812,000) shares of Common Stock of the Company under our 2007 Equity Incentive/Option Plan (the "Plan") at the fair market value of the Company's Common Stock, as determined by the Board of Directors on the date the Board approves such grant. The shares you will be given the opportunity to purchase will vest at the rate of 1/8th (12.5%) at the end of end of your first six months and an additional 1/48th (2.083%) per month thereafter, so long as you remain employed by the Company. Additionally, 50% of the unvested options will be vested immediately following either your termination without-cause by the Company or a change-in-control event of the Company. The grant of such options by the Company, however, is subject to the Board's approval and this promise to recommend such approval is not a promise of compensation and is not intended to create any obligation on the part of the Company. Further details on the Plan and any specific option grant to you will be provided upon approval of such grant by the Company's Board of Directors.

   a. Definitions.

      i. For purposes of this Section 4, "***Cause***" shall mean: (i) any willful act or acts of dishonesty undertaken by you and resulting in substantial gain or personal enrichment of you at the expense of the Company; (ii) any willful act of misconduct by you which is materially and demonstrably injurious to the Company; (iii) willful and repeated failure or refusal to comply in any respect with the terms of the Company's standard Employee Invention Assignment and Confidentiality Agreement, or any other policies of the Company applicable to you where non-compliance would be materially detrimental to the Company; or (iv) conviction of, or plea of guilty to or no contest

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to, a felony. No act, or failure to act, by you shall be considered "willful" if done, or omitted to be done, by you in good faith and in the reasonable belief that your act or omission was in the best interest of the Company and/or required by applicable law.

ii. For purposes of this Section 5, "***Change in Control***" shall mean any of the following events: (i) a merger or consolidation in which (1) the Company is a constituent party; or (2) a subsidiary of the Company is a constituent party and the Company issues shares of its capital stock pursuant to such merger or consolidation, except any such merger or consolidation involving the Company or a subsidiary in which the shares of capital stock of the Company outstanding immediately prior to such merger or consolidation continue to represent, or are converted or exchanged for shares of capital stock which represent, immediately following such merger or consolidation at least a majority, by voting power, of the capital stock of (A) the surviving or resulting corporation or (B) if the surviving or resulting corporation is a wholly owned subsidiary of another corporation immediately following such merger or consolidation, the parent corporation of such surviving or resulting corporation; (ii) a transaction to which the Company is a party and pursuant to which any "person" (as such term is used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended (the "***Exchange Act***")), other than a trustee or other fiduciary holding securities of the Company under an employee benefit plan of the Company, becomes the "beneficial owner" (as defined in Rule 13d-3 promulgated under the Exchange Act), directly or indirectly, of securities of the Company representing more than 50% of the combined voting power of the Company's then-outstanding securities, excluding, for purposes of this subsection (ii), any transaction constituting an equity financing in which the Company is the surviving corporation; or (iii) the sale, lease, transfer or other disposition (including by way of an exclusive license), in a single transaction or series of related transactions, by the Company or any subsidiary of the Company of all or substantially all the assets of the Company and its subsidiaries taken as a whole, except where such sale, lease, transfer or other disposition is to a wholly owned subsidiary of the Company.

5. **Confidentiality**. As an employee of the Company, you will have access to certain confidential information of the Company and you may, during the course of your employment, develop certain information or inventions that will be the property of the Company. To protect the interests of the Company, you will need to sign the Company's standard "Employee Invention Assignment and Confidentiality Agreement" as a condition of your employment. We wish to impress upon you that we do not want you to, and we hereby direct you not to, bring with you any confidential or proprietary material of any former employer or to violate any other obligations you may have to any former employer. During the period that you render services to the Company, you agree to not engage in any employment, business or activity that is in any way competitive with the business or proposed business of the Company. You will disclose to the Company in writing any other gainful employment, business or activity that you are currently associated with or participate in that competes with the Company. You will not assist any other person or organization in competing with the Company or in preparing to engage in competition with the business or proposed business of the Company. You represent that your signing of this offer letter, agreement(s) concerning stock options granted to you, if any, under the Plan (as defined above) and the Company's Employee Invention Assignment and Confidentiality Agreement and your commencement of employment with the Company will not violate any agreement currently in place between yourself and current or past employers.

6. **Employment with TriNet.**

Our benefits, payroll, and other human resource management services are provided through TriNet Employer Group, Inc., a professional employer organization. As a result of ADESTO TECHNOLOGIES' arrangement with TriNet, TriNet will be considered your employer of record for

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these purposes and your managers here at ADESTO TECHNOLOGIES will be responsible for directing your work, reviewing your performance, setting your schedule, and otherwise directing your work at ADESTO TECHNOLOGIES.

7. **At Will Employment**. While we look forward to a long and profitable relationship, should you decide to accept our offer, you will be an at-will employee of the Company, which means the employment relationship can be terminated by either you or the Company for any reason, at any time, with or without prior notice and with or without cause. Any statements or representations to the contrary (and, indeed, any statements contradicting any provision in this letter) should be regarded by you as ineffective. Further, your participation in any stock option or benefit program is not to be regarded as assuring you of continuing employment for any particular period of time. Any modification or change in your at will employment status may only occur by way of a written employment agreement signed by you and the Chief Executive Officer of the Company.

8. **Authorization to Work.** Please note that because of employer regulations adopted in the Immigration Reform and Control Act of 1986, within three (3) business days of starting your new position you will need to present documentation demonstrating that you have authorization to work in the United States. If you have questions about this requirement, which applies to U.S. citizens and non-U.S. citizens alike, you may contact our personnel office.

9. **Arbitration**. You and the Company agree to submit to mandatory binding arbitration any and all claims arising out of or related to your employment with the Company and the termination thereof, including but not limited to, claims for unpaid wages, wrongful termination, torts, stock or stock options or other ownership interest in the Company, and/ or discrimination (including harassment) based upon any federal, state or local ordinance, statute, regulation or constitutional provision **[except that each party may, at its, his or her option, seek injunctive relief in court related to the improper use, disclosure or misappropriation of a party's proprietary, confidential or trade secret information]**. All arbitration hearings shall be conducted in Santa Clara County, California. THE PARTIES HEREBY WAIVE ANY RIGHTS THEY MAY HAVE TO TRIAL BY JURY IN REGARD TO SUCH CLAIMS. This Agreement does not restrict your right to file administrative claims you may bring before any government agency where, as a matter of law, the parties may not restrict the employee's ability to file such claims (including, but not limited to, the National Labor Relations Board, the Equal Employment Opportunity Commission and the Department of Labor). However, the parties agree that, to the fullest extent permitted by law, arbitration shall be the exclusive remedy for the subject matter of such administrative claims. The arbitration shall be conducted through JAMS before a single neutral arbitrator, in accordance with the JAMS employment arbitration rules then in effect. The JAMS rules may be found and reviewed at http://jamsadr.com/rules-employment-arbitration. If you are unable to access these rules, please let me know and I will provide you with a hardcopy. The arbitrator shall issue a written decision that contains the essential findings and conclusions on which the decision is based.

10. **Background Check.** This offer is contingent upon a successful employment verification of criminal, education, and employment background. This offer can be rescinded based upon data received in the verification. You will also agree that the Company reserves the right to do a background check anytime during your full time employment with the Company.

11. **Acceptance**. This offer will remain open until September 1. 2015. If you decide to accept our offer, and I hope you will, please sign the enclosed copy of this letter in the space indicated and return it to me. Your signature will acknowledge that you have read and understood and agreed to the terms and conditions of this offer letter and the attached documents, if any. Should you have anything else that you wish to discuss, please do not hesitate to contact us.

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We are very excited and absolutely look forward to the opportunity to welcome you to Adesto Technologies Corporation.

Very truly yours,

Narbeh Derhacobian, President and CEO

/s/ Narbeh Derhacobian Date: 9/10/15

I have read and understood this offer letter and hereby acknowledge, accept and agree to the terms as set forth above and further acknowledge that no other commitments were made to me as part of my employment offer except as specifically set forth herein.

Date signed: 9/10/15

Name: Gideon Intrater

Signature: /s/ Gideon Intrater

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Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-3 (333-217164) and Form S-8 (Nos. 333-207630 and 333-216904) of our report dated March 13, 2018 related to the consolidated financial statements of Adesto Technologies Corporation, which appears in this Annual Report on Form 10-K.

/s/ BPM LLP

San Jose, California
March 13, 2018

Exhibit 31.1

**CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER PURSUANT TO
RULE 13A-14(A)/15D-14(A) OF THE SECURITIES EXCHANGE ACT
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Narbeh Derhacobian, certify that:

1. I have reviewed this Annual Report on Form 10-K of Adesto Technologies Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 13, 2018

By: /s/ Narbeh Derhacobian
Narbeh Derhacobian
President and Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER PURSUANT TO RULE 13A-14(A)/15D-14(A) OF THE SECURITIES EXCHANGE ACT AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Ron Shelton, certify that:

1. I have reviewed this Annual Report on Form 10-K of Adesto Technologies Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 13, 2018

By: /s/ Ron Shelton
Ron Shelton
Chief Financial Officer
(Principal Financial and Accounting Officer)

Exhibit 32.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER PURSUANT TO 18 U.S.C. SECTION 1350 AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, Narbeh Derhacobian, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- the Annual Report of Adesto Technologies Corporation on Form 10-K for the year ended December 31, 2017 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

- the information contained in such Annual Report on Form 10-K fairly presents, in all material respects, the financial condition and results of operations of Adesto Technologies Corporation.

Date: March 13, 2018

By: /s/ Narbeh Derhacobian
Narbeh Derhacobian
President and Chief Executive Officer
(Principal Executive Officer)

Exhibit 32.2

**CERTIFICATION OF CHIEF FINANCIAL OFFICER PURSUANT TO
18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002**

I, Ron Shelton, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- the Annual Report of Adesto Technologies Corporation on Form 10-K for the year ended December 31, 2017 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

- the information contained in such Annual Report on Form 10-K fairly presents, in all material respects, the financial condition and results of operations of Adesto Technologies Corporation.

Date: March 13, 2018

By: /s/ Ron Shelton
Ron Shelton
Chief Financial Officer
(Principal Financial and Accounting Officer)