UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended April 1, 2017

or

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

For the transition period from to

Commission file number 001-33170

NETLIST, INC.

(Exact name of registrant as specified in its charter)

Delaware	**95-4812784**
State or other jurisdiction of incorporation or organization	(I.R.S. Employer Identification No.)

175 Technology Drive, Suite 150
Irvine, CA 92618
(Address of principal executive offices) (Zip Code)

(949) 435-0025
(Registrant's telephone number, including area code)

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (section 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the 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 Act). Yes ☐ No ☒

The number of shares outstanding of the registrant's common stock as of the latest practicable date:

Common Stock, par value $0.001 per share
61,838,330 shares outstanding at May 11, 2017

NETLIST, INC. AND SUBSIDIARIES
QUARTERLY REPORT ON FORM 10-Q
FOR THE THREE MONTHS ENDED APRIL 1, 2017

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PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

NETLIST, INC. AND SUBSIDIARIES
Condensed Consolidated Balance Sheets
(in thousands, except par value)

	April 1, 2017 (unaudited)	December 31, 2016 (audited)
ASSETS		
Current Assets:		
Cash and cash equivalents	$ 7,770	$ 9,476
Restricted cash	3,100	3,100
Accounts receivable, net of reserves of $153 (2017) and $151 (2016)	1,235	1,751
Inventories	4,497	3,160
Prepaid expenses and other current assets	2,542	1,766
Total current assets	19,144	19,253
Property and equipment, net	602	645
Other assets	71	70
Total assets	$ 19,817	$ 19,968
LIABILITIES AND STOCKHOLDERS' DEFICIT		
Current Liabilities:		
Accounts payable	$ 6,255	$ 4,028
Revolving line of credit	1,410	676
Accrued payroll and related liabilities	818	1,085
Accrued expenses and other current liabilities	211	270
Notes payable and capital lease obligation, current	248	151
Total current liabilities	8,942	6,210
Convertible promissory note, net of debt discount, and accrued interest	14,380	14,251
Long-term warranty liability	40	36
Total liabilities	23,362	20,497
Commitments and contingencies		
Stockholders' deficit:		
Preferred stock, $0.001 par value - 10,000 shares authorized; no shares issued and outstanding	-	-
Common stock, $0.001 par value - 90,000 shares authorized; 61,736 (2017) and 61,653 (2016) shares issued and outstanding	62	62
Additional paid-in capital	144,361	144,035
Accumulated deficit	(147,968)	(144,626)
Total stockholders' deficit	(3,545)	(529)
Total liabilities and stockholders' deficit	$ 19,817	$ 19,968

See accompanying notes.

NETLIST, INC. AND SUBSIDIARIES
Unaudited Condensed Consolidated Statements of Operations
(in thousands, except per share amounts)

	Three Months Ended	
	April 1, 2017	April 2, 2016
Net product sales	$ 9,426	$ 1,171
Non-recurring engineering revenues	-	3,429
Total net revenues	9,426	4,600
Cost of sales(1)	8,746	1,149
Gross profit	680	3,451
Operating expenses:		
Research and development(1)	1,496	1,646
Intellectual property legal fees	466	823
Selling, general and administrative(1)	1,914	2,265
Total operating expenses	3,876	4,734
Operating loss	(3,196)	(1,283)
Other expense, net:		
Interest expense, net	(148)	(137)
Other income, net	2	8
Total other expense, net	(146)	(129)
Loss before provision for income taxes	(3,342)	(1,412)
Provision for income taxes	-	1
Net loss	$ (3,342)	$ (1,413)
Net loss per common share:		
Basic and diluted	$ (0.05)	$ (0.03)
Weighted-average common shares outstanding:		
Basic and diluted	61,681	50,365

(1) Amounts include stock-based compensation expense as follows:

Cost of sales	$ 16	$ 15
Research and development	66	135
Selling, general and administrative	182	308
Total stock-based compensation	$ 264	$ 458

See accompanying notes.

NETLIST, INC. AND SUBSIDIARIES
Unaudited Condensed Consolidated Statements of Cash Flows
(in thousands)

	Three Months Ended April 1, 2017	Three Months Ended April 2, 2016
Cash flows from operating activities:		
Net loss	$ (3,342)	$ (1,413)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	73	54
Interest accrued on convertible promissory note	75	75
Amortization of debt discount	54	54
Stock-based compensation expense	264	458
Changes in operating assets and liabilities:		
Accounts receivable	516	241
Inventories	(1,337)	55
Prepaid expenses and other assets	(557)	(22)
Accounts payable	2,227	(52)
Accrued payroll and related liabilities	(267)	(554)
Accrued expenses and other liabilities	(55)	(106)
Deferred revenue	-	(3,429)
Net cash used in operating activities	(2,349)	(4,639)
Cash flows from investing activities:		
Acquisition of property and equipment	(30)	(139)
Net cash used in investing activities	(30)	(139)
Cash flows from financing activities:		
Net borrowings under line of credit	734	-
Payments on debt	(123)	(56)
Proceeds from exercise of equity awards	62	40
Net cash provided by (used in) financing activities	673	(16)
Net change in cash and cash equivalents	(1,706)	(4,794)
Cash and cash equivalents at beginning of period	9,476	19,684
Cash and cash equivalents at end of period	$ 7,770	$ 14,890

See accompanying notes.

NETLIST, INC. AND SUBSIDIARIES
NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
April 1, 2017

Note 1—Description of Business

Netlist, Inc. together with its wholly owned subsidiaries (hereinafter collectively referred to as the "Company" or "Netlist," unless the context or the use of the term indicates otherwise), is a leading provider of high-performance modular memory subsystems serving customers in diverse industries that require superior memory performance to empower critical business decisions. The Company has a long history of introducing disruptive new products, such as one of the first load-reduced dual in-line memory module ("LRDIMM") based on its distributed buffer architecture, which has been adopted by the industry for DDR4 LRDIMM. The Company was also one of the first to bring NAND flash memory ("NAND flash") to the memory channel with its NVvault® non-volatile dual in-line memory modules ("NVDIMM") using software-intensive controllers and merging dynamic random access memory integrated circuits ("DRAM ICs" or "DRAM") and NAND flash to solve data bottleneck and data retention challenges encountered in high-performance computing environments. The Company recently introduced a new generation of storage class memory products called HybriDIMM™ to address the growing need for real-time analytics in Big Data applications and in-memory databases.

Due to the ground-breaking product development of its engineering teams, Netlist has built a robust portfolio of over 100 issued and pending U.S. and foreign patents, many seminal, in the areas of hybrid memory, storage class memory, rank multiplication and load reduction. Since its inception, the Company has dedicated substantial resources to the development and protection of technology innovations essential to its business. The Company's early pioneering work in these areas has been broadly adopted in industry-standard LRDIMM and in NVDIMM. Netlist's objective is to continue to innovate in its field and invest further in its intellectual property portfolio, with the goal of monetizing its intellectual property through a combination of product sales and licensing, royalty or other revenue-producing arrangements, which may result from joint development or similar partnerships or defense of our patents through enforcement actions against parties we believe are infringing them.

Netlist was incorporated in June 2000 and is headquartered in Irvine, California. In 2007, the Company established a manufacturing facility in the People's Republic of China (the "PRC"), which became operational in July 2007 upon the successful qualification of certain key customers.

Liquidity

The Company incurred net losses of $3.3 million, $11.2 million and $20.5 million for the three months ended April 1, 2017 and the years ended December 31, 2016 and January 2, 2016, respectively. The Company has historically financed its operations primarily through issuances of equity and debt securities and revenues generated from operations, including product sales and a non-recurring engineering ("NRE") fee from its Joint Development and License Agreement ("JDLA") with Samsung Electronics Co., Ltd. ("Samsung"), discussed below. The Company has also funded its operations with a revolving line of credit and term loans under a bank credit facility, a funding arrangement for costs associated with certain of its legal proceedings and, to a lesser extent, equipment leasing arrangements (see Notes 4, 5 and 10).

On November 12, 2015, the Company entered into the JDLA with Samsung, pursuant to which the Company and Samsung have agreed to work together to jointly develop new storage class memory technologies including a standardized product interface for NVDIMM-P memory modules in order to facilitate broad industry adoption of this new technology. The JDLA also includes comprehensive cross-licenses to the Company's and Samsung's patent portfolios for the purpose of developing this product interface, grants Samsung a right of first refusal to acquire the Company's HybriDIMM technology before it offers the technology to a third party, and grants the Company access to competitively priced DRAM and NAND flash raw materials. The Company believes Samsung represents an important strategic partner with a high level of technical capability in memory that can facilitate bringing its HybriDIMM technology to market. In connection with the JDLA, the Company received an $8.0 million NRE fee from Samsung for the joint development and received gross proceeds of $15.0 million for its issuance of a Senior Secured Convertible Note

(“SVIC Note”) and Stock Purchase Warrant (“SVIC Warrant”) to SVIC No. 28 New Technology Business Investment L.L.P., an affiliate of Samsung Venture Investment Co. (“SVIC”) (see Note 5).

On September 23, 2016, the Company completed a registered firm commitment underwritten public offering (the “2016 Offering”), pursuant to which it sold 9,200,000 shares of its common stock at a price to the public of $1.25 per share. The net proceeds to the Company from the 2016 Offering were $10.3 million, after deducting underwriting discounts and commissions and offering expenses paid by the Company.

Inadequate working capital would have a material adverse effect on the Company’s business and operations and could cause the Company to fail to execute its business plan, fail to take advantage of future opportunities or fail to respond to competitive pressures or customer requirements. A lack of sufficient funding may also require the Company to significantly modify its business model and/or reduce or cease our operations, which could include implementing cost-cutting measures or delaying, scaling back or eliminating some or all of its ongoing and planned investments in corporate infrastructure, research and development projects, business development initiatives and sales and marketing activities, among other activities. While the Company’s estimates of its operating revenues and expenses and working capital requirements could be incorrect and the Company may use its cash resources faster than it anticipates, management believes the Company’s existing cash balance, together with cash provided by the Company’s operations and borrowing availability under a bank credit facility (see Note 4), and taking into account cash expected to be used in operations and the funding to be received for certain litigation expenses (see Note 10), will be sufficient to meet the Company’s anticipated cash needs for at least the next 12 months.

Note 2—Summary of Significant Accounting Policies

Basis of Presentation

The accompanying interim unaudited condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (“U.S. GAAP”) for interim financial information and the instructions to the Securities and Exchange Commission’s (“SEC”) Form 10-Q and Article 8 of the SEC’s Regulation S-X. These condensed consolidated financial statements do not include all of the information and footnotes required by U.S. GAAP for complete financial statements. Therefore, these unaudited condensed consolidated financial statements should be read in conjunction with the Company’s audited consolidated financial statements and notes thereto as of and for the year ended December 31, 2016, included in the Company’s Annual Report on Form 10-K filed with the SEC on March 31, 2017.

The accompanying condensed consolidated financial statements as of and for the three months ended April 1, 2017 are unaudited; however, they contain all normal recurring accruals and adjustments that, in the opinion of the Company’s management, are necessary to present fairly the condensed consolidated financial position of the Company and its wholly-owned subsidiaries as of April 1, 2017 and the condensed consolidated statements of operations and statements of cash flows for the three months ended April 1, 2017 and April 2, 2016. The results of operations for the three months ended April 1, 2017 are not necessarily indicative of the results to be expected for any full year or any other interim period.

Principles of Consolidation

The accompanying condensed consolidated financial statements include the accounts of Netlist, Inc. and its wholly-owned subsidiaries. All intercompany balances and transactions have been eliminated in consolidation.

Fiscal Year

The Company operates under a 52 or 53-week fiscal year ending on the Saturday closest to December 31. For 2017, the Company’s fiscal year is scheduled to end on December 30, 2017 and will consist of 52 weeks, and each of the Company’s quarters within such fiscal year will be comprised of 13 weeks.

Use of Estimates

The preparation of the accompanying condensed consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the condensed consolidated financial statements, and the reported amounts of net revenues and expenses during the reporting period. By their nature, these estimates and assumptions are subject to an inherent degree of uncertainty. Significant estimates made by management include, among others, provisions for uncollectible receivables and sales returns, warranty liabilities, valuation of inventories, fair value of financial instruments, recoverability of long-lived assets, valuation of stock-based transactions, estimates for completion of NRE revenue milestones, and realization of deferred tax assets. The Company bases its estimates on its historical experience, knowledge of current conditions and the Company's belief of what could occur in the future considering available information. The Company reviews its estimates on an on-going basis. Actual results may differ materially from these estimates which may result in material adverse effects on the Company's consolidated operating results and financial position.

The Company believes the following critical accounting policies involve its more significant assumptions and estimates used in the preparation of the accompanying condensed consolidated financial statements: provisions for uncollectible receivables and sales returns; warranty liabilities; valuation of inventories; fair value of financial instruments; recoverability of long-lived assets; valuation of stock-based transactions; estimates for completion of NRE and other revenue milestones; and realization of deferred tax assets.

Revenue Recognition

Net Product Sales

Net product sales primarily consist of sales of high-performance modular memory subsystems to original equipment manufacturers ("OEMs"), hyperscale data center operators and storage vendors.

The Company recognizes revenues in accordance with Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") Topic 605. Accordingly, the Company recognizes revenues when there is persuasive evidence that an arrangement exists, product delivery and acceptance have occurred, the sales price is fixed or determinable, and collectability of the resulting receivable is reasonably assured.

The Company generally uses customer purchase orders and/or contracts as evidence of an arrangement. Delivery occurs when goods are shipped for customers with shipping point terms and upon receipt for customers with destination terms, at which time title and risk of loss transfer to the customer. Shipping documents are used to verify delivery and customer acceptance. The Company assesses whether the sales price is fixed or determinable based on the payment terms associated with the transaction and whether the sales price is subject to refund. Customers are generally allowed limited rights of return for up to 30 days, except for sales of excess component inventories, which contain no right-of-return privileges. Estimated returns are provided for at the time of sale based on historical experience or specific identification of an event necessitating a reserve. The Company offers a standard product warranty to its customers and has no other post-shipment obligations. The Company assesses collectability based on the creditworthiness of the customer as determined by credit checks and evaluations, as well as the customer's payment history.

All amounts billed to customers related to shipping and handling are classified as net product sales, while all costs incurred by the Company for shipping and handling are classified as cost of sales.

Engineering Services

The Company provides engineering services to its customers. The Company recognizes revenue from these services when all of the following conditions are met: (1) evidence existed of an arrangement with the customer, typically consisting of a purchase order or contract; (2) the Company's services were performed and risk of loss passed to the customer; (3) the Company completed all of the necessary terms of the contract; (4) the amount of revenue to which the Company was entitled was fixed or determinable; and (5) the Company believed it was probable that it would be able to collect the amount due from the customer. To the extent that one or more of these conditions has not been satisfied, the Company defers recognition of revenue.

Deferred Revenue

From time-to-time the Company receives pre-payments from its customers related to future services. Engineering development fee revenues, including NRE fees, are deferred and recognized ratably over the period the engineering work is completed.

Cash and Cash Equivalents

Cash and cash equivalents consist of cash and short-term investments with original maturities of three months or less.

Restricted Cash

Restricted cash generally consists of cash to secure standby letters of credit. Restricted cash was $3.1 million as of both April 1, 2017 and December 31, 2016, and related to two standby letters of credit.

Fair Value of Financial Instruments

The Company's financial instruments consist principally of cash and cash equivalents, restricted cash, accounts receivable, accounts payable, accrued expenses and debt instruments. The fair value of the Company's cash equivalents is determined based on quoted prices in active markets for identical assets or Level 1 inputs. The Company recognizes transfers between Levels 1 through 3 of the fair value hierarchy at the beginning of the reporting period. The Company believes that the carrying values of all other financial instruments approximate their current fair values due to their nature and respective durations.

Allowance for Doubtful Accounts

The Company performs credit evaluations of our customers' financial condition and limits the amount of credit extended to its customers as deemed necessary, but generally requires no collateral. The Company evaluates the collectability of accounts receivable based on a combination of factors. In cases where the Company is aware of circumstances that may impair a specific customer's ability to meet its financial obligations subsequent to the original sale, the Company will record an allowance against amounts due, and thereby reduce the net recognized receivable to the amount the Company reasonably believes will be collected. For all other customers, the Company records allowances for doubtful accounts based primarily on the length of time the receivables are past due based on the terms of the originating transaction, the current business environment, and its historical experience. Uncollectible accounts are charged against the allowance for doubtful accounts when all cost-effective commercial means of collection have been exhausted. Generally, the Company's credit losses have been within expectations and the provisions established. However, the Company cannot guarantee that it will continue to experience credit loss rates similar to those experienced in the past.

The Company's accounts receivable are highly concentrated among a small number of customers, and a significant change in the liquidity or financial position of one of these customers could have a material adverse effect on the collectability of the Company's accounts receivable, liquidity and future operating results.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to significant concentrations of credit risk consist principally of cash and cash equivalents, and accounts receivable.

The Company invests its cash equivalents primarily in money market mutual funds. Cash equivalents are maintained with high quality institutions, the composition and maturities of which are regularly monitored by management. At times, deposits held with financial institutions may exceed the amount of insurance provided by the Federal Deposit Insurance Corporation and the Securities Investor Protection Corporation.

The Company's trade accounts receivable are primarily derived from sales to OEMs in the server, high-performance computing and communications markets, as well as from sales to storage customers, appliance customers, system builders and cloud and datacenter customers. The Company performs credit evaluations of its customers' financial condition and limits the amount of credit extended when deemed necessary, but generally requires no collateral. The Company believes that the concentration of credit risk in its trade receivables is moderated by its credit evaluation process, relatively short collection terms, a high level of credit worthiness of its customers (see Note 3), foreign credit insurance, and letters of credit issued in its favor. Reserves are maintained for potential credit losses, and such losses historically have not been significant and have been within management's expectations.

Inventories

Inventories are valued at the lower of actual cost to purchase or manufacture the inventory or the net realizable value of the inventory. Cost is determined on an average cost basis which approximates actual cost on a first-in, first-out basis and includes raw materials, labor and manufacturing overhead. Net realizable value is the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. At each balance sheet date, the Company evaluates its ending inventory quantities on hand and on order and records a provision for excess quantities and obsolescence. Among other factors, the Company considers historical demand and forecasted demand in relation to the inventory on hand, competitiveness of product offerings, market conditions and product life cycles when determining obsolescence and net realizable value. In addition, the Company considers changes in the market value of components in determining the net realizable value of its inventory. Once established, lower of cost or market write-downs are considered permanent adjustments to the cost basis of the excess or obsolete inventories.

Property and Equipment

Property and equipment are recorded at cost and depreciated on a straight-line basis over their estimated useful lives, which generally range from three to seven years. Leasehold improvements are recorded at cost and amortized on a straight-line basis over the shorter of their estimated useful lives or the remaining lease term. Expenditures for repairs and maintenance are expensed as incurred. Upon retirement or sale, the cost and related accumulated depreciation and amortization of disposed assets are removed from the accounts and any resulting gain or loss is included in other expense, net.

Deferred Financing Costs, Debt Discount and Detachable Debt-Related Warrants

Costs incurred to issue debt are deferred and recorded as a reduction to the debt balance in the accompanying condensed consolidated balance sheets. The Company amortizes debt issuance costs over the expected term of the related debt using the effective interest method. Debt discounts relate to the relative fair value of warrants issued in conjunction with the debt are also recorded as a reduction to the debt balance and accreted over the expected term of the debt to interest expense using the effective interest method.

Impairment of Long-Lived Assets

The Company evaluates the recoverability of the carrying value of long-lived assets held and used by the Company in its operations for impairment on at least an annual basis or whenever events or changes in circumstances indicate that their carrying value may not be recoverable. When such factors and circumstances exist, the Company compares the projected undiscounted future net cash flows associated with the related asset or group of assets over their estimated useful lives against their respective carrying amount. These projected future cash flows may vary significantly over time as a result of increased competition, changes in technology, fluctuations in demand, consolidation of the Company's customers and reductions in average selling prices. If the carrying value is determined not to be recoverable from future operating cash flows, the asset is deemed impaired and an impairment loss is recognized to the extent the carrying value exceeds the estimated fair value of the asset. The fair value of the asset or asset group is based on market value when available, or when unavailable, on discounted expected cash flows. The Company's management believes there is no impairment of long-lived assets as of April 1, 2017. However, market conditions could change or demand for the Company's products could decrease, which could result in future impairment of long-lived assets.

Warranty Liability

The Company offers product warranties generally ranging from one to three years, depending on the product and negotiated terms of any purchase agreements with its customers. Such warranties require the Company to repair or replace defective product returned to the Company during the warranty period at no cost to the customer. Warranties are not offered on sales of excess component inventory. The Company records an estimate for warranty related costs at the time of sale based on its historical and estimated future product return rates and expected repair or replacement costs (see Note 3). While such costs have historically been within management's expectations and the provisions established, unexpected changes in failure rates could have a material adverse impact on the Company, requiring additional warranty reserves and could adversely affect the Company's gross profit and gross margins.

Stock-Based Compensation

The Company accounts for equity issuances to non-employees in accordance with FASB ASC Topic 505. All transactions in which goods or services are the consideration received for the issuance of equity instruments are accounted for based on the fair value of the consideration received or the fair value of the equity instrument issued, whichever is more reliably measurable. The measurement date used to determine the estimated fair value of the equity instrument issued is the earlier of the date on which the third-party performance is complete or the date on which it is probable that performance will occur.

In accordance with FASB ASC Topic 718, employee and director stock-based compensation expense recognized during the period is based on the value of the portion of stock-based payment awards that is ultimately expected to vest during the period. Given that stock-based compensation expense recognized in the accompanying condensed consolidated statements of operations is based on awards ultimately expected to vest, it has been reduced for estimated forfeitures. The Company estimates its forfeitures at the time of grant and revises such estimates, if necessary, in subsequent periods if actual forfeitures differ from those estimates. The Company's estimated average forfeiture rates are based on historical forfeiture experience and estimated future forfeitures.

The estimated fair value of common stock option awards to employees and directors is calculated using the Black-Scholes option pricing model. The Black-Scholes model requires subjective assumptions regarding future stock price volatility and expected time to exercise, along with assumptions about the risk-free interest rate and expected dividends, all of which affect the estimated fair values of the Company's common stock option awards. The expected term of options granted is calculated as the average of the weighted vesting period and the contractual expiration date of the option. This calculation is based on the safe harbor method permitted by the Securities and Exchange Commission ("SEC") in instances where the vesting and exercise terms of options granted meet certain conditions and where limited historical exercise data is available. The expected volatility is based on the historical volatility of the Company's common stock. The risk-free rate selected to value any particular grant is based on the U.S. Treasury rate that corresponds to the expected term of the grant effective as of the date of the grant. The expected dividend assumption is based on the Company's history and management's expectation regarding dividend payouts. Compensation expense for common stock option awards with graded vesting schedules is recognized on a straight-line basis over the requisite service period for the last separately vesting portion of the award, provided that the accumulated cost recognized as of any date at least equals the value of the vested portion of the award.

The Company recognizes the fair value of restricted stock awards issued to employees and outside directors as stock-based compensation expense on a straight-line basis over the vesting period for the last separately vesting portion of the awards. Fair value is determined as the difference between the closing price of the Company's common stock on the grant date and the purchase price of the restricted stock award, if any, reduced by expected forfeitures.

If there are any modifications or cancellations of the underlying vested or unvested stock-based awards, the Company may be required to accelerate, increase or cancel any remaining unearned stock-based compensation expense, or record additional expense for vested stock-based awards. Future stock-based compensation expense and unearned stock-based compensation may increase to the extent that the Company grants additional common stock options or other stock-based awards.

Income Taxes

Deferred tax assets and liabilities are recognized to reflect the estimated future tax effects, calculated at currently effective tax rates, of future deductible or taxable amounts attributable to events that have been recognized on a cumulative basis in the accompanying condensed consolidated financial statements. A valuation allowance related to a net deferred tax asset is recorded when it is more likely than not that some portion of the deferred tax asset will not be realized. Deferred tax liabilities, deferred tax assets and valuation allowances are classified as non-current in the accompanying condensed consolidated balance sheets.

ASC Topic 740 prescribes a recognition threshold and measurement requirement for the financial statement recognition of a tax position that has been taken or is expected to be taken on a tax return and also provides guidance on de-recognition, classification, interest and penalties, accounting in interim periods, disclosure, and transition. Under ASC Topic 740 the Company may only recognize or continue to recognize tax positions that meet a “more likely than not” threshold.

The application of tax laws and regulations is subject to legal and factual interpretation, judgment and uncertainty. Tax laws and regulations may change as a result of changes in fiscal policy, changes in legislation, the evolution of regulations and court rulings. Therefore, the actual liability for U.S. or foreign taxes may be materially different from the Company’s estimates, which could require the Company to record additional tax liabilities or to reduce previously recorded tax liabilities, as applicable.

Research and Development Expenses

Research and development expenditures are expensed in the period incurred.

Interest Expense

Interest expense consists primarily of interest associated with our issued debt, including fees related to the term loans, accretion of debt discounts and amortization of debt issuance costs. The Company recognizes the accretion of debt discounts and the amortization of interest costs using the effective interest method.

Risks and Uncertainties

The Company is subject to a number of risks and uncertainties, including its ability to achieve profitable operations due to the Company’s history of losses and accumulated deficits, the Company’s dependence on a small number of customers for a substantial portion of its net product sales, risks related to intellectual property matters, market acceptance of and demand for the Company’s products, and the risks described below. These risks could have a material adverse effect on the Company’s condensed consolidated financial position, results of operations and cash flows.

The Company has dedicated substantial resources to the development and protection of technology innovations essential to its business, and the Company expects these activities to continue for the foreseeable future. The Company also intends to aggressively pursue monetization avenues for its intellectual property portfolio, potentially including licensing, royalty or other revenue-producing arrangements. However, the Company’s revenues are currently generated by its product sales, and it may never be successful in generating a revenue stream from its intellectual property, in which case the Company’s investments of time, capital and other resources into its intellectual property portfolio may not provide adequate, or any, returns.

The Company also dedicates substantial resources to protecting its intellectual property, including its pending patent infringement litigation and U.S. International Trade Commission (“ITC”) proceedings against SK hynix Inc., a South Korean memory semiconductor supplier (“SK hynix”), and its efforts to defend its patents against challenges made by way of reexamination and review proceedings at the U.S. Patent and Trademark Office (“USPTO”) and Patent Trial and Appeal Board (“PTAB”) (see Note 7). The Company expects these activities to continue for the foreseeable future, without any guarantee that any ongoing or future patent protection or litigation activities will be successful. The Company is also subject to litigation based on claims that it has infringed the intellectual property rights of others, against which the Company intends to defend itself vigorously. Moreover, any litigation, regardless of its outcome, would involve a significant dedication of resources, including time and costs, would divert management’s time and attention and could negatively impact the Company’s results of operations. As a result, any current or future infringement claims by or against third parties could materially adversely affect the Company’s business, financial condition or results of operations.

The Company has also invested significant research and development time and costs into the design of application-specific integrated circuit (“ASIC”) and hybrid devices, including its NVvault family of products and most recently its next-generation HybriDIMM memory subsystem. The Company believes that market acceptance of these products or derivative products that incorporate its core memory subsystem technology is critical to its success. However, these products are subject to increased risks as compared to the Company’s legacy products. For example, the Company is dependent on a limited number of suppliers for the DRAM and ASIC devices that are essential to the functionality of these products and in the past it has experienced supply chain disruptions and shortages of DRAM and NAND flash required to create its NVvault family of products, and the Company’s products are generally subject to a product approval and qualification process with customers before purchases are made and the Company has experienced a longer qualification cycle than anticipated with some of these products, including its HyperCloud memory subsystems. These and other risks attendant to the production of the Company’s memory subsystem products could impair its ability to obtain customer or market acceptance of these products or obtain such acceptance in a timely manner, which would reduce the Company’s achievable revenues from these products and limit the Company’s ability to recoup its investments in the products.

The Company’s manufacturing operations in the PRC are subject to various political, geographic and economic risks and uncertainties inherent to conducting business in the PRC. These include, among others, (i) volatility and other potential changes in economic conditions in the region, (ii) managing a local workforce and overcoming other practical barriers, such as language and cultural differences, that may subject the Company to uncertainties or unfamiliar practices or regulatory policies, (iii) risks imposed by the geographic distance between the Company’s headquarters and its PRC operations, including difficulties maintaining the desired amount of control over production capacity and timing, inventory levels, product quality, delivery schedules, manufacturing yields and costs, (iv) the Company’s limited experience creating and overseeing foreign operations generally, (v) changes in the laws and policies of the Chinese government that affect business practices generally or restrict local operations by foreign companies, and (vi) changes in the laws and policies of the U.S. government regarding the conduct of business in foreign countries generally or in the PRC in particular, which may be more uncertain following the results of the 2016 U.S. presidential election. Additionally, the Chinese government controls the procedures by which its local currency, the Chinese Renminbi (“RMB”), is converted into other currencies, which generally requires government consent, and imposes legal and regulatory restrictions on the movement of funds outside of the PRC. As a result, RMB may not be freely convertible into other currencies at all times and the Company may need to comply with regulatory procedures to repatriate funds from its Chinese operations. Any changes to currency conversion requirements or any failure by the Company to comply with repatriation procedures and regulations could adversely affect its operating results, liquidity and financial condition. In addition, fluctuations in the exchange rate between RMB and U.S. dollars may adversely affect the Company’s expenses and results of operations, the value of its assets and liabilities and the comparability of its period-to-period results. The liabilities of the Company’s subsidiary in the PRC exceeded its assets as of December 31, 2016 and January 2, 2016.

Foreign Currency Remeasurement

The functional currency of the Company’s foreign subsidiaries is the U.S. dollar. Local currency financial statements are remeasured into U.S. dollars at the exchange rate in effect as of the balance sheet date for monetary assets and liabilities and the historical exchange rate for nonmonetary assets and liabilities. Expenses are remeasured using the average exchange rate for the period, except items related to nonmonetary assets and liabilities, which are remeasured using historical exchange rates. All remeasurement gains and losses are included in determining net loss. Transaction gains and losses were not significant during the three months ended April 1, 2017 and April 2, 2016.

Net Loss Per Share

Basic net loss per share is calculated by dividing net loss by the weighted-average common shares outstanding during the period, excluding unvested shares issued pursuant to restricted share awards under the Company's share-based compensation plans. Diluted net loss per share is calculated by dividing the net loss by the weighted-average shares and dilutive potential common shares outstanding during the period. Dilutive potential shares consist of dilutive shares issuable upon the exercise or vesting of outstanding stock options, warrants and restricted stock awards, respectively, computed using the treasury stock method and shares issuable upon conversion of the SVIC Note (see Note 5). In periods of losses, basic and diluted loss per share are the same, as the effect of stock options and unvested restricted share awards on loss per share is anti-dilutive.

Going Concern

In accordance with ASC Subtopic 205-40, Presentation of Financial Statements-Going Concern, management evaluates whether relevant conditions and events, when considered in the aggregate, indicate that it is probable the Company will be unable to meet its obligations as they become due within one year after the date that the financial statements are issued. When relevant conditions or events, considered in the aggregate, initially indicate that it is probable that the Company will be unable to meet its obligations as they become due within one year after the date that the financial statements are issued (and therefore they raise substantial doubt about the Company's ability to continue as a going concern), management evaluates whether its plans that are intended to mitigate those conditions and events, when implemented, will alleviate substantial doubt about the Company's ability to continue as a going concern. Management's plans are considered only to the extent that (1) it is probable that the plans will be effectively implemented and (2) it is probable that the plans will mitigate the conditions or events that raise substantial doubt about the Company's ability to continue as a going concern. See the discussion under *"Liquidity"* in Note 1 for information about the Company's liquidity position.

Recently Adopted Accounting Standards

In July 2015, the FASB issued Accounting Standards Update ("ASU") No. 2015-11, *Simplifying the Measurement of Inventory* ("ASU 2015-11"), which requires entities to measure inventory at the lower of cost or net realizable value. Current guidance requires inventory to be measured at the lower of cost or market, with market defined as replacement cost, net realizable value, or net realizable value less a normal profit margin. This ASU simplifies the subsequent measurement of inventory by replacing the lower of cost or market test with a lower of cost or net realizable value test. The Company adopted this guidance in the first quarter of 2017 and there was no material impact on its financial statements.

In March 2016, the FASB issued ASU No. 2016-09, *Compensation-Stock Compensation (Topic 718) Improvements to Employee Share-Based Payment Accounting* ("ASU 2016-09"), which is intended to simplify several aspects of the accounting for share-based payment award transactions. ASU 2016-09 is effective for fiscal years beginning after December 15, 2016, including interim periods. The Company adopted this guidance in the first quarter of 2017 and elected to continue to estimate forfeitures expected to occur to determine the amount of compensation cost to be recognized in each period; as a result there was no material impact on its financial statements.

Recent Accounting Pronouncements

In May 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers* ("ASU 2014-09"), which was subsequently amended by ASUs 2015-14, 2016-08, 2016-10, 2016-12, and 2016-20. ASU 2014-09, as amended, supersedes the revenue recognition requirements in ASC Topic 605, *Revenue Recognition,* and creates a new ASC Topic 606 (ASC 606). ASU 2014-9, as amended, implements a five-step process for customer contract revenue recognition that focuses on transfer of control, as opposed to transfer of risk and rewards. The amendment also requires enhanced disclosures regarding the nature, amount, timing and uncertainty of revenues and cash flows from contracts with customers. Other major provisions include the capitalization and amortization of certain contract costs, ensuring the time value of money is considered in the transaction price, and allowing estimates of variable consideration to be recognized before contingencies are resolved in certain circumstances. Entities can transition to the standard either retrospectively or as a cumulative-effect adjustment as of the date of adoption. ASC 606 is effective for public entities for annual periods beginning after December 15, 2017 (fiscal year 2018 for the Company), and interim periods within the year of adoption . The Company has not yet selected a transition method and is currently assessing the impact the adoption of ASC 606 will have on its consolidated financial statements and disclosures.

In February 2016, the FASB issued ASU No. 2016-02 *, Leases* ("ASU 2016-02"). Under ASU 2016-02, lessees will be required to recognize the following for all leases (with the exception of short-term leases) at the commencement date: a lease liability, which is a lessee's obligation to make lease payments arising from a lease, measured on a discounted basis; and a right-of-use asset, which is an asset that represents the lessee's right to use, or control the use of, a specified asset for the lease term. ASU 2016-02 is effective for fiscal years beginning after December 15, 2018 (fiscal year 2019 for the Company), including interim periods within those fiscal years. Early application is permitted. Lessees must apply a modified retrospective transition approach for leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements. The modified retrospective approach would not require any transition accounting for leases that expired before the earliest comparative period presented. Lessees may not apply a full retrospective transition approach. The Company is currently evaluating the impact of adopting ASU 2016-02 on its consolidated financial statements and disclosures.

In August 2016, the FASB issued ASU No. 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments* (ASU 2016-15), which is intended to reduce the existing diversity in practice in how certain cash receipts and cash payments are classified in the statement of cash flows. ASU 2016-15 is effective for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years with early adoption permitted, provided that all of the amendments are adopted in the same period. The Company is currently evaluating the impact of adopting ASU 2016-15 on its consolidated financial statements and disclosures.

In October 2016, the FASB issued ASU No. 2016-16, *Income Taxes (Topic 740), Intra-Entity Transfers of Assets Other Than Inventory* (ASU 2016-16), which requires entities to recognize the income tax consequences of an intra-entity transfer of an asset other than inventory when the transfer occurs. This amends current U.S. GAAP which prohibits recognition of current and deferred income taxes for all types of intra-entity asset transfers until the asset has been sold to an outside party. ASU 2016-16 is effective for fiscal years beginning after December 15, 2017, including interim periods therein with early application permitted. Upon adoption, the Company must apply a modified retrospective transition approach through a cumulative-effect adjustment to retained earnings as of the beginning of the period of adoption. The Company is currently evaluating the impact of this new standard on its consolidated financial statements and disclosures, as well as its planned adoption date.

In November 2016, the FASB issued ASU No. 2016-18, *Statement of Cash Flows (Topic 230), Restricted Cash* ("ASU 2016-18"), which enhances and clarifies the guidance on the classification and presentation of restricted cash in the statement of cash flows. ASU 2016-18 is effective for fiscal periods beginning after December 15, 2018, including interim periods therein with early application permitted. The Company is currently evaluating the impact of this standard on its consolidated financial statements and disclosures.

Note 3—Supplemental Financial Information

Inventories

Inventories consisted of the following as of the dates presented:

	April 1, 2017	December 31, 2016
	(in thousands)	
Raw materials	$ 1,198	$ 884
Work in process	151	47
Finished goods	3,148	2,229
	$ 4,497	$ 3,160

Warranty Liabilities

The following table summarizes activity related to warranty liabilities in the periods presented:

	Three Months Ended	
	April 1, 2017	April 2, 2016
	(in thousands)	
Beginning balance	$ 89	$ 122
Estimated cost of warranty claims charged to cost of sales	49	11
Cost of actual warranty claims	(38)	(88)
Ending balance	100	45
Less current portion	(60)	(23)
Long-term warranty liability	$ 40	$ 22

The allowance for warranty liabilities expected to be incurred within one year is included as a component of accrued expenses and other current liabilities in the accompanying condensed consolidated balance sheets. The allowance for warranty liability expected to be incurred after one year is classified as long-term warranty liability in the accompanying condensed consolidated balance sheets.

Computation of Net Loss Per Share

The following table sets forth the computation of basic and diluted net loss per share, including the numerator and denominator used in the calculation of basic and diluted net loss per share, for the periods presented:

	Three Months Ended	
	April 1, 2017	April 2, 2016
	(in thousands, except per share data)	
Basic and diluted net loss per share:		
Numerator: Net loss	$ (3,342)	$ (1,413)
Denominator: Weighted-average common shares outstanding, basic and diluted	61,681	50,365
Basic and diluted net loss per share	$ (0.05)	$ (0.03)

The table below sets forth potentially dilutive common share equivalents, consisting of shares issuable upon the exercise or vesting of outstanding stock options and restricted stock awards, respectively, and the exercise of warrants, computed using the treasury stock method, and shares issuable upon conversion of the SVIC Note (see Note 5) using the "if converted" method. These potential common shares have been excluded from the diluted net loss per share calculations above as their effect would be anti-dilutive for the periods presented:

	Three Months Ended	
	April 1, 2017	April 2, 2016
	(in thousands)	
Common share equivalents	12,837	12,759

The above common share equivalents would have been included in the calculation of diluted net loss per share had the Company reported net income for the periods presented.

Major Customers and Suppliers

The Company's product sales have historically been concentrated in a small number of customers. The following table sets forth the percentage of the Company's net product sales made to customers that each comprise 10% or more of the Company's net product sales in the periods presented:

	Three Months Ended	
	April 1, 2017	April 2, 2016
Customer:		
Customer A	* %	28 %
Customer B	* %	12 %
Customer C	15 %	* %
Customer D	11 %	* %

* less than 10% of net product sales during the period.

Sales of NAND flash products sourced from Samsung under its JDLA represented 61% of the Company's product sales in the three months ended April 1, 2017.

The Company's accounts receivable are concentrated with three customers at April 1, 2017, representing approximately 34%, 13% and 10% of aggregate gross receivables. At December 31, 2016, two customers represented approximately 27% and 11% of aggregate gross receivables, respectively. The loss of any of the Company's significant customers or a reduction in sales to or difficulties collecting payments from any of them could significantly reduce the Company's net product sales and adversely affect its operating results. The Company tries to mitigate risks associated with foreign receivables by purchasing comprehensive foreign credit insurance.

Cash Flow Information

The following table sets forth supplemental disclosures of cash flow information and non-cash financing activities for the periods presented:

	Three Months Ended	
	April 1, 2017	April 2, 2016
	(in thousands)	
Supplemental disclosure of cash flow information:		
Debt financing of insurance	$ 220	$ 224

Note 4—Credit Agreement

SVB Credit Agreement

On October 31, 2009, the Company and Silicon Valley Bank ("SVB") entered into a credit agreement (as amended, the "SVB Credit Agreement"). Pursuant to the terms of the SVB Credit Agreement, the Company is eligible to borrow, in a revolving line of credit, up to the lesser of (i) 80% of its eligible accounts receivable, or (ii) $5.0 million, subject to certain adjustments as set forth in the SVB Credit Agreement. The SVB Credit Agreement requires letters of credit to be secured by cash, which is classified as restricted cash in the accompanying condensed consolidated balance sheets. As of April 1, 2017, and December 31, 2016, (i) letters of credit were outstanding in the amount of $3.1 million (ii) the Company had outstanding borrowings of $1.4 million and $0.7, respectively, and (iii) availability under the revolving line of credit was $0.01 million and $0.8 million, respectively.

On January 29, 2016, the Company and SVB entered into an amendment to the SVB Credit Agreement (the "2016 SVB Amendment") to, among other things, adjust the rate at which advances under the SVB Credit Agreement accrue interest to the Wall Street Journal "prime rate" plus 2.75% (prior to the 2016 SVB Amendment, advances accrued interest at a rate equal to SVB's most recently announced "prime rate" plus 2.75%).

On March 27, 2017, the Company and SVB entered into another amendment to the SVB Credit Agreement (the "2017 SVB Amendment"), to (i) extend the maturity date of advances under the SVB Credit Agreement to April 1, 2018, (ii) modify the Company's financial covenants under the SVB Credit Agreement to remove all prior financial standards and replace them with a liquidity ratio standard, (iii) remove or amend certain termination, anniversary and unused facility fees payable by the Company under the SVB Credit Agreement, and (iv) make certain other administrative changes.

As of April 1, 2017, all obligations under the SVB Credit Agreement were secured by a first priority security interest in the Company's tangible and intangible assets, other than its patent portfolio, which was subject to a first priority security interest held by SVIC (see Note 5). Certain of these lien priorities were modified by certain Intercreditor Agreements entered into subsequent to April 1, 2017 (see Note 10). The SVB Credit Agreement subjects the Company to certain affirmative and negative covenants, including financial covenants with respect to the Company's liquidity and restrictions on the payment of dividends. As of April 1, 2017 the Company was in compliance with its covenants under the SVB Credit Agreement.

Note 5—Debt

The Company's debt consisted of the following as of the dates presented:

	April 1, 2017	December 31, 2016
	(in thousands)	
Convertible promissory note, SVIC, net of debt discount of $1,030 and $1,084 in 2017 and 2016, respectively	$ 13,970	$ 13,916
Accrued interest on convertible promissory note with SVIC	410	335
Notes payable and capital lease obligation	248	151
	$ 14,628	$ 14,402
Less current portion	(248)	(151)
	$ 14,380	$ 14,251

On November 18, 2015, in connection with entering into the JDLA with Samsung, the Company sold to SVIC the SVIC Note and the SVIC Warrant. The SVIC Note has an original principal amount of $15.0 million, accrues interest at a rate of 2.0% per year, is due and payable in full on December 31, 2021, and is convertible into shares of the Company's common stock at a conversion price of $1.25 per share, subject to certain adjustments, on the maturity date of the SVIC Note. Upon a change of control of the Company prior to the maturity date of the SVIC Note, the SVIC Note may, at the Company's option, be assumed by the surviving entity or be redeemed upon the consummation of such change of control for the principal and accrued but unpaid interest as of the redemption date. The SVIC Warrant grants SVIC a right to purchase 2,000,000 shares of the Company's common stock at an exercise price of $0.30 per share, subject to certain adjustments, is only exercisable in the event the Company exercises its right to redeem the SVIC Note prior to its maturity date, and expires on December 31, 2025.

The SVIC Warrant was valued at $1,165,000, based on its relative fair value, and was recorded as a debt discount. The Company also recorded $154,000 as a debt discount for professional services fees rendered in connection with the transaction. These amounts are being amortized over the term of the SVIC Note using the effective interest method. For the three months ended April 1, 2017 and April 2, 2016, the Company amortized $54,000 and $54,000 respectively, to interest expense in the accompanying condensed consolidated statements of operations.

In connection with the SVIC Note, SVIC was granted a first priority security interest in the Company's patent portfolio and a second priority security interest in all of the Company's other tangible and intangible assets. Upon issuance of the SVIC Note, the Company, SVB and SVIC entered into an Intercreditor Agreement pursuant to which SVB and SVIC agreed to their relative security interests in the Company's assets. Subsequent to April 1, 2017, the Company, SVB and SVIC entered into additional Intercreditor Agreements to modify certain of these lien priorities (see Note 10). Additionally, upon issuance of the SVIC Note and the SVIC Warrant, the Company and SVIC entered into a Registration Rights Agreement pursuant to which the Company is obligated to register with the SEC, upon demand by SVIC, the shares of the Company's common stock issuable upon conversion of the SVIC Note or upon exercise of the SVIC Warrant.

On August 26, 2016, SVIC agreed to waive the Company's compliance with its covenant to maintain sufficient authorized and unissued shares of its common stock for the full conversion of the principal and interest under the SVIC Note at its maturity date, and the Company agreed to take certain actions to increase the number of its authorized shares of common stock to an amount sufficient to comply with this covenant. The waiver terminates on December 31, 2017.

Capital Lease and Notes Payable

The Company has purchased computer equipment through a capital lease. As of April 1, 2017, the lease requires monthly payments of approximately $12,000 and matures in December 2017.

The Company finances certain of its insurance policies. As of April 1, 2017, required payments are approximately $29,000 per month and the related financing agreements mature at various dates through September 2017.

Interest expense, including amortization of debt discounts and debt issuance costs, net of interest income, was as follows during the periods presented:

	Three Months Ended	
	April 1, 2017	April 2, 2016
	(in thousands)	
Interest expense:		
SVB	$ 13	$ 11
SVIC	129	129
Others	12	1
	154	141
Interest income	(6)	(4)
	$ 148	$ 137

Note 6—Income Taxes

The following table sets forth the Company's provision for income taxes, along with the corresponding effective tax rates, for the periods presented:

	Three Months Ended	
	April 1, 2017	April 2, 2016
Provision for income taxes	$ -	$ 1
Effective tax rate	- %	- %

The Company evaluates whether a valuation allowance should be established against its deferred tax assets based on the consideration of all available evidence using a "more likely than not" standard. In making such judgments, significant weight is given to evidence that can be objectively verified. Due to uncertainty of future utilization, the Company has provided a full valuation allowance as of April 1, 2017 and December 31, 2016. Accordingly, no benefit has been recognized for net deferred tax assets. The Company's effective tax rate differs from the federal statutory tax rate of 34% for the three months ended April 1, 2017 and April 2, 2016 due to providing the full valuation allowance against net deferred tax assets.

The Company did not have any unrecognized tax benefits as of April 1, 2017 and December 31, 2016.

Note 7—Commitments and Contingencies

Litigation and Patent Reexaminations

The Company owns numerous patents and continues to seek to grow and strengthen its patent portfolio, which covers different aspects of the Company's technology innovations with various claim scopes. The Company plans to pursue avenues to monetize its intellectual property portfolio, in which it would generate revenue by selling or licensing its technology, and it intends to vigorously enforce its patent rights against alleged infringers of such rights. The Company dedicates substantial resources to protecting its intellectual property, including its efforts to defend its patents against challenges made by way of reexamination proceedings at the PTAB or USPTO. These activities are likely to continue for the foreseeable future, without any guarantee that any ongoing or future patent protection and litigation activities will be successful, or that the Company will be able to monetize its intellectual property portfolio. The Company is also subject to litigation claims that it has infringed on the intellectual property of others, against which the Company intends to defend itself vigorously.

Litigation, whether or not eventually decided in the Company's favor or settled, is costly and time-consuming and could divert management's attention and resources. Thus, because of the nature and inherent uncertainties of litigation, even if the outcome of any proceeding is favorable, the Company's business, financial condition, results of operations or cash flows could be materially and adversely affected. Additionally, the outcome of pending litigation, and related patent reexaminations, as well as any delay in their resolution, could affect the Company's ability to continue to sell its products, protect against competition in the current and expected markets for its products or license its intellectual property in the future.

Google Litigation

On December 4, 2009, the Company filed a patent infringement lawsuit against Google, Inc. ("Google") in the U.S. District Court for the Northern District of California (the "Northern District Court"), seeking damages and injunctive relief based on Google's alleged infringement of the Company's U.S. Patent No. 7,619,912 (the "'912 patent"), which relates generally to technologies to implement rank multiplication. In February 2010, Google answered the Company's complaint and asserted counterclaims against the Company seeking a declaration that the patent is invalid and not infringed, and claiming that the Company committed fraud, negligent misrepresentation and breach of contract based on the Company's activities in the Joint Electron Device Engineering Council ("JEDEC") standard-setting organization. The counterclaim seeks unspecified compensatory damages. Accruals have not been recorded for loss contingencies related to Google's counterclaim because it is not probable that a loss has been incurred and the amount of any such loss cannot be reasonably estimated. In October 2010, Google requested and was later granted an *Inter Partes* Reexamination of the '912 patent by the USPTO. The reexamination proceedings are described below. In connection with the reexamination request, the Northern District Court granted the Company's and Google's joint request to stay the '912 patent infringement lawsuit against Google until the completion of the reexamination proceedings.

Inphi Litigation

On September 22, 2009, the Company filed a patent infringement lawsuit against Inphi Corporation ("Inphi") in the U.S. District Court for the Central District of California (the "Central District Court"). The complaint, as amended, alleges that Inphi is contributorily infringing and actively inducing the infringement of U.S. patents owned by the Company, including the '912 patent, U.S. Patent No. 7,532,537 (the "'537 patent"), which relates generally to memory modules with load isolation and memory domain translation capabilities, and U.S. Patent No. 7,636,274 (the "'274 patent"), which is related to the '537 patent and relates generally to load isolation and memory domain translation technologies. The Company is seeking damages and injunctive relief based on Inphi's use of the Company's patented technology. Inphi denied infringement and claimed that the three patents are invalid. In June 2010, Inphi requested and was later granted *Inter Partes* Reexaminations of the '912, '537 and '274 patents by the USPTO. The reexamination proceedings are described below (except for the reexamination proceeding related to the '537 patent, which have concluded with the confirmation of all of the claims of such patent). In connection with the reexamination requests, Inphi filed a motion to stay the patent infringement lawsuit with the Central District Court until completion of the reexamination proceedings, which was granted.

'912 Patent Reexamination

As noted above, in April 2010, June 2010 and October 2010, Google and Inphi submitted requests for an *Inter Partes* Reexamination of the '912 patent by the USPTO, claiming that the '912 patent is invalid and requesting that the USPTO reject the patent's claims and cancel the patent. Additionally, in October 2010, Smart Modular, Inc. ("Smart Modular") submitted another such reexamination request. On January 18, 2011, the USPTO granted such reexamination requests, and in February 2011, the USPTO merged the Inphi, Google and Smart Modular '912 patent reexaminations into a single proceeding. On March 21, 2014, the USPTO issued an Action Closing Prosecution ("ACP"), an office action that states the USPTO examiner's position on patentability and closes further prosecution, and on June 18, 2014 the USPTO issued a Right of Appeal Notice ("RAN"), a notice that triggers the rights of the involved parties to file a notice of appeal to the ACP, each of which confirmed the patentability of 92 of the '912 patent's claims and rejected the patent's 11 other claims. The parties involved filed various notices of appeal, responses and requests, and on November 24, 2015, the PTAB held a hearing on such appeals. On May 31, 2016, the PTAB issued a decision affirming certain of the examiner's decisions and reversing others. On February 9, 2017, the PTAB granted the Company's request to reopen prosecution before the USPTO examiner and remanded the consolidated proceeding to the Examiner to consider the patentability of certain of the pending claims in view of the PTAB's May 31, 2016 decision and comments from the parties. The Examiner will next issue a determination as to the patentability of the claims, at which point the proceeding will return to the PTAB for reconsideration and issuance of a new decision. Accruals have not been recorded for loss contingencies related to the '912 patent reexamination proceedings because it is not probable that a loss has been incurred and the amount of any such loss cannot be reasonably estimated.

'627 Patent Reexamination

In September 2011, Smart Modular submitted a request for an *Inter Partes* Reexamination by the USPTO of the Company's U.S. Patent No. 7,864,627 (the "'627 patent"), related to the '912 patent, claiming that the '627 patent is invalid and requesting that the USPTO reject the patent's claims and cancel the patent. On November 16, 2011, the request was granted. On March 27, 2014 and June 27, 2014, the USPTO issued an ACP and a RAN, respectively, each of which rejected all of the '627 patent's claims. The parties involved filed various notices of appeal, responses and requests, and on November 24, 2015, the PTAB held a hearing on such appeals. On May 31, 2016, the PTAB issued a decision affirming the decisions of the examiner. On February 9, 2017, the PTAB granted the Company's request to reopen prosecution before the USPTO examiner and remanded the proceeding to the examiner to consider the patentability of certain of the pending claims in view of the PTAB's May 31, 2016 decision and comments from the parties. The examiner will next issue a determination as to the patentability of the claims, at which point the proceeding will return to the PTAB for reconsideration and issuance of a new decision. Accruals have not been recorded for loss contingencies related to the '627 patent reexamination proceedings because it is not probable that a loss has been incurred and the amount of any such loss cannot be reasonably estimated.

'274 Patent Reexamination

As noted above, in April 2010 and June 2010, Inphi submitted requests for an *Inter Partes* Reexamination of the '274 patent by the USPTO. On August 27, 2010, the request was granted. In March 2012 and June 2012, the USPTO issued an ACP and a RAN, respectively, each of which confirmed the patentability of many of the '274 patent's claims. The parties involved filed various notices of appeal, responses and requests, and on November 20, 2013, the PTAB held a hearing on such appeals. On January 16, 2014, the PTAB issued a decision affirming the examiner in part, but reversing the examiner on new grounds and rejecting all of the patent's claims. On September 11, 2015, the USPTA examiner issued a determination rejecting the amended claims. On January 23, 2017, the USPTO granted-in-part the Company's petition to enter comments in support of its positions in the proceeding. Inphi will next have an opportunity to respond to the Company's comments, and the examiner will then issue a new determination. Accruals have not been recorded for loss contingencies related to the '274 patent reexamination proceedings because it is not probable that a loss has been incurred and the amount of any such loss cannot be reasonably estimated.

Smart Modular '295 Patent Litigation and Reexamination

In September 13, 2012, Smart Modular, Inc. ("Smart Modular") filed a patent infringement lawsuit against the Company in the U.S. District Court for the Eastern District of California (the "Eastern District Court"). The complaint alleges that the Company willfully infringes and actively induces the infringement of certain claims of U.S. Patent No. 8,250,295 ("the '295 patent") issued to Smart Modular and seeks damages and injunctive relief. The Company answered Smart Modular's complaint in October 2012, denying infringement of the '295 patent, asserting that the '295 patent is invalid and unenforceable, and asserting counterclaims against Smart Modular.

On December 7, 2012, the USPTO granted the Company's request for the reexamination of the '295 patent. On April 29, 2014, the USPTO examiner issued an ACP confirming some claims and rejecting others, and on August 4, 2015, the examiner issued a RAN confirming all pending claims. On September 4, 2015, the Company appealed to the PTAB. The parties involved filed various notices of appeal, responses and requests, and on September 22, 2016, the PTAB held a hearing on such appeals. On November 14, 2016, the PTAB issued a decision reversing the examiner and rejected all of the pending claims. On January 23, 2017, Smart Modular filed a request to reopen prosecution. The parties will next have the opportunity present evidence and arguments and the examiner will then issue a new determination. The examiner's determination will then go back to the PTAB for another decision.

On May 30, 2013, the Eastern District Court issued an order granting the Company's motion to stay pending completion of the reexamination of the '295 patent and denied Smart Modular's motion for preliminary injunction. On May 5, 2016, Smart Modular filed a motion to lift the stay which was granted by the Eastern District Court on September 21, 2016. On February 15, 2017, the Company filed a new motion to stay pending completion of the reexamination of the '295 patent. This motion remains pending before the Eastern District Court.

Smart Modular and SanDisk Litigation

On July 1 and August 23, 2013, the Company filed complaints against Smart Modular, Smart Storage Systems ("Smart Storage") (which was subsequently acquired by SanDisk Corporation ("SanDisk")), Smart Worldwide Holdings ("Smart Worldwide") and Diablo Technologies ("Diablo") in the Central District Court, seeking, among other things, damages and other relief for alleged infringement of several of the Company's patents by the defendants based on the manufacture and sale of the ULLtraDIMM memory module, alleged antitrust violations by Smart Modular and Smart Worldwide, and alleged trade secret misappropriation and trademark infringement by Diablo. The trade secret misappropriation and trademark infringement claims against Diablo were fully adjudicated on August 17, 2016 and are no longer pending.

On August 23, 2013, Smart Modular and Diablo each filed a complaint in the San Francisco Division of the Northern District Court seeking declaratory judgment of non-infringement and invalidity of the patents asserted in the Company's complaint. Based on various motions filed by the parties, on November 26, 2013, the Central District Court severed and transferred the patent claims related to the ULLtraDIMM memory module to the Northern District Court.

On February 12, 2014, the Northern District Court granted the parties' joint stipulation dismissing Smart Modular without prejudice. Between June 18, 2014 and August 23, 2014, SanDisk, Diablo, and Smart Modular filed numerous petitions in the USPTO requesting *Inter Partes* Review of the Company's asserted patents. All of the reviews associated with U.S. Patent Nos. 8,516,187; 8,301,833; 8,516,185 have been resolved in the Company's favor and are no longer pending. The reviews associated with U.S. Patent Nos. 8,001,434; 8,359,501; 7,881,150; and 8,081,536 have concluded before the PTAB and the parties have appealed the decisions in these reviews to the Court of Appeals for the Federal Circuit and are awaiting decisions. On April 9, 2015, the Northern District Court stayed the infringement proceedings as to the Company's patents asserted against the ULLtraDIMM pending resolution of the patent review decisions on appeal.

SK hynix Litigation

On September 1, 2016, the Company filed legal proceedings for patent infringement against SK hynix Inc., a South Korean memory semiconductor supplier ("SK hynix"), in the U.S. International Trade Commission ("ITC") and the Central District Court. The proceedings are based on the alleged infringement by SK hynix's registered dual in-line memory module ("RDIMM") and load reduced dual in-line memory module ("LRDIMM") enterprise memory products of six of the Company's U.S. patents. In the ITC proceedings, the Company is seeking an exclusion order that directs U.S. Customs and Border Protection to stop allegedly infringing SK hynix RDIMM and LRDIMM products from entering the United States. In the Central District Court proceedings, the Company is primarily seeking damages.

On October 3, 2016, the ITC instituted an investigation of the trade practices of SK hynix and certain of its subsidiaries related to its importation, sale for importation, and/or sale after importation of RDIMM and LRDIMM enterprise memory products. On November 10, 2016, the ITC set a 16-month target date of February 7, 2018, for the investigation with a final initial determination being filed no later than October 10, 2017. Based on this target date, the ITC scheduled a hearing on the merits of the investigation which began on May 8, 2017 and concluded on May 11, 2017. On January 4, 2017, the Central District Court issued a scheduling order setting various dates including a trial date of July 10, 2018.

On October 5, 2016 and October 28, 2016, SK hynix filed motions in the Central District Court and the ITC, respectively, to disqualify the Company's litigation counsel. The Company opposed both motions. On December 5, 2016, the Central District Court granted SK hynix's motion to disqualify. On December 8, 2016, the Company's substitute counsel entered appearances in the ITC and the Central District Court.

Between December 30, 2016 and January 20, 2017, SK hynix filed numerous petitions in the USPTO requesting *Inter Partes* Review of certain of the Company's patents, including the patents asserted in the ITC and Central District Court. The Company has filed Patent Owner Preliminary Responses in each of these reviews. Based on these filings, the PTAB will determine whether or not to institute the requested reviews, likely in July or August 2017.

Morgan Joseph Litigation

On March 31, 2016, Morgan Joseph Triartisan LLC ("Morgan Joseph") filed a complaint in the Supreme Court of the State of New York against the Company and certain of its officers for breach of contract and related causes of action. The complaint alleges that the Company refused to honor its payment obligations under a written agreement with Morgan Joseph related to the provision of financial advisory and investment banking services. Morgan Joseph is seeking compensatory damages in the amount of $1,012,500, plus punitive damages in an amount not less than $1 million, together with pre-judgment interest, costs, and fees.

On September 15, 2016, the Company filed a motion to dismiss Morgan Joseph's complaint for failure to state a claim. On February 15, 2017, the court granted the Company's motion to dismiss as to all causes of action brought by Morgan Joseph.

Other Contingent Obligations

In the ordinary course of its business, the Company has made certain indemnities, commitments and guarantees pursuant to which it may be required to make payments in relation to certain transactions. These include: (i) intellectual property indemnities to the Company's customers and licensees in connection with the use, sale and/or license of Company products; (ii) indemnities to vendors and service providers pertaining to claims based on the Company's negligence or willful misconduct; (iii) indemnities involving the accuracy of representations and warranties in certain contracts; (iv) indemnities to directors and officers of the Company to the maximum extent permitted under the laws of the State of Delaware; (v) indemnities to SVIC and SVB pertaining to all obligations, demands, claims, and liabilities claimed or asserted by any other party in connection with transactions contemplated by the applicable loan documents; and (vi) indemnities or other claims related to certain real estate leases, under which the Company may be required to indemnify property owners for environmental and other liabilities or may face other claims arising from the Company's use of the applicable premises. The duration of these indemnities, commitments and guarantees varies and, in certain cases, may be indefinite. The majority of these indemnities, commitments and guarantees do not provide for any limitation of the maximum potential for future payments the Company could be obligated to make. Historically, the Company has not been obligated to make significant payments as a result of these obligations, and no liabilities have been recorded for these indemnities, commitments and guarantees in the accompanying condensed consolidated balance sheets.

Note 8—Stockholders' Equity

Serial Preferred Stock

The Company's authorized capital stock includes 10,000,000 shares of serial preferred stock, with a par value of $0.001 per share. No shares of preferred stock were outstanding at April 1, 2017 or December 31, 2016. Subsequent to April 1, 2017, the Company designated 1,000,000 of its shares of preferred stock as Series A preferred stock and established the rights, preferences and privileges of this series (see Note 10).

Common Stock

On September 23, 2016, the Company completed the 2016 Offering, pursuant to which it sold 9,200,000 shares of its common stock at a price to the public of $1.25 per share. The net proceeds to the Company from the 2016 Offering were $10.3 million, after deducting underwriting discounts and commissions and offering expenses paid by the Company.

Stock-Based Compensation

The Company has stock-based compensation awards outstanding pursuant to its Amended and Restated 2006 Equity Incentive Plan, as re-approved by the Company's stockholders on June 8, 2016 (the "Amended 2006 Plan"), under which a variety of stock-based awards, including stock options, may be granted to employees and non-employee service providers of the Company. In addition to awards granted pursuant to the Amended 2006 Plan, the Company periodically grants equity-based awards outside the Amended 2006 Plan to certain new hires as an inducement to enter into employment with the Company.

Subject to certain adjustments, as of April 1, 2017, the Company was authorized to issue a maximum of 10,205,566 shares of its common stock pursuant to awards granted under the Amended 2006 Plan. Pursuant to the terms of the Amended 2006 Plan, the maximum number of shares of common stock subject to the plan automatically increased on the first day of each calendar year from January 1, 2007 through January 1, 2016, by the lesser of (i) 5.0% of the number of shares of common stock issued and outstanding as of the first day of the applicable calendar year, and (ii) 1,200,000 shares of common stock, subject to adjustment for certain corporate actions. Beginning January 1, 2017, the automatic annual increase to the number of shares of common stock that may be issued pursuant to awards granted under the Amended 2006 Plan is equal to the lesser of (i) 2.5% of the number of shares of common stock issued and outstanding as of the first day of the applicable calendar year, and (ii) 1,200,000 shares of common stock, subject to adjustment for certain corporate actions. As of April 1, 2017, the Company had 743,700 shares of common stock available for issuance pursuant to future awards to be granted under the Amended 2006 Plan. Stock options granted under the Amended 2006 Plan generally vest at a rate of at least 25% per year over four years and expire 10 years from the date of grant.

The following table summarizes the Company's stock option activity in the three months ended April 1, 2017:

	Options Outstanding	
	Number of Shares	**Weighted-Average Exercise Price**
	(in thousands)	
Options outstanding at December 31, 2016	8,798	$ 1.46
Options granted	1,020	1.02
Options exercised	(83)	0.74
Options expired/forfeited	(397)	1.66
Options outstanding at April 1, 2017	9,338	$ 1.41

The intrinsic value of stock options exercised in the three months ended April 1, 2017 was $19,000.

The following table presents the assumptions used to calculate the weighted-average grant date fair value of stock options granted by the Company during the periods presented:

	Three months ended	
	April 1, 2017	**April 2, 2016**
Expected term (in years)	6.1	6.1
Expected volatility	87 %	113 %
Risk-free interest rate	2.09 %	1.66 %
Expected dividends	-	-
Weighted-average grant date fair value per share	$ 0.75	$ 0.63

As of April 1, 2017, the amount of unearned stock-based compensation estimated to be expensed from the Company's 2017 fiscal year through the Company's 2019 fiscal year related to unvested stock options is approximately $2.4 million, net of estimated forfeitures. The weighted-average period over which the unearned stock-based compensation is expected to be recognized is approximately 2.6 years. If there are any modifications or cancellations of the underlying unvested awards, the Company may be required to accelerate, increase or cancel any remaining unearned stock-based compensation expense or calculate and record additional expense. Future stock-based compensation expense and unearned stock-based compensation expense will increase to the extent the Company grants additional stock options or other stock-based awards.

Warrants

The following is a summary of the Company's warrant activity for the year ended December 31, 2016 and the quarter ended April 1, 2017:

	Number of Shares (in thousands)	Weighted Average Exercise Price
Warrants outstanding - January 2, 2016	7,633	$ 0.59
Warrant granted	-	-
Warrants exercised	(2,709)	0.47
Warrants outstanding - December 31, 2016	4,924	$ 0.66
Warrant granted	-	-
Warrants exercised	-	-
Warrants outstanding - April 1, 2017	4,924	$ 0.66

Note 9—Segment and Geographic Information

The Company operates in one reportable segment, which is the design and manufacture of high-performance memory subsystems for the server, high-performance computing and communications markets. The Company evaluates financial performance on a Company-wide basis.

At April 1, 2017 and December 31, 2016, approximately $64,000 and $64,000, respectively, of the Company's long-lived assets, net of depreciation and amortization, were located in the PRC. Substantially all other long-lived assets were located in the United States.

Note 10—Subsequent Events

The Company has evaluated subsequent events through the filing date of the Quarterly Report on Form 10-Q in which these condensed consolidated financial statements are included and has determined that no subsequent events have occurred that would require recognition in the condensed consolidated financial statements or disclosures in the notes thereto, other than as discussed below and elsewhere in these notes.

Rights Agreement

On April 17, 2017, the Company entered into a rights agreement (the "Rights Agreement") with Computershare Trust Company, N.A., as rights agent. In connection with the adoption of the Rights Agreement and pursuant to its terms, the Company's board of directors authorized and declared a dividend of one right (each, a "Right") for each outstanding share of the Company's common stock to stockholders of record at the close of business on May 18, 2017 (the "Record Date"), and authorized the issuance of one Right for each share of the Company's common stock issued by the Company (except as otherwise provided in the Rights Agreement) between the Record Date and the Distribution Date (as defined below).

Each Right entitles the registered holder, subject to the terms of the Rights Agreement, to purchase from the Company, when exercisable and subject to adjustment, one unit consisting of one one-thousandth of a share (a "Unit") of Series A Preferred Stock of the Company (the "Preferred Stock"), at a purchase price of $6.56 per Unit, subject to adjustment. Subject to the provisions of the Rights Agreement, including certain exceptions specified therein, a distribution date for the Rights (the "Distribution Date") will occur upon the earlier of (i) 10 business days following a public announcement that a person or group of affiliated or associated persons (an "Acquiring Person") has acquired or otherwise obtained beneficial ownership of 15% or more of the then-outstanding shares of the Company's common stock, and (ii) 10 business days (or such later date as may be determined by the Company's board of directors) following the commencement of a tender offer or exchange offer that would result in a person or group becoming an Acquiring Person. The Rights are not exercisable until the Distribution Date and, unless earlier redeemed or exchanged by the

Company pursuant to the terms of the Rights Agreement, will expire on the earlier of (i) the close of business on April 17, 2018, the first anniversary of the adoption of the Rights Agreement, and (ii) the date of any settlement, adjudication, dismissal with prejudice, abandonment by the Company or other conclusive and final resolution of the Company's legal proceedings against SK hynix (see Note 7).

In connection with the adoption of the Rights Agreement, the Company's board of directors approved a Certificate of Designation of the Series A Preferred Stock (the "Certificate of Designation") setting forth the rights, preferences and limitations of the Preferred Stock. The Company filed the Certificate of Designation with the Secretary of State of the State of Delaware on April 17, 2017.

TRGP Agreement and Related Intercreditor Agreements

On May 3, 2017, the Company and TR Global Funding V, LLC, an affiliate of TRGP Capital Management, LLC ("TRGP"), entered into an investment agreement (the "TRGP Agreement"), which generally provides that TRGP will directly fund the costs incurred by or on behalf of the Company in connection with its legal proceedings against SK hynix (see Note 7), including costs incurred since January 1, 2017 and costs to be incurred in the future (all such funded costs, collectively, the "Funded Costs"). In exchange for such funding, the Company has agreed that, if the Company recovers any proceeds in connection with the SK hynix proceedings, it will pay to TRGP the amount of the Funded Costs paid by TRGP plus an escalating premium based on when any such proceeds are recovered, such that the premium will equal a specified low-to-mid double-digit percentage of the amount of the Funded Costs and such percentage will increase by a specified low double-digit amount each quarter after a specified date until any such proceeds are recovered. In addition, pursuant to the terms of a separate security agreement between the Company and TRGP dated May 3, 2017 (the "Security Agreement"), the Company has granted to TRGP (i) a first priority lien on, and security in, the claims underlying the SK hynix proceedings and any proceeds that may be received by the Company in connection with these proceedings, and (ii) a second priority lien on, and security in, the Company's patents that are the subject of the SK hynix proceedings.

The TRGP Agreement does not impose financial covenants on the Company. Termination events under the TRGP Agreement include, among others, any failure by the Company to make payments to TRGP thereunder upon receipt of recoveries in the SK hynix proceedings; the occurrence of certain bankruptcy events; certain breaches by the Company of its covenants under the TRGP Agreement or the related Security Agreement; and the occurrence of a change of control of the Company. If any such termination event occurs, subject to certain cure periods for certain termination events, TRGP would have the right to terminate its obligations under the TRGP Agreement, including its obligation to make any further payments of Funded Costs after the termination date. In the event of any such termination by TRGP, the Company would continue to be obligated to pay TRGP the portion of any proceeds the Company may recover in connection with the SK hynix proceedings that TRGP would have been entitled to receive absent such termination, as described above, and TRGP may also be entitled to seek additional remedies pursuant to the dispute resolution provisions of the TRGP Agreement.

In connection with the TRGP Agreement, on May 3, 2017, TRGP entered into intercreditor agreements with SVIC and SVB, and SVIC and SVB entered into an intercreditor agreement with each other (such intercreditor agreements, collectively, the "Intercreditor Agreements"). Pursuant to the terms of the Intercreditor Agreements, TRGP, SVB and SVIC have agreed to their relative security interest priorities in the Company's assets, such that: (i) TRGP has a first priority security interest in the Company's claims underlying the SK hynix proceedings and any proceeds that may be received by the Company in connection with these proceedings, and a second priority security interest in the Company's patents that are the subject of the SK hynix proceedings, (ii) SVIC has a first priority security interest in the Company's complete patent portfolio and a second priority security interest in all of the Company's other tangible and intangible assets (other than the Company's claims underlying and any proceeds it may receive from the SK hynix proceedings), and (iii) SVB has a first priority security interest in all of the Company's tangible and intangible assets other than its patent portfolio and its claims underlying and any proceeds it may receive from the SK hynix proceedings, a second priority security interest in the Company's patent portfolio other than the patents that are the subject of the SK hynix proceedings, and a third priority security interest in the Company's patents that are the subject of the SK hynix proceedings. The Company consented and agreed to the terms of each of the Intercreditor Agreements.

In the three ended April 1, 2017, the Company excluded legal expenses of $4.2 million as a result of entering into the TRPG agreement and recorded approximately $0.7 million in prepaid and other current assets for reimbursement due the Company from TRGP for expenses already paid. Any settlement proceeds the Company recovers in connection with the SK hynix proceedings will be reduced by this amount plus the premium amount due at the time of the recovery.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion and analysis of our financial condition and results of operations *(the "MD&A")* should be read *together* with our unaudited condensed consolidated financial statements and the related notes *included* in Part I, Item 1 of this report *, as well as the MD&A included in* our Annual Report on Form 10-K for *our* fiscal year ended December 31, *2016, including the audited consolidated financial statements and related notes included in such report (the "2016 Annual Report"), which was filed with the Securities and Exchange Commission ("SEC") on March 31, 2017. In preparing this MD&A* , we presume that readers have access to and have read the *MD&A included in the 2016 Annual Report,* pursuant to Instruction 2 to paragraph (b) of Item 303 of Regulation S-K promulgated by the SEC.

Unless the context indicates otherwise, all references to "Netlist," the "Company," "we," "us," or "our" in this *MD&A* and elsewhere in this report refer to Netlist, Inc., together with its majority and wholly owned subsidiaries.

Forward-Looking Statements

This discussion and analysis includes "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are statements other than historical facts and often address future events and our future performance. Words such as "anticipate," "estimate," "expect," "project," "intend," "may," "will," "might," "plan," "predict," "believe," "should," "could" and similar words or expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Forward-looking statements contained in this discussion and analysis include statements about, among other things: our plans relating to our intellectual property, including our strategy for monetizing, licensing, expanding, and defending our patent portfolio; our expectations with respect to strategic partners, including our relationship with Samsung Electronics Co., Ltd. ("Samsung") and the potential for commercial licensing agreements; our expectations and strategies regarding outstanding legal proceedings and patent reexaminations relating to our intellectual property portfolio, including our pending proceedings against SK hynix Inc., a South Korean memory semiconductor supplier ("SK hynix"); our beliefs regarding the market and demand for our products; and our expectations regarding our strategy, business plans and objectives, our future operations and financial position, including future revenues, costs and prospects, and our liquidity and capital resources, including cash flows, sufficiency of cash resources, efforts to reduce expenses and the potential for future financings. All forward-looking statements reflect management's present expectations regarding future events and are subject to known and unknown risks, uncertainties and assumptions that could cause actual results to differ materially from those expressed in or implied by any forward-looking statements. These risks and uncertainties include those described under "Risk Factors" in Part II, Item 1A of this report. Given these risks, uncertainties and other important factors, you should not place undue reliance on these forward-looking statements. These forward-looking statements represent our estimates and assumptions only as of the date made, and except as required by law, we undertake no obligation to revise or update any forward-looking statements for any reason.

Overview

We are a leading provider of high-performance modular memory subsystems serving customers in diverse industries that require superior memory performance to empower critical business decisions. We have a long history of introducing disruptive new products, such as one of the first load reduced dual in-line memory modules ("LRDIMM") based on our distributed buffer architecture, which has been adopted by the industry for DDR4 LRDIMM. We were also one of the first to bring NAND flash memory ("NAND flash") to the memory channel with our NVvault non-volatile dual in-line memory modules ("NVDIMM") using software-intensive controllers and merging dynamic random access memory integrated circuits ("DRAM ICs" or "DRAM") and NAND flash to solve data bottleneck and data retention challenges encountered in high-performance computing environments. We recently introduced a new generation of storage class memory products called HybriDIMM to address the growing need for real-time analytics in Big Data applications and in-memory databases.

Due to the ground-breaking product development of our engineering teams, we have built a robust portfolio of over 100 issued and pending U.S. and foreign patents, many seminal, in the areas of hybrid memory, storage class memory, rank multiplication and load reduction. Since our inception in 2000, we have dedicated substantial resources to the development and protection of technology innovations essential to our business. Our early pioneering work in these areas has been broadly adopted in industry-standard LRDIMM and in NVDIMM. Our objective is to continue to innovate in our field and invest further in our intellectual property portfolio, with the goal of monetizing our intellectual property through a combination of product sales and licensing, royalty or other revenue-producing arrangements, which may result from joint development or similar partnerships or defense of our patents through enforcement actions against parties we believe are infringing them.

In November 2015, we entered into a joint development and license agreement (“JDLA”) pursuant to which we and Samsung have agreed to work together to jointly develop new storage class memory technologies including a standardized product interface for NVDIMM-P memory modules in order to facilitate broad industry adoption of this new technology. The JDLA also includes comprehensive cross-licenses to our and Samsung’s patent portfolios for the purpose of developing this product interface, grants Samsung a right of first refusal to acquire our HybriDIMM technology before we offer the technology to a third party, and grants us access to competitively priced DRAM and NAND flash raw materials. The JDLA also provided for an $8.0 million non-recurring engineering (“NRE”) fee that we received from Samsung for the joint development and calls for potential marketing collaboration and for the exchange of potential monetary consideration as progress is made towards commercialization of our storage class memory product. Moreover, we believe Samsung represents an important strategic partner with a high level of technical capability in memory that can facilitate bringing our HybriDIMM technology to market. In connection with the JDLA, we also received gross proceeds of $15.0 million for our issuance of a Senior Secured Convertible Note (“SVIC Note”) and Stock Purchase Warrant (“SVIC Warrant”) to SVIC No. 28 New Technology Business Investment L.L.P., an affiliate of Samsung Venture Investment Co. (“SVIC”). See Notes 5 and 6 to the condensed consolidated financial statements included in this report for additional information.

Further, in September 2016, we took action to protect and defend our innovations by filing legal proceedings for patent infringement against SK hynix and two of its subsidiaries in the U.S. International Trade Commission ("ITC") and in district court. We are seeking an exclusion order in the ITC that directs U.S. Customs and Border Protection to stop allegedly infringing SK hynix RDIMM and LRDIMM products from entering the United States. The evidentiary hearing in the ITC investigations will occur in May 2017, with a final initial determination expected to be issued by the ITC in October 2017. In the district court proceedings, we are primarily seeking damages. Our patents involved in the proceedings cover key features of RDIMM and LRDIMM, which we believe are strategic product lines for SK hynix that together account for a significant portion of SK hynix's total revenue and profits. We have recently taken steps to solidify our position and strategy in connection with our proceedings against SK hynix, including establishing a funding arrangement for our costs associated with these proceedings and adopting a rights agreement to implement a standard “poison pill,” which are discussed further below.

We recorded total net revenues of $9.4 million, $1.2 million, $19.7 million and $8.0 million and we incurred net losses of $3.3 million. $1.4 million, $11.2 million and $20.5 million for the three months ended April 1, 2017 and April 2, 2016 and for the years ended December 31, 2016 and January 2, 2016, respectively. We have historically financed our operations primarily through issuances of equity and debt securities and revenues generated from operations, including product sales and NRE revenues from the JDLA. We have also funded our operations with a revolving line of credit and term loans under a bank credit facility, a funding arrangement for costs associated with our legal proceedings against SK hynix and, to a lesser extent, equipment leasing arrangements. See “Liquidity and Capital Resources” below for further information.

Recent Developments

Extension of SVB Credit Agreement

On March 27, 2017, we entered into an amendment to our credit agreement (as amended, the “SVB Credit Agreement”) with Silicon Valley Bank (“SVB”). The amendment extends the maturity date of advances under the SVB Credit Agreement to April 1, 2018, modifies our financial covenants under the SVB Credit Agreement to remove all prior financial standards and replace them with a liquidity ratio standard, removes or amends certain termination, anniversary and unused facility fees payable by us under the SVB Credit Agreement, and makes certain other administrative changes.

Establishment of Funding Arrangement and Rights Agreement for SK hynix Proceedings

In April 2017, we established a funding arrangement and a rights agreement in connection with our strategy for our proceedings against SK hynix, each of which is described below.

TRGP Agreement

On May 3, 2017, we entered into an investment agreement (the "TRGP Agreement") with TR Global Funding V, LLC, an affiliate of TRGP Capital Management, LLC ("TRGP"), which generally provides that TRGP will directly fund the costs incurred by us or on our behalf in connection with our proceedings against SK hynix, including costs previously incurred since January 1, 2017 and costs to be incurred in the future. In exchange for such funding, we have agreed that, if we recover any proceeds in connection with the SK hynix proceedings, we will pay to TRGP the amount of its funding plus an escalating premium based on when any such proceeds are recovered, such that the premium will equal a specified low-to-mid double-digit percentage of the amount of TRGP's funding and such percentage will increase by a specified low double-digit amount each quarter after a specified date until any such proceeds are recovered. In addition, we have granted to TRGP a first priority security interest in the claims underlying the SK hynix proceedings and any proceeds we may receive in connection with these proceedings, and a second priority security interest in our patents that are the subject of these proceedings. We have established this funding arrangement in order to provide us with increased security that we will be able to vigorously pursue our claims against SK hynix through their final resolution.

Rights Agreement

On April 17, 2017, we adopted a short-term rights agreement to implement a standard "poison pill." In general terms, for so long as the rights issued under the rights agreement are outstanding, which is expected to be no longer than 12 months, the rights agreement prevents any person or group from acquiring a significant percentage of our outstanding capital stock or attempting a hostile takeover of our Company by significantly diluting the ownership percentage of such person or group. As a result, the rights agreement has a significant anti-takeover effect. Our board of directors approved the rights agreement as part of our strategy in connection with our proceedings against SK hynix, with the intent of disconnecting our market capitalization from the damages calculations and any settlement negotiations that may develop in connection with these proceedings.

Key Business Metrics

The following describes certain line items in our condensed consolidated statements of operations that are important to management's assessment of our financial performance:

Net Product Sales

Net product sales consist primarily of sales of our high-performance memory subsystems, net of a provision for estimated returns under our right of return policies, which generally range up to 30 days. We do not have long-term agreements with any of our customers. Instead, sales are made primarily pursuant to standard purchase orders. Although original equipment manufacturer ("OEM") customers typically provide us with non-binding forecasts of future product demand over specific periods of time, they generally place orders with us no more than two weeks in advance of the desired delivery date. Selling prices are typically negotiated monthly, based on competitive market conditions and the current price of key product components, including DRAM ICs and NAND flash. Purchase orders generally have no cancellation or rescheduling penalty provisions. We often ship our products to our customers' international manufacturing sites. All of our sales to date, however, are denominated in U.S. dollars.

We also resell certain Samsung products that we purchase under the terms of our JDLA with Samsung to certain end-customers that are not reached in Samsung's distribution model, including storage customers, appliance customers, system builders and cloud and datacenter customers. In the three months ended April 1, 2017 and April 2, 2016, resales of these products represented approximately 91% and 1% of our net product sales, respectively, and we expect resales of these products may continue to increase over time. Additionally, we sell excess component inventory of DRAM ICs and NAND flash to distributors and other users of memory integrated circuits. Component inventory sales are a relatively small percentage of net product sales, due in part to our efforts to diversify our customer base and our product line. This diversification effort has also allowed us to use components in a wider range of memory subsystems. We expect that component inventory sales will continue to represent a minimal portion of our net product sales in future periods.

Engineering Services

Pursuant to the terms of our JDLA with Samsung, we provided certain engineering services for Samsung and received a NRE fee as compensation for these services. These fees from Samsung are the only such fees for engineering services that we have received to date, although we may in the future receive additional fees of this type, from Samsung or other customers, depending on the terms of the relationships we may develop.

Cost of Sales

Our cost of sales includes the cost of materials, labor and other manufacturing costs, depreciation and amortization of equipment expenses, inventory valuation provisions, stock-based compensation expense, occupancy costs and other allocated fixed costs. To the extent that we continue to resell certain Samsung products, our cost of sales also includes the cost of the products that we purchase from Samsung under the terms of the JDLA.

The DRAM ICs and NAND flash incorporated into our products constitute a significant portion of our cost of sales, and thus our cost of sales will fluctuate based on the cost of DRAM ICs and NAND flash. We attempt to pass through these DRAM IC and NAND flash cost fluctuations to our customers by frequently renegotiating pricing prior to the placement of their purchase orders. However, the sales prices of our memory subsystems can also fluctuate due to competitive conditions in our key customer markets that are unrelated to the cost of DRAM ICs and NAND flash, which affects our gross margin. In addition, we have in the past experienced supply chain disruptions and shortages of DRAM and NAND flash required to create our HyperCloud, NVvault and Planar X VLP products, which can cause fluctuations in our net product sales and gross profits. In addition, the gross margin on our sales of any excess component DRAM IC and NAND flash inventory, as well as on our resales of Samsung products, is much lower than the gross margin on our sales of our memory subsystems. As a result, fluctuations in DRAM IC and NAND flash inventory sales and Samsung product resales as a percentage of our sales could impact our overall gross margin.

In addition, any significant decrease in demand for our products could result in an increase in the amount of excess inventory quantities on hand. In addition, our estimates of future product demand may prove to be inaccurate, in which case we may have understated or overstated the provision required for excess and obsolete inventory. In the future, if our inventories are determined to be overvalued, we would be required to recognize additional expense in our cost of sales at the time of such determination. Likewise, if our inventories are determined to be undervalued, we may have over-reported our costs of sales in previous periods and would be required to recognize additional gross profit at the time such inventories are sold. In addition, should the market value of DRAM ICs or NAND flash decrease significantly, we may be required to lower our selling prices to reflect the lower cost of our raw materials. If such price decreases reduce the net realizable value of our inventories to less than our cost, we would be required to recognize additional expense in our cost of sales in the same period. Although we make every reasonable effort to ensure the accuracy of our forecasts of future product demand, any significant unanticipated changes in demand, technological developments or the market value of DRAM ICs or NAND flash could have a material effect on the value of our inventories and our reported operating results.

Research and Development

Research and development expenses consist primarily of employee and independent contractor compensation and related costs, stock-based compensation expense, NRE fees, computer-aided design software license costs, reference design development costs, depreciation or rental of evaluation equipment expenses, and occupancy and other allocated overhead costs. Also included in research and development expense are the costs of materials and overhead related to the production of engineering samples of new products under development or products used solely in the research and development process. Our customers typically do not separately compensate us for design and engineering work involved in developing application-specific products for them. All research and development costs are expensed as incurred. We anticipate that research and development expenditures will increase in future periods as we seek to expand new product opportunities, increase our activities related to new and emerging markets and continue to develop additional proprietary technologies.

Intellectual Property Legal Fees

Intellectual property legal fees consist of legal fees incurred for patent filings, protection and enforcement. We anticipate that intellectual property legal fees will increase in future periods as we seek to continue to protect and expand our patent portfolio. With respect to our legal fees for the SK hynix proceedings that are covered by the TRPG Agreement, any cash proceeds we may receive upon resolution of these proceedings will be reduced by the aggregate amount of the legal fees paid by TRGP plus the premium owed under the TRGP Agreement, all of which will be owed to TRGP at the time of any such cash recovery.

Selling, General and Administrative

Selling, general and administrative expenses primarily consist of employee compensation and related costs, stock-based compensation expense, independent sales representative commissions, professional services fees, promotional and other selling and marketing expenses, and occupancy and other allocated overhead costs. A significant portion of our selling effort is directed at building relationships with OEMs and other customers and working through the product approval and qualification process with them. Therefore, the cost of material and overhead related to products manufactured for qualification is included in selling expenses.

Provision for Income Taxes

The federal statutory tax rate was 34% for the three months ended April 1, 2017 and April 2, 2016. Our effective tax rate differs from the statutory rate because we provide a full valuation allowance against net deferred tax assets, and accordingly we did not recognize an income tax benefit related to losses incurred for the three months ended April 1, 2017 and April 2, 2016.

Factors Affecting Our Performance and Business Risks and Uncertainties

Our performance, financial condition and prospects are affected by a number of factors, and are exposed to a number of risks and uncertainties. See the discussion of certain major factors affecting our performance in the MD&A included in our 2016 Annual Report, and see the discussion of certain risks that we face under “Risk Factors” in Part II, Item 1A of this report.

Critical Accounting Policies and Use of Estimates

The preparation of our condensed consolidated financial statements included in this report in conformity with accounting principles generally accepted in the United States requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the condensed consolidated financial statements and the reported amounts of net revenues and expenses during the reporting period. By their nature, these estimates and assumptions are subject to an inherent degree of uncertainty. We base our estimates on our historical experience, knowledge of current conditions and belief of what could occur in the future considering available information. We review our estimates on an on-going basis. Actual results may differ from these estimates, which may result in material adverse effects on our consolidated operating results and financial position. We believe the following critical accounting policies involve our more significant assumptions and estimates used in the preparation of our condensed consolidated financial statements included in this report: provisions for uncollectible receivables and sales returns; warranty liabilities; valuation of inventories; fair value of financial instruments; recoverability of long-lived assets; valuation of stock-based transactions; estimates for completion of NRE and other revenue milestones; and realization of deferred tax assets.

Our critical accounting policies and estimates are discussed in the MD&A included in our 2016 Annual Report. For the three months ended April 1, 2017, there were no material changes to our critical accounting policies.

Results of Operations

The following table presents each line item of our condensed consolidated statement of operations as a percentage of total net revenues for the three months ended April 1, 2017 compared to three months ended April 2, 2016:

	Three Months Ended	
	April 1, 2017	April 2, 2016
Net product sales	100 %	25 %
NRE revenues	-	75
Total net revenues	100	100
Cost of sales	93	25
Gross profit	7	75
Operating expenses:		
Research and development	16	36
Intellectual property legal fees	5	18
Selling, general and administrative	20	49
Total operating expenses	41	103
Operating loss	(34)	(28)
Other expense, net:		
Interest expense, net	(2)	(3)
Other income (expense), net	0	0
Total other expense, net	(2)	(3)
Loss before provision for income tax	(35)	(31)
Provision for income taxes	-	-
Net loss	(35)%	(31)%

Net Product Sales, NRE Revenues, Cost of Sales and Gross Profit

The following table presents net product sales, NRE revenues, cost of sales and gross profit for the three months ended April 1, 2017 and April 2, 2016:

	Three Months Ended			
	April 1, 2017	April 2, 2016	Change	% Change
	(in thousands, except percentages)			
Net product sales	$ 9,426	$ 1,171	$ 8,255	705 %
NRE revenues	-	3,429	(3,429)	100 %
Total net revenues	9,426	4,600	4,826	105 %
Cost of sales	8,746	1,149	7,597	661 %
Gross profit	$ 680	$ 3,451	$ (2,771)	(80)%
Gross margin	7.2%	75.0%	(67.8)%	

Net Product Sales

The increase in our net product sales for the three months ended April 1, 2017 as compared to the three months ended April 2, 2016 resulted primarily from increases of $5.9 million in sales of NAND flash, primarily sourced from Samsung under our JDLA and $2.4 million in sales of other small outline dual in-line memory module ("SODIMM") and registered dual in-line memory module ("RDIMM") products. Our two largest customers in the three months ended April 2, 2016, which accounted for 28% and 12% of our net product sales in the period, respectively, made significantly fewer purchases and contributed less than 1% of our net product sales in the three months ended April 1, 2017, while our two largest customers in the three months ended April 1, 2017, which accounted for 15% and 11% of our net product sales in the period, were new customers in the fourth quarter of 2016 and made no purchases and contributed no net product sales in the three months ended April 2, 2016.

NRE Revenues

The decrease in NRE revenues for the three months ended April 1, 2017 as compared to the three months ended April 2, 2016 resulted from the recognition of revenues from the NRE fee for engineering services performed under our JDLA with Samsung, in which we completed the engineering services required under the initial phase of the agreement in 2016.

Cost of Sales, Gross Profit and Gross Margin

The increase in our cost of sales for the three months ended April 1, 2017 as compared to the three months ended April 2, 2016 resulted primarily from increased costs associated with our increased product sales between periods. The decrease in our gross margin in the three months ended April 1, 2017 as compared to the three months ended April 2, 2016 resulted primarily from the decrease of NRE revenues from the JDLA, partially offset by increased sales of NAND flash and other SODIMM and RDIMM products. Our gross margin in all periods is impacted by the mix of products that we sell, as our sales of NAND flash and other components, including resales of certain Samsung products, result in lower gross margins than sales of our memory subsystems and other specialty DIMM products.

Research and Development

The following table presents research and development expenses for the three months ended April 1, 2017 and April 2, 2016:

	Three Months Ended			
	April 1, 2017	April 2, 2016	Change	% Change
	(in thousands, except percentages)			
Research and development	$ 1,496	$ 1,646	$ (150)	(9)%

The decrease in research and development expenses in the three months ended April 1, 2017 as compared to the three months ended April 2, 2016 of $0.15 million resulted primarily from a decrease of (i) $0.1 million in headcount, overhead and travel expenses (ii) $0.03 million in product research expenses and (iii) $0.03 million in professional and outside services fees.

Intellectual Property Legal Fees

The following table presents intellectual property legal fees for the three months ended April 1, 2017 and April 2, 2016:

	Three Months Ended			
	April 1, 2017	April 2, 2016	Change	% Change
	(in thousands, except percentages)			
Intellectual property legal fees	$ 466	$ 823	$ (357)	(43)%

The decrease in intellectual property legal fees for the three months ended April 1, 2017 as compared to the three months ended April 2, 2016 resulted primarily from a decrease between periods in legal fees incurred for certain trade secret litigation, and our establishment of the TRGP Agreement to finance the legal fees and costs incurred in the 2017 period in connection with our legal proceedings against SK hynix.

Selling, General and Administrative

The following table presents selling, general and administrative expenses for the three months ended April 1, 2017 and April 2, 2016:

	Three Months Ended			
	April 1, 2017	**April 2, 2016**	**Change**	**% Change**
	(in thousands, except percentages)			
Selling, general and administrative	$ 1,914	$ 2,265	$ (351)	(15)%

he decrease in selling, general and administrative expense for the three months ended April 1, 2017 as compared to the three months ended April 2, 2016 resulted primarily from a decrease of $0.4 million in sales and marketing headcount costs and related overhead and travel expenses.

Other Expense, Net

The following tables present other expense, net for the three months ended April 1, 2017 and April 2,2016:

	Three Months Ended			
	April 1, 2017	**April 2, 2016**	**Change**	**% Change**
	(in thousands, except percentages)			
Interest expense, net	$ (148)	$ (137)	$ 11	8 %
Other income (expense), net	2	8	6	(75)%
Total other expense, net	$ (146)	$ (129)	$ 17	13 %

The increase in interest expense, net, for the three months ended April 1, 2017 as compared to the three months ended April 2, 2016 resulted primarily from increased interest incurred in the first quarter of 2017 on borrowings under the SVB Credit Agreement. The increase in other income (expense), net, was not significant between periods.

Provision for Income Taxes

The following table presents the provision for income taxes for the three months ended April 1, 2017 and April 2, 2016:

	Three Months Ended			
	April 1, 2017	**April 2, 2016**	**Change**	**% Change**
	(in thousands, except percentages)			
Provision for income taxes	$ -	$ 1	$ (1)	(100)%

The federal statutory rate was 34% for the three months ended April 1, 2017 and April 2, 2016. In both the 2017 and 2016 periods, we continued to provide a full valuation allowance against our net deferred tax assets, which consist primarily of net operating loss carryforwards. In the 2017 and 2016 periods, our effective tax rate differed from the statutory rate primarily due to the valuation allowance on newly generated loss carryforwards.

Liquidity and Capital Resources

Liquidity generally refers to the ability to generate adequate amounts of cash to meet our cash needs. We require cash to fund our operating expenses and working capital requirements, including research and development and intellectual property litigation fees, to make required payments of principal and interest under our outstanding debt instruments and, to a lesser extent, to fund capital expenditures.

Working Capital and Cash and Cash Equivalents

The following table presents working capital and cash and cash equivalents as of April 1, 2017 and December 31, 2016:

	April 1, 2017	December 31, 2016
	(in thousands)	
Working capital	$ 10,202	$ 13,043
Cash and cash equivalents(1)	$ 7,770	$ 9,476

(1) Included in working capital.

Our working capital decreased for the three months ended April 1, 2017, primarily as a result of an increase in our accounts payable of approximately $2.2 million and an increase in our borrowings under the SVB Credit Agreement of approximately $0.7 million for the purchase of additional inventory to support the increase in our product sales and to fund our operations.

Cash Provided by (Used in) in the Three Months Ended April 1, 2017 and April 2, 2016

The following table summarizes our cash flows for the three months ended April 1, 2017 and April 2, 2016:

	Three Months Ended	
	April 1, 2017	April 2, 2016
	(in thousands)	
Net cash provided by (used in):		
Operating activities	$ (2,349)	$ (4,639)
Investing activities	(30)	(139)
Financing activities	673	(16)
Net change in cash and cash equivalents	$ (1,706)	$ (4,794)

Operating Activities

Net cash used in operating activities for the three months ended April 1, 2017 was primarily the result of a net loss of $3.3 million, partially offset by (i) approximately $0.5 million in net non-cash operating expenses, primarily consisting of stock-based compensation, depreciation and amortization, interest accrued on convertible debt and amortization of debt discounts, and (ii) approximately $0.5 million in net cash provided by operating activities due to changes in operating assets and liabilities, primarily from an increase in accounts payable of approximately $2.2 million and a decrease in accounts receivable of approximately $0.5 million, partially offset by increases in inventory and prepaid expenses and other assets of approximately $1.3 million and $0.6 million, respectively, and a decrease in accrued payroll and related liabilities of approximately $0.3 million. The decrease in accounts receivable between periods was primarily due to faster collection of our accounts receivable. The increase in inventories between periods was primarily due to our purchase of additional inventory to support the increase in our product sales. The increase in accounts payable between periods was primarily due to increased purchases of inventory.

Net cash used in operating activities for the three months ended April 2, 2016 was primarily the result of a net loss of $1.4 million and approximately $3.9 million in net cash used in operating activities due to changes in operating assets and liabilities, primarily from changes in deferred revenue, inventories, accounts receivable, prepaid expenses and other assets and accounts payable, partially offset by approximately $0.6 million in net non-cash operating expenses, which were primarily comprised of depreciation and amortization, amortization of debt discounts and stock-based compensation.

Investing Activities

Net cash used in investing activities for three months ended April 1, 2017 and April 2, 2016 was primarily the result of our purchases of property and equipment during the periods.

Financing Activities

Net cash provided by financing activities for the three months ended April 1, 2017 was primarily the result of net borrowings of approximately $0.7 million under the SVB Credit Agreement and net proceeds from the exercise of equity awards of approximately $0.06 million, partially offset by payments on outstanding debt of approximately $0.1 million. Net cash used in financing activities for three months ended April 2, 2016 was primarily the result of payments on our outstanding debt, partially offset by proceeds from the exercise of employee stock options.

Capital Resources

Our sources of cash have historically consisted of proceeds from issuances of equity and debt securities and revenues generated from operations, including product sales and NRE revenues from our JDLA. We have also funded our operations with a revolving line of credit and term loans under a bank credit facility, a funding arrangement for costs associated with our legal proceedings against SK hynix and, to a lesser extent, equipment leasing arrangements.

SVB Credit Agreement

On October 31, 2009, we entered into the SVB Credit Agreement, which provides that we may borrow up to the lesser of (i) 80% of eligible accounts receivable, or (ii) $5.0 million, subject to certain adjustments as set forth in the SVB Credit Agreement. The SVB Credit Agreement expires April 1, 2018.

As of April 1, 2017, we had outstanding borrowings under the SVB Credit Agreement of $1.4 million. We made no borrowings under the SVB Credit Agreement in the three months ended April 2, 2016. As of April 1, 2017 and December 31, 2016, we had borrowing availability under the SVB Credit Agreement of approximately $0.01 million and $0.8 million, respectively.

SVIC Note and SVIC Warrant

On November 18, 2015, we issued to SVIC the SVIC Note and the SVIC Warrant. The SVIC Note has an original principal amount of $15.0 million, accrues interest at a rate of 2.0% per year, is due and payable in full on December 31, 2021, and is convertible into shares of our common stock at a conversion price of $1.25 per share, subject to certain adjustments, on the maturity date of the SVIC Note. The SVIC Warrant grants SVIC a right to purchase up to 2,000,000 shares of our common stock at an exercise price of $0.30 per share, subject to certain adjustments, is only exercisable in the event we exercise our right to redeem the SVIC Note prior to its maturity date, and expires on December 31, 2025. Proceeds from the SVIC Note were used to repay a former loan from a different lender.

2016 Offering

On September 23, 2016, we completed a registered firm commitment underwritten public offering (the "2016 Offering"), pursuant to which we sold 9,200,000 shares of our common stock at a price to the public of $1.25 per share. The net proceeds to us from the 2016 Offering were $10.3 million, after deducting underwriting discounts and commissions and offering expenses paid by us.

TRGP Agreement

On May 3, 2017, we entered into the TRGP Agreement, which generally provides that TRGP will directly fund the costs incurred by us or on our behalf in connection with our legal proceedings against SK hynix, including costs previously incurred since January 1, 2017 and costs to be incurred in the future.

Equipment Leasing Arrangements

We have in the past utilized equipment leasing arrangements to finance certain capital expenditures. Although equipment leases did not contribute material cash during the periods covered by this report, they continue to be a financing alternative that we may pursue in the future.

Sufficiency of Cash Balances and Potential Sources of Additional Capital

We believe our existing cash balance, together with cash provided by our operations and borrowing availability under the SVB Credit Agreement, and taking into account cash expected to be used in our operations and the funding to be received under the TRGP Agreement, will be sufficient to meet our anticipated cash needs for at least the next 12 months. Our capital requirements will depend on many factors, including, among others: the acceptance of, and demand for, our products; our levels of net product sales and any other revenues we may receive, including NRE, license, royalty or other fees; the extent and timing of any investments in developing, marketing and launching new or enhanced products or technologies; the costs of developing, improving and maintaining our internal design, testing and manufacturing processes; the costs associated with defending and enforcing our intellectual property rights; and the nature and timing of acquisitions and other strategic transactions in which we participate, if any.

Although we expect to rely in the near term on our existing cash balance, cash provided by our operations, payments under the TRGP Agreement and borrowing availability under the SVB Credit Agreement, our estimates of our operating revenues and expenses and working capital requirements could be incorrect, and we may use our cash resources faster than we anticipate. Further, some or all of our ongoing or planned investments may not be successful and could result in further losses. Until we can generate sufficient revenues to finance our cash requirements from our operations, which we may never do, we may need to increase our liquidity and capital resources by one or more measures, which may include, among others, reducing operating expenses, restructuring our balance sheet by negotiating with creditors and vendors, entering into strategic partnerships or alliances, raising additional financing through the issuance of debt, equity or convertible securities or pursuing alternative sources of capital, such as through asset or technology sales or licenses or other alternative financing arrangements. We may not be able to obtain capital when needed, on terms acceptable to us or at all.

Inadequate working capital would have a material adverse effect on our business and operations and could cause us to fail to execute our business plan, fail to take advantage of future opportunities or fail to respond to competitive pressures or customer requirements. A lack of sufficient funding may also require us to significantly modify our business model and/or reduce or cease our operations, which could include implementing cost-cutting measures or delaying, scaling back or eliminating some or all of our ongoing and planned investments in corporate infrastructure, research and development projects, business development initiatives and sales and marketing activities, among other activities. Modification of our business model and operations could result in an impairment of assets, the effects of which cannot be determined. Furthermore, if we continue to issue equity or convertible debt securities to raise additional funds, our existing stockholders may experience significant dilution, and the new equity or debt securities may have rights, preferences and privileges that are superior to those of our existing stockholders. If we incur additional debt, it may increase our leverage relative to our earnings or to our equity capitalization or have other material consequences. If we pursue asset or technology sales or licenses or other alternative financing arrangements to obtain additional capital, our operational capacity may be limited and any revenue streams or business plans that are dependent on the sold or licensed assets may be reduced or eliminated. Moreover, we may incur substantial costs in pursuing any future capital-raising transactions, including investment banking, legal and accounting fees, printing and distribution expenses and other similar costs, which would reduce the benefit of the capital received from the transaction.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements that have or are reasonably likely to have a current or future effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditure or capital resources that is material to investors.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Not applicable.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management carried out an evaluation, under the supervision and with the participation of our principal executive officer and principal financial officer, of the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934, as amended ("Exchange Act")) as of the end of the period covered by this report. Based upon this evaluation, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures were effective as of April 1, 2017. Our disclosure controls and procedures are designed to provide reasonable assurance that information required to be disclosed by us in reports that we file or submit under the Exchange Act (i) is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the Securities and Exchange Commission ("SEC")and (ii) is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosures.

Changes *in Internal Control over Financial Reporting*

During our fiscal quarter ended April 1, 2017, there were no changes in our internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations on Internal Control

A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty and that breakdowns can occur because of simple errors. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the controls. The design of any system of controls is also based in part upon certain assumptions about the likelihood of future events, and any design may not succeed in achieving its stated goals under all potential conditions. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

In addition, projections of any evaluation of effectiveness to future periods are subject to risks that controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with the controls.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

The information under "Litigation and Patent Reexaminations" in Note 7 to the condensed consolidated financial statements included in Part I, Item 1 of this report is incorporated herein by reference.

Item 1A. Risk Factors

Investing in our common stock involves a high degree of risk. Before making any investment decision with respect to our securities, you should carefully consider each of the following risk factors as well as the other information in this report. Each of these risk factors, either alone or taken together, could adversely affect our business, operating results, financial condition, ability to access capital resources and future growth prospects, as well as the value of an investment in our common stock. As a result, you could lose some or all of any investment you have made or may make in our common stock. In assessing these risks, you should also refer to the other information contained or incorporated by reference in this report, including our condensed consolidated financial statements and the related notes. The risks described below are not the only ones we face. Additional risks of which we are not presently aware or that we currently believe are immaterial may also impair our business operations and financial position.

Risks Related to Our Business

We have historically incurred losses and may continue to incur losses.

Since the inception of our business in 2000, we have only experienced one fiscal year (2006) with profitable results. In order to regain profitability, or to achieve and sustain positive cash flows from operations, we must reduce operating expenses and/or increase our revenues and gross margins. Although we have in the past engaged in a series of cost reduction actions, such expense reductions alone may not make us profitable or allow us to sustain profitability if it is achieved and eliminating or reducing strategic initiatives could limit our opportunities and prospects. Our ability to achieve profitability will depend on increased revenue growth from, among other things, monetization of our intellectual property, increased demand for our memory subsystems and other product offerings and our ability to expand into new and emerging markets. We may not be successful in any of these pursuits and we may never achieve profitability or sustain profitability if achieved.

We may not have sufficient working capital to fund our planned operations and, as a result, we may need to raise additional capital in the future, which may not be available when needed, on acceptable terms or at all.

We believe that, taking into account our planned activities and our sources of capital, we have sufficient cash resources to satisfy our capital needs for at least the next 12 months. However, our estimates of our operating revenues and expenses and working capital requirements could be incorrect, and we may use our cash resources faster than we anticipate. Further, some or all of our ongoing or planned investments may not be successful and could result in further losses.

Our capital requirements will depend on many factors, including, among others:

- the acceptance of, and demand for, our products;
- our success, and that of our strategic partners, in developing and selling products derived from our technology;
- the extent and timing of any investments in developing, marketing and launching new or enhanced products or technologies;
- the costs of developing, improving and maintaining our internal design, testing and manufacturing processes;
- the costs associated with defending and enforcing our intellectual property rights;
- our results of operations, including our levels of net product sales and any other revenues we may receive, including non-recurring engineering (“NRE”), license, royalty or other fees;

- the amount and timing of vendor payments and the collection of receivables, among other factors affecting our working capital;
- our receipt of cash proceeds from the exercise of outstanding stock options or warrants to acquire our common stock;
- the nature and timing of acquisitions and other strategic transactions in which we participate, if any; and
- the costs associated with the continued operation, and any future growth, of our business.

We expect to rely in the near term on cash provided by our operations, funds raised pursuant to recent issuances of debt and equity securities, such as our November 2015 issuance of convertible debt to an affiliate of Samsung Venture Investment Co., Samsung Venture Investment Co. ("SVIC"), and our September 2016 public offering of common stock, our new funding arrangement with TR Global Funding V, LLC, an affiliate of TRGP Capital Management, LLC ("TRGP"), for costs associated with certain of our legal proceedings, and borrowing availability under our credit facility with Silicon Valley Bank ("SVB"). However, our estimates of our operating revenues and expenses and working capital requirements could be incorrect, and we may use our cash resources faster than we anticipate. Further, some or all of our ongoing or planned investments may not be successful and could result in further losses. Until we can generate sufficient revenues to finance our cash requirements from our operations, which we may never do, we may need to increase our liquidity and capital resources by one or more measures, which may include, among others, reducing operating expenses, restructuring our balance sheet by negotiating with creditors and vendors, entering into strategic partnerships or alliances, raising additional financing through the issuance of debt, equity or convertible securities or pursuing alternative sources of capital, such as through asset or technology sales or licenses or other alternative financing arrangements. We may not be able to obtain capital when needed, on terms acceptable to us or at all.

Inadequate working capital would have a material adverse effect on our business and operations and could cause us to fail to execute our business plan, fail to take advantage of future opportunities or fail to respond to competitive pressures or customer requirements. A lack of sufficient funding may also require us to significantly modify our business model and/or reduce or cease our operations, which could include implementing cost-cutting measures or delaying, scaling back or eliminating some or all of our ongoing and planned investments in corporate infrastructure, research and development projects, business development initiatives and sales and marketing activities, among other activities. Modification of our business model and operations could result in an impairment of assets, the effects of which cannot be determined. Furthermore, if we continue to issue equity or convertible debt securities to raise additional funds, our existing stockholders may experience significant dilution, and the new equity or debt securities may have rights, preferences and privileges that are superior to those of our existing stockholders. If we incur additional debt, it may increase our leverage relative to our earnings or to our equity capitalization or have other material consequences. If we pursue asset or technology sales or licenses or other alternative financing arrangements to obtain additional capital, our operational capacity may be limited and any revenue streams or business plans that are dependent on the sold or licensed assets may be reduced or eliminated. Moreover, we may incur substantial costs in pursuing any future capital-raising transactions, including investment banking, legal and accounting fees, printing and distribution expenses and other similar costs, which would reduce the benefit of the capital received from the transaction.

We have incurred a material amount of indebtedness to fund our operations, the terms of which have required us to pledge substantially all of our assets as security. Our level of indebtedness and the terms of such indebtedness could adversely affect our operations and liquidity.

We have incurred debt under our convertible note issued to SVIC, our credit facility with SVB, and our new funding arrangement with TRGP. In connection with these debt and other arrangements, we have granted security interests to SVIC, SVB and TRGP in our various assets, such that all of our tangible and intangible assets, including our complete patent portfolio, are subject to one or more outstanding liens held by one or more of these parties. The SVIC and SVB debt instruments and the TRGP investment agreement contain customary representations, warranties and indemnification provisions, as well as affirmative and negative covenants that, among other things, restrict our ability to:

- incur additional indebtedness or guarantees;
- incur liens;
- make investments, loans and acquisitions;
- consolidate or merge;
- sell or exclusively license assets, including capital stock of subsidiaries;
- alter our business;
- change any provision of our organizational documents;
- engage in transactions with affiliates;
- make certain decisions regarding certain of our outstanding legal proceedings without consulting with or obtaining consent from certain of these parties; and
- pay dividends or make distributions.

The SVIC and SVB debt instruments and the TRGP investment agreement also include events of default, including, among other things, payment defaults, any breach by us of representations, warranties or covenants, certain bankruptcy events and certain material adverse changes. If an event of default were to occur under any of these instruments or agreements and we were unable to obtain a waiver for the default, the counterparties could, among other remedies, accelerate our obligations under the debt instrument or other agreement and exercise their rights to foreclose on their security interests, which would cause substantial harm to our business and prospects.

Additionally, incurrence and maintenance of this or other debt could have material adverse consequences on our business and financial condition, such as:

- requiring us to dedicate a portion of our cash flows from operations and other capital resources to debt service, thereby reducing our ability to fund working capital, capital expenditures and other cash requirements;
- increasing our vulnerability to adverse economic and industry conditions;
- limiting our flexibility in planning for or reacting to changes and opportunities in our business and industry, which may place us at a competitive disadvantage; and
- limiting our ability to incur additional debt when needed, on acceptable terms or at all.

We are involved in and expect to continue to be involved in costly legal and administrative proceedings to enforce or protect our intellectual property rights and to defend against claims that we infringe the intellectual property rights of others.

As is common in the semiconductor industry, we have experienced substantial litigation regarding patent and other intellectual property rights. We are currently involved in litigation and proceedings at the U.S. Patent and Trademark Office ("USPTO") and Patent Trial and Appeal Board ("PTAB") based on alleged third-party infringement of our patents, and lawsuits claiming that we are infringing others' intellectual property rights also have been and may in the future be brought against us.

The process of obtaining and protecting patents is inherently uncertain. In addition to the patent issuance process established by law and the procedures of the USPTO, we must comply with administrative procedures of the Joint Electron Device Engineering Council ("JEDEC") to protect our intellectual property within its industry standard-setting process. These procedures evolve over time, are subject to variability in their application and may be inconsistent with each other. Failure to comply with the USPTO's or JEDEC's administrative procedures could jeopardize our ability to claim that our patents have been infringed.

Our business strategy includes litigating claims against others, such as our competitors, customers and former employees, to enforce our intellectual property, contractual and commercial rights including, in particular, our patent portfolio and our trade secrets, as well as to challenge the validity and scope of the proprietary rights of others. This or other similar proceedings could also subject us to counterclaims or countersuits against us, or the parties we sue could seek to invalidate our patents or other intellectual property rights through reexamination or similar processes at the USPTO or similar bodies. Moreover, any legal disputes with customers could cause them to cease buying or using our products or delay their purchase of our products and could substantially damage our relationship with them.

Making use of new technologies and entering new markets increases the likelihood that others might allege that our products infringe on their intellectual property rights. The likelihood of this type of lawsuit may also be increased due to the limited pool of experienced technical personnel that we can draw upon to meet our hiring needs. As a result, a number of our existing employees have worked for our existing or potential competitors at some point during their careers, and we anticipate that a number of our future employees will have similar work histories. Moreover, lawsuits of this type may be brought, even if there is no merit to the claim, as a strategy to prevent us from hiring qualified candidates, drain our financial resources and divert management's attention away from our business.

Litigation is inherently uncertain. An adverse outcome in existing or any future litigation could force us to, among other things:

- relinquish patents or other protections of our technologies if they are invalidated, which would enable our competitors and others to freely use this technology;
- compete with products that rely upon technologies and other intellectual property rights that we have developed and that we believe we have the right to protect from third-party use;
- accept terms of an arrangement to license our technologies to a third party that are not as favorable as we might expect;
- cease manufacturing and/or selling products or using certain processes that are claimed to be infringing a third party's intellectual property;
- pay damages (which in some instances may be three times actual damages), including royalties on past or future sales, if we are found to infringe a third party's intellectual property;
- seek a license from a third -party intellectual property owner to use its technology in our products, which may not be available on reasonable terms or at all; or

- redesign any products that are claimed to be infringing a third party's intellectual property, which may not be possible to do in a timely manner, without incurring significant costs or at all.

Moreover, any litigation, regardless of its outcome, would involve a significant dedication of resources, including time and costs, would divert management's time and attention and could negatively impact our results of operations. As a result, any current or future infringement claims by or against third parties could materially adversely affect our business, financial condition or results of operations.

We are involved in and expect to continue to be involved in legal proceedings at the ITC and related enforcement actions to stop allegedly infringing SK hynix RDIMM and LRDIMM products from entering the United States, as well as legal proceedings in district court to seek damages for the alleged patent infringement. Our involvement in these proceedings, as well as steps we have taken to implement certain of our strategies in connection with these proceedings, subject us to a number of risks.

On September 1, 2016, we took action to protect and defend our innovations by filing legal proceedings for patent infringement against SK hynix Inc., a South Korean memory semiconductor supplier ("SK hynix"), and two of its subsidiaries in the U.S. International Trade Commission ("ITC") and in district court. We are seeking an exclusion order in the ITC that directs U.S. Customs and Border Protection to stop allegedly infringing SK hynix registered dual in-line memory module ("RDIMM") and load reduced dual in-line memory modules ("LRDIMM") products from entering the United States. ITC investigations typically proceed on an expedited basis. The evidentiary hearing in the ITC investigation will occur in May 2017, with a final initial determination expected to be issued by the ITC in October 2017, but there can be no guarantee that our proceedings will follow such a timeline.

Intellectual property litigation is expensive and time-consuming, regardless of the merits of any claim, and could divert management's attention from operating our business. Even if we are successful at the ITC, we would then need to enforce the order which is expensive, time consuming and could divert management's attention from operating our business. In addition, lawsuits in the ITC and in district courts are subject to inherent uncertainties due to the complexity of the technical issues involved, and we may not be successful in our actions. Moreover, if we are countersued by SK hynix and lose the suit, we could be required to pay substantial damages or lose some of our intellectual property protections. Furthermore, we may not be able to reach a settlement with SK hynix to license our patent portfolio, and even if we are able to reach a settlement, the terms of the arrangement may not be as favorable as we anticipated. Any of the foregoing could cause us to incur significant costs, decrease the perceived value of our intellectual property and materially adversely affect our business, financial condition or results of operations.

We have recently taken steps to solidify our position and strategy in connection with our proceedings against SK hynix. In April 2017, we established a funding arrangement with TRGP, which generally provides that TRGP will directly fund the costs incurred by us or on our behalf in connection with the SK hynix proceedings, and in exchange for such funding, we have agreed to pay to TRGP the amount of its funding plus an escalating premium starting at a low-to-mid double-digit percentage of the amount of its funding if and when we recover any proceeds from the proceedings, and we have granted to TRGP a first priority lien on the claims underlying the proceedings and any proceeds received from the proceedings and a second priority lien on our patents that are the subject of the proceedings. We established this funding arrangement in order to provide us with increased security that we will be able to vigorously pursue our claims against SK hynix through their final resolution, but the arrangement also involves certain risks, including, among others, our obligation to use a portion of any proceeds we may receive from these proceedings to repay the funded amounts at a premium, which premium would increase the longer the proceedings remain unresolved, and our obligation to consult with or obtain consent from TRGP in connection with certain decisions or other matters relating to the SK hynix proceedings.

In addition, in April 2017, we adopted a short-term rights agreement to implement a standard "poison pill." In general terms, for so long as the rights issued under the rights agreement are outstanding, which is expected to be no longer than 12 months, the rights agreement prevents any person or group from acquiring a significant percentage of our outstanding capital stock or attempting a hostile takeover of our Company by significantly diluting the ownership percentage of such person or group. As a result, the rights agreement has a significant anti-takeover effect. Our board of directors approved the rights agreement as part of our strategy in connection with our proceedings against SK hynix, with the intent of disconnecting our market capitalization from the damages calculations and any settlement negotiations that may develop in connection with these proceedings. However, the rights agreement may not have the intended, or any, impact on these proceedings or any related settlement negotiations, but would have the anti-takeover effect of any standard "poison pill" and thus would involve the risks associated with these anti-takeover effects, which are described elsewhere in these risk factors.

We may be unsuccessful in monetizing our intellectual property portfolio.

We have dedicated substantial resources to the development and protection of technology innovations essential to our business, and we expect these activities to continue for the foreseeable future. We also intend to aggressively pursue monetization avenues for our intellectual property portfolio, potentially including licensing, royalty or other revenue-producing arrangements. However, our revenues are currently generated by our product sales and we may never be successful in generating a revenue stream from our intellectual property, in which case our investments of time, capital and other resources into our intellectual property portfolio may not provide adequate, or any, returns.

Although we may pursue agreements with third parties to commercially license certain of our products or technologies, we may never successfully enter into any such agreement. Further, the terms of any such agreements that we may reach with third-party licensees are uncertain and may not provide sufficient royalty or other licensing revenues to us to justify our costs of developing and maintaining the licensed intellectual property or may otherwise include terms that are not favorable to us. Additionally, the pursuit of licensing arrangements would require by its nature that we relinquish certain of our rights to our technologies and intellectual property that we license to third parties, which could limit our ability to base our own products on such technologies or could reduce the economic value that we receive from such technologies and intellectual property. Additionally, the establishment of arrangements to monetize our intellectual property may be more difficult or costly than expected, may require additional personnel and investments and may be a significant distraction for management. In connection with any monetization avenues we may develop, our licenses and royalty revenue may be uncertain from period to period and we may be unable to attract sufficient licensing customers, which would materially and adversely affect our results of operations.

Our ability to establish licensing, royalty or similar revenues, and maintain or increase any such revenues we are able to establish, depends on a variety of factors, including the novelty, utility, performance, quality, breadth, depth and overall perceived value of our intellectual property portfolio, all as compared to that of our competitors, as well as our sales and marketing capabilities. If secured, licensing or royalty revenues may also be negatively affected by factors within and outside our control, including reductions in our customers' sales prices, sales volumes and the terms of the license arrangements. If we are not successful in monetizing our intellectual property portfolio, we may never recoup the costs associated with developing, maintaining, defending and enforcing this portfolio and our financial condition and prospects would be harmed.

Our revenues and results of operations have been substantially dependent on single products or product categories, including NVvault in historical periods and Samsung products in recent periods. Revenue lost from any decline in sales of these products, such as the recent decline in NVvault product sales, may be challenging to replace and could significantly harm our performance.

We are and have historically been substantially dependent on sales of single products or product categories. For instance, for our fiscal year ended January 2, 2016, our NVvault non-volatile dual in-line memory modules ("NVDIMM") used in cache-protection and data-logging applications, including our NVvault battery-free, the flash-based cache system, accounted for approximately 20% of our net product sales, and for our fiscal year ended December 31, 2016 and our fiscal quarter ended April 1, 2017, our resales of certain Samsung products that we purchase under the terms of our Joint Development and License Agreement ("JDLA") with Samsung Electronics Co., Ltd. ("Samsung") to certain end-customers that are not reached in Samsung's distribution model accounted for approximately 21% and 91% of our net product sales, respectively. Demand for these products could decline at any time for a number of reasons, including, among others, product obsolescence, introduction of more advanced or otherwise superior competing products by our competitors, the ability to obtain these products or substitute products from alternate sources, or the other risk factors described in this Item 1A. Further, we have no long-term purchase agreements or other commitments with respect to sales of any of our products. As a result, any decline in demand for these products from us would result in our reduced sales of these products, which could materially adversely impact our revenues and results.

For example, we have experienced a sharp decline in NVvault sales in recent years, due in large part to our loss of our former most significant NVvault customer, Dell, beginning in 2012. We recognized no NVvault sales to Dell in the three months ending April 1, 2017 or April 2, 2016 and we expect no future demand from Dell for these products. In order to leverage our NVvault technology and secure one or more new key customers, we continue to pursue additional qualifications of NVvault with other original equipment manufacturers ("OEMs") and to target new customer applications, such as online transaction processing, virtualization, Big Data analytics, high speed transaction processing, high-performance database applications and in-memory database applications. We also introduced EXPRESSvault in March 2011 and the next-generation of EXPRESSvault (EV3) in July 2015, and we continue to pursue qualification of the next-generation DDR3 NVvault and DDR4 NVvault with customers. Our future operating results will depend on our ability to commercialize these NVvault product extensions, as well as our other products such as HybriDIMM and other high-density and high-performance solutions. HybriDIMM is still under development and may require additional investment and the services and attention of key employees who have competing demands on their available time. Although we believe that our JDLA with Samsung may advance the development of this product, our partnership with Samsung and any other steps we take to further the development of this or any other products in development could fail. If we are not successful in expanding our qualifications or marketing any new or enhanced products, we will be unable to secure revenues sufficient to replace lost NVvault revenues and our results of operations and prospects could be materially harmed.

In addition, significant sales of certain products could impact our costs and our margins. For instance, our resales of Samsung products, which contributed a significant portion of our net product sales in 2016 and in our first quarter of 2017, carry lower gross margin than sales of our own products. As a result, any increase in sales of these products in future periods could reduce our overall gross profit margin.

We are subject to risks relating to our focus on developing our HybriDIMM and NVvault products and a lack of market diversification.

We have historically derived a substantial portion of our revenues from sales of our high-performance modular memory subsystems to OEMs in the server, high-performance computing and communications markets, as well as from sales products to storage customers, appliance customers, system builders and cloud and datacenter customers. We expect these memory subsystems to continue to account for a portion of our revenues in the near term. We believe that market acceptance of these products or derivative products that incorporate our core memory subsystem technology is critical to our success.

We have invested significant research and development time and costs into the design of application-specific integrated circuits ("ASIC") and hybrid devices, including our NVvault family of products and most recently our next-generation HybriDIMM memory subsystem. These products are subject to increased risks as compared to our legacy products. For example:

- we are dependent on a limited number of suppliers for the dynamic random access memory integrated circuits ("DRAM ICs" or "DRAM") and ASIC devices that are essential to the functionality of these products, and in the past we have experienced supply chain disruptions and shortages of DRAM and NAND flash memory ("NAND flash") required to create our NVvault family of products as a result of issues that are specific to our suppliers or the industry as a whole;
- our products are generally subject to a product approval and qualification process with customers before purchases are made and we have experienced a longer qualification cycle than anticipated with some of these products, including our HyperCloud memory subsystems;
- the NVvault products or other new products such as HybriDIMM may contain currently undiscovered flaws, the correction of which could result in increased costs and time to market; and

- we are required to demonstrate the quality and reliability of our products to and qualify them with our customers, which requires a significant investment of time and resources prior to the receipt of any revenues from these customers.

These and other risks attendant to the production of our memory subsystem products could impair our ability to obtain customer or market acceptance of these products or obtain such acceptance in a timely manner, which would reduce our achievable revenues from these products and limit our ability to recoup our investments in the products.

Additionally, if the demand for servers deteriorates or if the demand for our products to be incorporated in servers declines, our operating results would be adversely affected, and we would be forced to diversify our product portfolio and our target markets. We may not be able to achieve this diversification, and our inability to do so may adversely affect our business, operating performance and prospects.

Sales to a small number of varying customers represent a significant portion of our net product sales, and the loss of, or a significant reduction in sales to, any one of these customers could materially harm our business.

Sales to small number of customers represent a substantial portion of our net product sales. Approximately 15% and 11% of our net product sales in the three months ended April 1, 2017 were to two customers, which were new customers in the fourth quarter of 2016. Approximately 28% and 12% of our net product sales in the three months ended April 2, 2016 were to two customers, both of which purchased few products and contributed only a small portion of our revenues in 2017. The composition of major customers and their respective contributions to our net product sales have varied and will likely continue to vary from period to period as our existing and prospective customers progress through the life cycle of the products they produce and sell.

We do not have long-term agreements with any of our customers and, as result, any or all of them could decide at any time to discontinue, decrease or delay their purchase of our products. In addition, the prices that these customers pay for our products could change at any time. Further, we may not be able to sell some products developed for one customer to a different customer because our products are often customized to address specific customer requirements, and even if we are able to sell these products to another customer, our margin on these products may be reduced. Additionally, although customers are generally allowed only limited rights of return after purchasing our products, we may determine that it is in our best interest to accept returns from certain large or key customers even if we are not contractually obligated to accept them in order to maintain good relations with these customers. Any returns beyond our expectations could negatively impact our operating results. Moreover, because a few customers account for a substantial portion of our net product sales, the failure of any one of these customers to pay on a timely basis would negatively impact our cash flows. As a result, the loss of any of our customers or a reduction in sales to or difficulties collecting payments from any of them could significantly reduce our net product sales and adversely affect our operating results.

Our ability to maintain or increase our net product sales to our key customers depends on a variety of factors, many of which are beyond our control. These factors include our customers' continued sales of servers and other computing systems that incorporate our memory subsystems and our customers' continued incorporation of our products into their systems. Because of these and other factors, sales to these customers may not continue and the amount of such sales may not reach or exceed historical levels in any future period.

Our customers require that our products undergo a lengthy and expensive qualification process without any assurance of sales.

Our prospective customers generally test and evaluate our memory subsystems before purchasing our products and integrating them into their systems. This extensive qualification process involves rigorous reliability testing and evaluation of our products, which may continue for nine months or longer and is often subject to delays. In addition to qualification of specific products, some of our customers may also require us to undergo a technology qualification if our product designs incorporate innovative technologies that the customer has not previously encountered. Such technology qualifications often take substantially longer than product qualifications and can take over a year to complete. Qualification by a prospective customer does not ensure any sales to that prospective customer, in which case we would receive no or limited revenues in spite of our investment of time and other resources in this qualification process, which could adversely affect our operating results.

Even after successful qualification and sales of our products to a customer, because the qualification process is both product-specific and platform-specific, our existing customers sometimes require us to re-qualify our products or to qualify our new products for use in new platforms or applications. For example, as our OEM customers transition from prior generation architectures to current generation architectures, we must design and qualify new products for use by these customers. In the past, this design and qualification process has taken up to nine months to complete, during which time our net product sales to these customers declined significantly. Additionally, after our products are qualified with existing or new customers, the customer may take several months to begin purchasing the product or may decide not to purchase the product at all.

Likewise, changes in our products, our manufacturing facilities, our production processes or our component suppliers may require a new qualification process. For example, when our memory and NAND flash component vendors discontinue production of components, it may be necessary for us to design and qualify new products for our customers. As a result, some customers may require us, or we may decide, to purchase an estimated quantity of discontinued memory components necessary to ensure a steady supply of existing products until products with new components can be qualified. Purchases of this nature may affect our liquidity. Additionally, our estimation of quantities required during the transition may be incorrect, which could adversely impact our results of operations through lost revenue opportunities or charges related to excess and obsolete inventory.

We must devote substantial resources, including design, engineering, sales, marketing and management efforts, to qualify our products with prospective customers in anticipation of sales. Significant delays or other difficulties in the qualification process could result in an inability to keep up with rapid technology change or new, competitive products. If we delay or do not succeed in qualifying a product with an existing or prospective customer, we would not be able to sell that product to that customer, which may result in our holding excess and obsolete inventory and could reduce our net product sales and customer base, any of which could materially harm our operating results and business.

We are subject to risks of disruption in the supply of the components of our products.

Our ability to fulfill customer orders or produce qualification samples is dependent on a sufficient supply of field-programmable gate arrays (“FPGAs”), ASICs, DRAM ICs and NAND flash, which are essential components of our memory subsystems. In addition, we resell some of the components that we purchase from Samsung under the terms of our JDLA to certain end-customers that are not reached in Samsung’s distribution model, including small to medium storage customers, appliance customers, system builders and cloud and datacenter customers. We have no long-term supply contracts for any of these components. Further, there are a relatively small number of suppliers of these components and we typically purchase from only a subset of these suppliers. As a result, our inventory purchases have historically been concentrated in a small number of suppliers, including Samsung Semiconductor, Inc., from which we obtained a large portion of our total inventory purchases in 2016 and the first quarter of 2017. We also use consumables and other components, including printed circuit boards (“PCBs”), to manufacture our memory subsystems, which we sometimes procure from single or limited sources to take advantage of volume pricing discounts.

From time to time, shortages in DRAM ICs and NAND flash have required some suppliers to limit the supply of these components. In the past, we have experienced supply chain disruptions and shortages of DRAM and NAND flash required to create our HyperCloud, NVvault and Planar X VLP products, and we are continually working to secure adequate supplies of the components necessary to fill customers’ orders for our products in a timely manner. If we are unable to obtain a sufficient supply of DRAM ICs, NAND flash or other essential components to avoid interruptions in the delivery of our products as required by our customers or the delivery of these components to customers to whom we resell them directly, these customers may reduce future orders for our products or not purchase our products at all, which would cause our net product sales to decline and harm our operating results. In addition, our reputation could be harmed due to failures to meet our customers’ demands and, even assuming we are successful in resolving supply chain disruptions, we may not be able to replace any lost business and we may lose market share to our competitors. Further, if our suppliers are unable to produce qualification samples on a timely basis or at all, we could experience delays in the qualification process with existing or prospective customers, which could have a significant impact on our ability to sell our products. Moreover, if we are not able to obtain these components in the amounts needed on a timely basis and at commercially reasonable prices, we may not be able to develop or introduce new products or we may be forced to cease our resale activities for the components we sell to customers directly.

Our dependence on a small number of suppliers and the lack of any guaranteed sources for the essential components of our products expose us to several risks, including the inability to obtain an adequate supply of these essential components, increases in their costs, delivery delays and poor quality. Additionally, our customers qualify certain of the components provided by our suppliers for use in their systems. If one of our suppliers experiences quality control or other problems, it may be disqualified by one or more of our customers. This would disrupt our supplies of these components, and would also reduce the number of suppliers available to us and may require that we qualify a new supplier, which we may not be able to do.

Historical declines in customer demand and our revenues have caused us to reduce our purchases of DRAM ICs and NAND flash. Such declines or other fluctuations could continue in the future. If we fail to maintain sufficient purchase levels with some suppliers, our ability to obtain supplies of raw materials may be impaired due to the practice of some suppliers to allocate their products to customers with the highest regular demand.

Frequent technology changes and the introduction of next-generation versions of these components may also result in the obsolescence of our inventory on-hand, which could involve significant time and costs to replace, reduce our net product sales and gross margin and adversely affect our operating performance and financial condition.

If we are unable to timely and cost-effectively develop new or enhanced products that meet our customers' requirements and achieve market acceptance or technologies that we can monetize, our revenues and prospectus could be materially harmed.

Our industry is characterized by rapid technological change, evolving industry standards and rapid product obsolescence. As a result, continuous development of new technology, processes and product innovations is necessary in order to be successful. We believe that the continued and timely development of new products and improvement of existing products are critical to our business and prospects for growth.

In order to develop and introduce new or enhanced products and technologies, we need to:

- retain and continue to attract new engineers with expertise in high-performance modular memory subsystems and our key technology competencies;
- identify and adjust to the changing requirements of our existing and potential future customers;
- identify and adapt to emerging technological trends and evolving industry standards in our markets;
- continue to develop and enhance our design tools, manufacturing processes and other technologies that allow us to produce attractive and competitive products;
- design and introduce cost-effective, innovative and performance-enhancing features that differentiate our products and technologies from those of our competitors;
- secure licenses to enable us to use any technologies, processes or other rights essential to the manufacture or use of any new products we may design, which licenses may not be available when needed, on acceptable terms or at all;
- maintain or develop new relationships with suppliers of components required for any new or enhanced products and technologies;
- qualify any new or enhanced products for use in our customers' products; and

- develop and maintain effective marketing strategies.

We may not be successful at any of these activities. As a result, we may not be able to successfully develop new or enhanced products or we may experience delays in this process. Failures or delays in product development and introduction could result in the loss of, or delays in generating, net products sales or other revenues and the loss of key customer relationships. Even if we develop new or enhanced products or technologies, they may not meet our customers' requirements or gain market acceptance, as our product development efforts are inherently risky due to the challenges of foreseeing changes or developments in technology or anticipating the adoption of new standards. Moreover, we have invested significant resources in our product development efforts, which would be lost if we fail to develop successful products. If any if these risks were to occur, our net product sales, prospects and reputation could be materially adversely affected.

We face intense competition in our industry, and we may not be able to compete successfully in our target markets.

Our products are primarily targeted to OEMs in the server, high-performance computing and communications markets, as well as to storage customers, appliance customers, system builders and cloud and datacenter customers. These markets are intensely competitive, as numerous companies vie for business opportunities at a limited number of large OEMs and other customers. We face competition from DRAM suppliers, memory module providers and logic suppliers for many of our products, including EXPRESSvault, NVvault and HybriDIMM. Additionally, if and to the extent we enter new markets or pursue licensing arrangements to monetize our technologies and intellectual property portfolio, we may face competition from a large number of competitors that produce solutions utilizing similar or competing technologies.

Some of our customers and suppliers may have proprietary products or technologies that are competitive with our products, or could develop internal solutions or enter into strategic relationships with, or acquire, other high-density memory module providers. Any of these actions could reduce our customers' demand for our products. Some of our significant suppliers of memory integrated circuits may be able to manufacture competitive products at lower costs by leveraging internal efficiencies, or could choose to reduce our supply of memory integrated circuits, which could adversely affect our ability to manufacture our memory subsystems on a timely basis, if at all.

Certain of our competitors have substantially greater financial, technical, marketing, distribution and other resources, broader product lines, lower cost structures, greater brand recognition and longer standing relationships with customers and suppliers. Some of our competitors may also have a greater ability to influence industry standards than we do. Additionally, some of our competitors may have more extensive or more established patent portfolios than we do. We may not be able to compete effectively against any of these organizations.

Our ability to compete in our current target markets and future markets will depend in large part on our ability to successfully develop, introduce and sell new and enhanced products or technologies on a timely and cost-effective basis and to respond to changing market requirements. We expect our competitors to continue to improve the performance of their current products and potentially reduce their prices. In addition, our competitors may develop future generations and enhancements of competitive products or new or enhanced technologies that may offer greater performance and improved pricing or render our technologies obsolete. If we are unable to match or exceed the improvements made by our competitors, our market position and prospects could deteriorate and our net product sales could decline.

A limited number of relatively large potential customers dominate the markets for our products.

Our target markets are characterized by a limited number of large companies. Consolidation in one or more of our target markets may further increase this industry concentration. As a result, we anticipate that sales of our products will continue to be concentrated among a small number of large customers in the foreseeable future. We believe that our financial results will depend in significant part on our success in establishing and maintaining relationships with and effecting substantial sales to these potential customers. Even if we establish and successfully maintain these relationships, our financial results will be largely dependent on these customers' sales and business results.

If a standardized memory solution that addresses the demands of our customers is developed, our net product sales and market share may decline.

Many of our memory subsystems are specifically designed for our OEM customers' high-performance systems. In a drive to reduce costs and assure supply of their memory module demand, our OEM customers may endeavor to design JEDEC standard DRAM modules into their new products. Although we also manufacture JEDEC modules, this trend could reduce the demand for our higher-priced customized memory solutions, which would have a negative impact on our operating results. In addition, the adoption of a JEDEC standard module instead of a previously custom module might allow new competitors to participate in a share of our customers' memory module business that previously belonged to us.

If our OEM customers were to adopt JEDEC standard modules, our future business may be limited to identifying the next generation of high-performance memory demands of OEM customers and developing solutions that address these demands. Until fully implemented, any next generation of products may constitute a significantly smaller market, which could reduce our revenues and harm our competitive position.

If we fail to protect our proprietary rights, our customers or our competitors might gain access to our proprietary designs, processes and technologies, which could adversely affect our operating results.

We rely on a combination of patent protection, trade secret laws and restrictions on disclosure to protect our intellectual property rights. We have submitted a number of patent applications regarding our proprietary processes and technology. It is not certain when or if any of the claims in our patent applications will be allowed. As of April 1, 2017, we had 68 U.S. and foreign patents issued, 1 German utility model and 42 pending patent applications worldwide. Although we intend to continue filing patent applications with respect to the new processes and technologies that we develop, patent protection may not be available for some of these processes or technologies, in which case they may remain unprotected from use by third parties, including our competitors.

Our efforts to protect our intellectual property rights may not:

- prevent challenges to or the invalidation or circumvention of our intellectual property rights;
- keep our competitors or other third parties from independently developing similar products or technologies, duplicating, reverse engineering or otherwise using our products or technologies without our authorization or designing around any patents that may be issued to us;
- prevent disputes with third parties regarding ownership of our intellectual property rights;
- prevent disclosure of our trade secrets and know-how to third parties or into the public domain;
- result in valid patents, including international patents, from any of our pending or future applications; or
- otherwise adequately protect our intellectual property rights.

Monitoring for any unauthorized use of our technologies is costly, time-consuming and difficult. This is particularly true in foreign countries, such as the People's Republic of China ("PRC"), where we have established a manufacturing facility and where the laws may not protect our proprietary rights to the same extent as applicable U.S. laws.

If some or all of the claims in our patent applications are not allowed or if any of our intellectual property protections are limited in scope by the USPTO, a court or applicable foreign authorities or are circumvented by third parties, we could face increased competition for our products and be unable to execute on our strategy of monetizing our intellectual property. Any of these outcomes could significantly harm our business, operating results and prospects.

Our operating results may be adversely impacted by worldwide economic and political uncertainties and specific conditions in the markets we address and in which we or our strategic partners or competitors do business, including the cyclical nature of and volatility in the memory market and semiconductor industry.

Adverse changes in domestic and global economic and political conditions have made it extremely difficult for our customers, our vendors and us to accurately forecast and plan future business activities, and these conditions have caused and could continue to cause U.S. and foreign businesses to slow or decrease spending on our products and services. For instance, the current political instability in Korea could impact our operations and financial condition as a result of our dependence on Samsung, a South Korean based company, as a key supplier and strategic partner, and our ongoing legal proceedings against SK hynix. In addition, sales of our products are dependent upon demand by OEMs in the server, high-performance computing and communications markets, as well as by storage customers, appliance customers, system builders and cloud and datacenter customers. These markets are characterized by wide fluctuations in product supply and demand. Additionally, these markets have been cyclical and have experienced significant downturns, often connected with or in anticipation of maturing product cycles, reductions in technology spending and declines in general economic conditions. During these downturns, product demand diminishes, production capacity exceeds demand, inventory levels increase and average selling prices decline, all of which would materially adversely impact our business and operating results. Additionally, such a downturn could decrease the perceived value of our intellectual property portfolio and result in reduced ability to pursue our goal of monetizing this portfolio.

We may experience substantial period-to-period fluctuations in our operating results due to factors affecting the markets in which we operate. A decline or significant shortfall in demand in any of these markets could have a material adverse effect on demand for our products and on our net product sales. In addition, because many of our costs and operating expenses are relatively fixed, if we are unable to control our expenses adequately in response to reduced product sales, our gross margins, operating income and cash flows would be negatively impacted.

During challenging economic times our customers may face issues gaining timely access to sufficient credit, which could impair their ability to make timely payments to us. This may impair our liquidity and cash flows and require us to increase our allowance for doubtful accounts. Furthermore, our vendors may face similar issues gaining access to credit, which may limit their ability to supply components or provide trade credit to us. We cannot predict the timing, strength or duration of any economic slowdown or subsequent economic recovery, either generally or in our markets. If the economy or markets in which we operate experience such a slowdown, our business, financial condition and results of operations could be materially and adversely affected. Additionally, the combination of our lengthy sales cycle coupled with any challenging macroeconomic conditions could compound the negative impact of any such downturn on the results of our operations.

Our lack of a significant backlog of unfilled orders and the difficulty inherent in estimating customer demand makes it difficult to forecast our short-term production requirements, and any failure to optimally calibrate our production capacity and inventory levels to meet customer demand could adversely affect our revenues, gross margins and earnings.

We make significant decisions regarding the levels of business we will seek and accept, production schedules, component procurement, personnel needs and other resource requirements based on our estimates of customer demand. We do not have long-term agreements with any of our customers. Instead, sales are made primarily pursuant to standard purchase orders that we often receive no more than two weeks in advance of the desired delivery date and that may be rescheduled or cancelled on relatively short notice. The short-term nature of the commitments by many of our customers and the fact that our customers may cancel or defer purchase orders for any reason reduces our backlog of firm orders and our ability to accurately estimate future customer requirements for our products. This fact, combined with the quick turn-around times that apply to most orders, makes it difficult to forecast our production needs and allocate production capacity efficiently. As a result, we attempt to forecast the demand for the components needed to manufacture our products, but any such forecasts could turn out to be wrong. Further, lead times for components vary significantly and depend on various factors, such as the specific supplier and the demand and supply for a component at a given time.

Our production expense and component purchase levels are to a large extent fixed in the short term. As a result, we may be unable to adjust spending on a timely basis to compensate for any unexpected shortfall in customer orders. If we overestimate customer demand, we may have excess inventory of components, which may not be able to be used in other products or may become obsolete before any such use. If there is a subsequent decline in the prices of these components, the value of our inventory would fall. As a result, we may need to write-down the value of our component inventory, which may result in a significant decrease in our gross margin and financial condition. Also, to the extent that we manufacture products in anticipation of future demand that does not materialize or in the event a customer cancels or reduces outstanding orders, we could experience an unanticipated increase in our finished goods inventory. In the past, we have had to write-down inventory due to obsolescence, excess quantities and declines in market value below our costs. Any significant shortfall of customer orders in relation to our expectations could hurt our operating results, cash flows and financial condition.

Conversely, any rapid increases in production required by our customers could strain our resources and reduce our margins. If we underestimate customer demand, we may not have sufficient inventory of necessary components on hand to manufacture enough product to meet that demand. We also may not have sufficient manufacturing capacity at any given time to meet any demands for rapid increases in production. These shortages of inventory and capacity would lead to delays in the delivery of our products, which may force us to forego sales opportunities, reduce our net product sales and damage our customer relationships.

In addition, we resell certain Samsung products that we purchase under the terms of our JDLA with Samsung to certain end-customers that are not reached in Samsung's distribution model. This includes small to medium storage customers, appliance customers, system builders and cloud and datacenter customers. However, there is no guarantee of sufficient demand for these products and such demand could decline, due to customers obtaining these products from alternate sources, reducing their need for these products generally or for other reasons. The lack of sales of these products may adversely impact our financial conditions and results of operations. Furthermore, sales of these products generally carry lower gross margin than sales of our own products and, as a result, any increase in sales of these products in future periods could reduce our overall gross profit margin.

Declines in our average sales prices, driven by volatile prices for essential components and other factors, may result in declines in our revenues and gross profit.

Our industry is competitive and historically has been characterized by declines in average sales price, based in part on market prices for DRAM ICs, NAND flash and other essential product components, which have historically constituted a substantial portion of the total cost of our memory subsystems. Our average sales prices may decline due to several factors, including overcapacity in the worldwide supply of these components, increased manufacturing efficiencies, implementation of new manufacturing processes and expansion of manufacturing capacity by component suppliers.

Once our prices with a customer are negotiated, we are generally unable to revise pricing with that customer until our next regularly scheduled price adjustment. As a result, if market prices for essential components increase, we generally cannot pass the price increases on to our customers for products purchased under an existing purchase order. Consequently, we are exposed to the risks associated with the volatility of prices for these components and our cost of sales could increase and our gross margins could decrease in the event of price increases. Alternatively, if there are declines in the price of these components, we may need to reduce our selling prices for subsequent purchase orders, which may result in a decline in our net product sales.

In addition, since a large percentage of our product sales are to a small number of customers that are primarily large OEMs, these customers have exerted, and we expect they will continue to exert, pressure on us to make price concessions. If not offset by increases in volume of sales or the sales of newly-developed products with higher margins, decreases in average sales prices could have a material adverse effect on our business and operating results.

Our manufacturing operations involve significant risks.

We maintain a manufacturing facility in the PRC at which we produce most of our products. This internal manufacturing process allows us to utilize our own materials and processes, protect our intellectual property and develop the technology for manufacturing. However, our manufacturing activities require significant resources to maintain. For instance, we must continuously review and improve our manufacturing processes in order to maintain satisfactory manufacturing yields and product performance, try to lower our costs and otherwise remain competitive. As we manufacture more complex products, the risk of encountering delays, difficulties or higher costs increases. The start-up costs associated with implementing new manufacturing technologies, methods and processes, including the purchase of new equipment and any resulting manufacturing delays and inefficiencies, could negatively impact our results of operations.

Additionally, we could experience a prolonged disruption, material malfunction, interruption or other loss of operations at our manufacturing facility or we may need to add manufacturing capacity to satisfy any increased demand for our products. Under these circumstances, we may be forced to rely on third parties for our manufacturing needs, which could increase our manufacturing costs, decreases our profit margin, decrease our control over manufacturing processes, limit our ability to meet customer demand and delay new product development until we could secure a relationship with a third-party manufacturer, which we may not be able to do in a timely manner, on acceptable terms or at all. If any of these risks were to occur, our operations, performance and customer relationships could be severely harmed. In addition, we may need to expand our existing manufacturing facility or establish a new facility. Any need to expand or replace our manufacturing facility would be expensive and time-consuming and could also subject us to factory audits by our customers that could themselves result in delays, unexpected costs or customer losses if we cannot meet the standards of any such audits. Further, we may not be able to replace or increase our manufacturing capacity at all. The occurrence of any of these events could have a material adverse effect on our business, financial condition and results of operations.

We depend on third parties to design and manufacture custom components for some of our products, which exposes us to risks.

Significant customized components, such as ASICs, that are used in HyperCloud and some of our other products are designed and manufactured by third parties. The ability and willingness of third parties to enter into these engagements with us and perform in accordance with these engagements is largely outside of our control. If one or more of our design or manufacturing partners experiences a manufacturing disruption, fails to dedicate adequate resources to the production of our products, experiences financial instability or otherwise fails to perform its obligations to us in a timely manner or at satisfactory quality levels, our ability to bring products to market or deliver products to our customers, as well as our reputation, could suffer and our business and prospects could be materially harmed. In the event of any failure by our component manufacturers, we may have no readily available alternative source of supply for these components, since, in our experience, the lead time needed to establish a relationship with a new design or manufacturing partner is substantial, and the time for our OEM customers to re-qualify our product with components from a new vendor is also significant. Additionally, if we need to replace one of our component manufacturers, we may not be able to do so in a timely manner, on acceptable terms or at all. Further, we may not be able to redesign our customized components to be manufactured by the new manufacturer, in which case we could infringe on the intellectual property of our current design or manufacturing partner when we redesign the custom components. Such an occurrence could force us to stop selling certain products or expose us to lawsuits, license payments or other liabilities.

Our dependence on third-party manufacturers exposes us to many other risks, including, among others: reduced control over delivery schedules, quality, manufacturing yields and costs; the potential lack of adequate capacity during periods of excess demand; limited warranties on products supplied to us; and potential misappropriation of our intellectual property or the intellectual property of others. We are dependent on our manufacturing partners to manufacture components with acceptable quality and manufacturing yields, to deliver these components to us on a timely basis and to allocate a portion of their manufacturing capacity sufficient to meet our needs. Although our products are designed using the process design rules of the particular manufacturers, our manufacturing partners may not be able to achieve or maintain acceptable yields or deliver sufficient quantities of components on a timely basis or at an acceptable cost. Additionally, our manufacturing partners may not continue to devote adequate resources to produce our products or continue to advance the process design technologies on which the qualification and manufacturing of our products are based. Further, we could be exposed to liability if our component manufacturers are found to infringe the intellectual property rights of others and we are held responsible for any such infringement. Any of these risks could limit our ability to meet customer demand and materially adversely affect our business and operating results.

If our products do not meet quality standards or are defective or used in defective systems, we may be subject to quality holds, warranty claims, recalls or liability claims.

Our customers require our products to meet strict quality standards. If our products do not meet these standards, our customers may discontinue purchases from us until we are able to resolve the quality issues that are causing us to not meet the standards, which we may not be able to do. These "quality holds" could be costly and time-consuming to resolve and could have a significant adverse impact on our revenues and operating results.

If our products are defectively manufactured, contain defective components or are used in defective or malfunctioning systems, we could be subject to warranty and product liability claims, product recalls, safety alerts or advisory notices.

Although we generally attempt to contractually limit our exposure to incidental and consequential damages, if these contract provisions are not enforced or if liabilities arise that are not effectively limited, we could incur substantial costs in defending or settling product liability claims. While we currently have product liability insurance coverage, it may not provide coverage under certain circumstances and it may not be adequate to satisfy claims made against us. We also may be unable to maintain insurance in the future at satisfactory rates or in adequate amounts.

Warranty and product liability claims, product recalls, safety alerts or advisory notices, regardless of their coverage by insurance or their ultimate outcome, could have a material adverse effect on our business, financial condition and ability to attract and retain customers.

We may become involved in non-patent related litigation and administrative proceedings that may materially adversely affect us.

From time to time, we may become involved in various legal proceedings relating to matters incidental to the ordinary course of our business, including commercial, employment, class action, whistleblower and other litigation and claims, as well as governmental and other regulatory investigations and proceedings. Such matters can be time-consuming, divert management's attention and resources and cause us to incur significant expenses. Furthermore, because litigation is inherently unpredictable, the results of these actions could subject us to monetary damages or other liabilities and have a material adverse effect on our business, results of operations and financial condition.

Our indemnification obligations for the infringement by our products of the intellectual property rights of others could require us to pay substantial damages.

As is common in our industry, we have a number of agreements in which we have agreed to defend, indemnify and hold harmless our customers and suppliers from damages and costs that may arise from the infringement by our products of third-party patents, trademarks or other proprietary rights. The scope of these indemnities varies, but may, in some instances, include indemnification for damages and expenses, including attorneys' fees. The term of these indemnification obligations is generally perpetual after execution of an agreement and the maximum potential amount of future payments we could be required to make under these indemnification obligations is often unlimited. Any indemnification claims by customers could require us to incur significant legal fees and could potentially result in our payment of substantial damages, and our insurance generally would not cover these fees or damages. As a result, the occurrence of any of these risks could result in a material adverse effect on our business and results of operations.

We depend on a few key employees, and our business could be harmed if we lose the services of any of these employees or are unable to attract and retain other qualified personnel.

To date, we have been highly dependent on the experience, relationships and technical knowledge of certain key employees. We believe that our future success will be dependent on our ability to retain the services of these key employees, develop their successors and properly manage the transition of their roles should departures occur. The loss of these key employees or their inability to provide their services could delay the development and introduction of new or enhanced products, negatively impact our ability to sell our existing products, limit our ability to pursue our other business goals and strategies and otherwise harm our business. We do not have employment agreements with any of these key employees other than Chun K. Hong, our President, Chief Executive Officer and Chairman of our board of directors. We maintain “Key Man” life insurance on Mr. Hong, but we do not carry “Key Man” life insurance on any of our other key employees.

Our future success also depends on our ability to attract, retain and motivate highly skilled engineering, manufacturing and other technical and sales personnel. Competition for experienced personnel is intense. We may not be successful in attracting new engineers or other technical personnel or in retaining or motivating our existing personnel. If we are unable to hire and retain engineers with the skills necessary to keep pace with the evolving technologies in our markets, our ability to continue to provide our existing products and to develop new or enhanced products will be negatively impacted, which would harm our business. In addition, a general shortage of experienced engineers could lead to increased recruiting, relocation and compensation costs to attract such engineers, which may exceed our expectations and resources. These increased costs may make hiring new engineers difficult or may increase our operating expenses.

A significant portion of our workforce consists of contract personnel. We invest considerable time and expense to train these contract personnel; however, they typically may terminate their relationships with us at any time. As a result, we may experience high turnover rates in this contract personnel workforce, which may require us to expend additional resources to attract, train and retain replacements. Additionally, if we convert any of these contract personnel into permanent employees, we may have to pay finder’s fees to the contract agency. These risks associated with our contract personnel workforce may involve increased costs or delays or failures in meeting customer requirements or developing new or enhanced products, any of which could materially adversely affect our business and operating performance.

We rely on our internal and third-party sales representatives to market and sell our products, and any failure by these representatives to perform as expected could reduce our sales.

We primarily market and sell our products through a direct sales force and a network of independent sales representatives. We have expended significant resources to build our internal sales and marketing function, but compared to many of our competitors, we have relatively little experience creating a sales and marketing platform and developing a team to implement it. We may be unsuccessful in these efforts.

These sales representatives generally may terminate their relationships with us at any time. As a result, our performance depends in part on our ability to retain existing and attract additional sales representatives that will be able to market and support our products effectively, especially in markets in which we have not previously distributed our products. Our efforts to attract, train and retain these sales representatives to be knowledgeable about our industry, products and technologies are costly and time-consuming. If these efforts fail, our investments in these sales representatives may not produce the expected benefits and our ability to market and sell our products may be limited, which could materially harm our financial condition and operating results. Further, our reliance upon independent sales representatives subjects us to risks, as we have very little control over their activities and they are generally free to market and sell other, potentially competing products. As a result, these independent sales representatives could devote insufficient time or resources to marketing our products, could market them in an ineffective manner or could otherwise be unsuccessful in selling adequate quantities of our products.

Economic, geographic and political and other risks associated with our international sales and operations expose us to significant risks.

Part of our growth strategy involves making sales to foreign corporations and delivering our products to facilities located in foreign countries. To facilitate this process and to meet the long-term projected demand for our products, we have established a manufacturing facility in the PRC, which performs most of our worldwide manufacturing activities. Selling and manufacturing in foreign countries subjects us to additional risks not present with our domestic operations, as we are operating in business and regulatory environments in which we have limited experience. Further, the geographic distance from our headquarters in Irvine, California, compounds the difficulties of running a manufacturing operation in the PRC. For instance, we may not be able to maintain the desired amount of control over production capacity and timing, inventory levels, product quality, delivery schedules, manufacturing yields and costs. Moreover, we will need to continue to overcome language and cultural barriers to effectively conduct these international operations. Our failure to meet applicable regulatory requirements or overcome cultural barriers could result in legal consequences or production delays and increased turnaround times, which would adversely affect our business. In addition, changes to the labor laws of the PRC could increase the cost of employing the local workforce. The increased industrialization of the PRC, as well as general economic and political conditions in the PRC, could also increase the cost of local labor or the other costs of doing business in the PRC. Any of these factors could negatively impact the cost savings we experience from locating our manufacturing facility in the PRC. Additionally, our management has limited experience creating or overseeing foreign operations, and the ongoing management of our PRC facility may require our management team to divert substantial amounts of their time and attention, particularly if we encounter operational, legal or cultural difficulties or disruptions at our PRC facility.

To date, all of our net product sales have been denominated in U.S. dollars. In the future, however, some of our net product sales may be denominated in Chinese Renminbi (“RMB”). The Chinese government controls the procedures by which RMB is converted into other currencies, which generally requires government consent. As a result, RMB may not be freely convertible into other currencies at all times. If the Chinese government institutes changes in currency conversion procedures or imposes additional restrictions on currency conversion, our operations and our operating results could be negatively impacted. In addition, Chinese law imposes restrictions on the movement of funds outside of the PRC. If we need or decide to repatriate funds from our Chinese operations, we would be required to comply with the procedures and regulations of applicable Chinese law. Any failure to comply with these procedures and regulations could adversely affect our liquidity and financial condition. Further, if we are able to repatriate funds from our Chinese operations, these funds would be subject to U.S. corporate income tax. In addition, fluctuations in the exchange rate between RMB and U.S. dollars may adversely affect our expenses and results of operations, the value of our assets and liabilities and the comparability of our period-to-period results.

In addition, international turmoil and the threat of future terrorist attacks, both domestically and internationally, have contributed to an uncertain political and economic climate, both in the United States and globally, and have negatively impacted the worldwide economy. The economies of the PRC and other countries in which we make sales have been highly volatile in the recent past, resulting in significant fluctuations in local currencies and other instabilities. These conditions could continue or worsen, which could adversely affect our foreign operations and some of our customers or suppliers and our performance.

Our international sales are subject to a number of additional risks, including regulatory risks, timing and availability of export licenses, difficulties in accounts receivable collections, difficulties in managing distributors, lack of a significant local sales presence, difficulties in obtaining governmental approvals, compliance with a wide variety of complex foreign laws and treaties and potentially adverse tax consequences. In addition, the United States or foreign countries may implement quotas, duties, tariffs, taxes or other charges or restrictions upon the importation or exportation of our products, leading to a reduction in sales and profitability in that country. This risk of increased trade barriers or charges has become more pronounced following the results of the recent U.S. presidential election, as the trade policies of the current U.S. presidential administration, including withdrawal from the Trans-Pacific Partnership and proposed revision to the North American Free Trade Agreement, could threaten or otherwise have a significant negative effect on our ability to continue to conduct our international operations in the manner and at the costs as we have in the past. Any increased costs or regulatory obstacles with respect to our international operations, including our manufacturing facility in the PRC and our international sales, could have a material adverse effect on our business, financial condition and prospects for growth.

Our operations could be disrupted by power outages, natural disasters or other factors.

Due to the geographic concentration of our manufacturing operations in our PRC facility and our small number of component suppliers, a disruption resulting from equipment or power failures, quality control issues, human errors, government intervention or natural disasters, including earthquakes and floods, could require significant costs to repair and could interrupt or interfere with the manufacture of our products and cause significant delays in product shipments, which could harm our customer relationships, financial condition and results of operations. In July 2014, our PRC facility suffered water damage as a result of heavy rain and floods, which forced us to temporarily halt manufacturing at the facility while necessary repairs or replacements were made to the facility and to certain of our manufacturing equipment. This incident caused us to incur additional expenses, as we shifted our manufacturing activities to a third-party facility in the PRC to mitigate the disruption in product shipments to our customers. While we believe we were able to contain this disruption, we may not be able to secure alternative manufacturing capabilities if manufacturing at the PRC facility is disrupted in the future, in which case our relationships with our customers could be materially harmed. Additionally, while we were able to favorably resolve our claim with our insurance carrier with respect to the damage to our facility cause by the July 2014 incident, we may not experience the same outcome if a similar event occurs in the future, in which case we would be forced to bear the significant costs to repair any damage to our manufacturing equipment and facility.

Difficulties with our global information technology systems, including any unauthorized access, could harm our business.

Any failure or malfunctioning of our global information technology systems, errors or misuse by system users, difficulties in migrating stand-alone systems to our centralized systems or inadequacy of the systems in addressing the needs of our operations could disrupt our ability to timely and accurately manufacture and ship products, divert management's and key employees' attention away from other business matters and involve significant costs and other resources to repair or otherwise resolve, any of which could have a material adverse effect on our business, financial condition and results of operations. Any such event could also disrupt our ability to timely and accurately process, report and evaluate key operating metrics and key components of our results of operations, financial position and cash flows and could adversely affect our ability to complete other important business process, such as maintenance of our disclosure controls and procedures and evaluation of our internal control over financial reporting.

We store data about our business, including certain customer data, information about our and our customer's intellectual property and other proprietary information, on our global information technology systems. While our systems includes security measures designed to prevent unauthorized access, third parties may circumvent these measures and gain unauthorized access to our systems. This unauthorized access could be the result of employee error, employee malfeasance or other causes, including intentional misconduct by computer hackers. Because the techniques used to gain unauthorized access to information technology systems evolve frequently and generally are not recognized until successful, we may be unable to anticipate these techniques or to implement adequate preventative measures. Any security breach could result in disruption to our business, misappropriation or loss of data, significant resources to correct, loss of confidence in us by our customers, damage to our reputation, legal liability and a negative impact on our performance.

Our failure to comply with environmental and other applicable laws and regulations could subject us to significant fines and liabilities or cause us to incur significant costs.

We are subject to various and frequently changing U.S. federal, state and local and foreign laws and regulations relating to the protection of the environment, including laws governing the discharge of pollutants into the air and water, the management and disposal of hazardous substances and wastes and the clean-up of contaminated sites. In particular, some of our manufacturing processes may require us to handle and dispose of hazardous materials from time to time. For example, in the past our manufacturing operations have used lead-based solder in the assembly of our products. Today, we use lead-free soldering technologies in our manufacturing processes, as this is required for products entering the

European Union. We could incur substantial costs, including clean-up costs, civil or criminal fines or sanctions and third-party claims for property damage or personal injury, as a result of violations of or noncompliance with these and other environmental laws and regulations. Although we have not incurred significant costs to date to comply with these laws and regulations, new laws or changes to current laws and regulations to make them more stringent could require us to incur significant costs to remain in compliance.

We are also subject to a variety of laws and regulations relating to other matters, including workplace health and safety, labor and employment, foreign business practices, public reporting and taxation, among others. It is difficult and costly to manage the requirements of every authority having jurisdiction over our various activities and to comply with their varying standards. Any changes to existing regulations or adoption of new regulations may result in significant additional expense to us and our customers. Further, our failure to comply with any applicable laws and regulations may result in a variety of administrative, civil and criminal enforcement measures, including monetary penalties or imposition of sanctions or other corrective requirements, any of which could materially adversely affect our reputation and our business.

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

In August 2012, the SEC adopted rules requiring disclosure of specified minerals, known as conflict minerals, that are necessary to the functionality or production of products manufactured or contracted to be manufactured by public companies. The rules require companies to verify and disclose whether or not such minerals, as used in a company's products or their manufacture, originate from the Democratic Republic of Congo or an adjoining country. Because our products contain certain conflict minerals and we or our manufacturers use these conflict minerals in the manufacture of our products, we are required to comply with these disclosure rules. To comply with the rules, we are required to conduct a reasonable country of origin inquiry each year and, depending on the results of that inquiry, we may be required to exercise due diligence on the source and chain of custody of conflict minerals contained in or used to manufacture our products. Such due diligence must conform to a nationally or internationally recognized due diligence framework. We are also required to file a disclosure report with the SEC of each year relating to our conflict mineral use.

The due diligence activities required to determine the source and chain of custody of minerals contained in our products or used in their manufacture are time -consuming and may result in significant costs. Due to the size and complexity of our supply chain, we face significant challenges in verifying the origins of the minerals used in our products. Further, these rules could affect the availability in sufficient quantities and at competitive prices of certain minerals used in our products and their manufacture, which could result in increased material and component costs and additional costs associated with potential changes to our products, processes or sources of supply. Additionally, if we are unable to sufficiently verify the origin of the minerals used in our products through the due diligence measures that we implement, we may not be able to satisfy customers who require that our products be certified as "conflict-free," which could place us at a competitive disadvantage.

Our internal control over financial reporting may not be effective, which could have a significant and adverse effect on our business.

Section 404 of the Sarbanes-Oxley Act of 2002 and the related rules and regulations of the SEC, which we collectively refer to as Section 404, require us to evaluate our internal control over financial reporting and require management to report on the effectiveness of this internal control as of the end of each year. Effective internal control is necessary for us to produce reliable financial reports and is important in our effort to prevent financial fraud. In the course of our Section 404 evaluations, we or our independent registered public accounting firm may identify significant deficiencies or material weaknesses in our internal control over financial reporting. If we fail to maintain an effective system of internal control over financial reporting or if management or our independent registered public accounting firm discover material weaknesses, we may be unable to produce reliable financial reports or prevent fraud, which could harm our financial condition and results of operations, result in a loss of investor confidence and negatively impact our stock price. Further, our Section 404 evaluations may lead us to conclude that enhancements, modifications or changes to our internal control over financial reporting are necessary or desirable. Implementing any such changes would divert the attention of management, could involve significant time and costs and may negatively impact our financial results.

If we do not effectively manage any future growth we may experience, our resources, systems and controls may be strained and our results of operations may suffer.

Any future growth we may experience could strain our resources, management, information and telecommunication systems and operating and financial controls. To manage future growth effectively, including any expansion of volume in our manufacturing facility in the PRC, we must be able to improve and expand our systems and controls. We may not be able to do this in a timely or cost-effective manner. In addition, our officers have relatively limited experience in managing a rapidly growing business. As a result, they may not be able to manage any future growth we may experience. Any failure to manage any growth we may experience or improve or expand our existing systems and controls, or unexpected difficulties in doing so, could harm our business.

If we acquire businesses or technologies or pursue other strategic transactions in the future, these transactions could disrupt our business and harm our operating results and financial condition.

We evaluate opportunities to acquire businesses or technologies or pursue other strategic transactions, including collaboration or joint development arrangements such as our JDLA with Samsung that might complement our current product offerings or enhance our intellectual property portfolio or technical capabilities. We have no experience acquiring other businesses or technologies. Acquisitions and other strategic transactions entail a number of risks that could adversely affect our business and operating results, including, among others:

- difficulties in integrating the operations, technologies or products of acquired companies or working with third parties with which we may partner on joint development or collaboration relationships;
- the diversion of management’s time and attention from the daily operations of the business;
- insufficient increases in revenues to offset increased expenses associated with an acquisition or strategic transaction;
- difficulties retaining business relationships with our existing suppliers and customers or the suppliers and customers of an acquired company;
- overestimation of potential synergies or a delay in realizing these synergies;
- entering markets in which we have no or limited experience and in which competitors have stronger market positions;
- the potential loss of key employees of our Company or an acquired company;
- exposure to contingent liabilities of an acquired company;
- depletion of cash resources to fund an acquisition or other strategic transaction, or dilution of existing stockholders or increased leverage relative to our earnings or to our equity capitalization if we issue debt or equity securities to fund the transaction;
- adverse tax consequences; and
- incurrence of material charges, such as depreciation, deferred compensation charges, in-process research and development charges, the amortization of amounts related to deferred stock-based compensation expense and identifiable purchased intangible assets or impairment of goodwill.

If any of these risks were to occur, we may not be able to realize the intended benefits of an acquisition or strategic transaction and our operating results, financial condition and business prospects could be materially negatively affected.

Risks Related to Our Common Stock

Our results of operations fluctuate significantly and are difficult to predict, and any failure to meet investor or analyst expectations could cause the price of our common stock to decline.

Our operating results have fluctuated significantly in the past, and we expect they will continue to fluctuate from quarter-to-quarter and year-to-year in the future due to a variety of factors, many of which are beyond our control. Factors relating to our business that may contribute to these quarterly and annual fluctuations include, among others, the other risk factors described in this Item 1A. Due to the various factors described herein and others, the results of any prior quarterly or annual periods should not be relied upon as an indication of our future operating performance. If our quarterly results of operations fall below the expectations of securities analysts or investors, the price of our common stock could decline substantially. As a result of the significant fluctuations of our operating results in prior periods, period-to-period comparisons of our operating results may not be meaningful and investors in our common stock should not rely on these comparisons.

Our principal stockholders have significant voting power and may take actions that may not be in the best interest of our other stockholders.

As of May 11, 2017, 9.1% of our outstanding common stock was held by our directors and officers, including 8.2% held by Chun K. Hong, our Chief Executive Officer and Chairman of our board of directors. As a result, Mr. Hong has the ability to exert substantial influence over all matters requiring approval by our stockholders, including the election and removal of directors, any proposed merger, consolidation or sale of all or substantially all of our assets and other significant corporate transactions. This concentration of control could be disadvantageous to other stockholders with interests different from those of Mr. Hong.

Anti-takeover provisions under our charter documents and Delaware law, as well as our recently adopted rights agreement, could delay or prevent a change of control and could also limit the market price of our common stock.

Our certificate of incorporation and bylaws contain provisions that could delay or prevent a change of control of our Company or changes in our board of directors that our stockholders might consider favorable. In addition, these anti-takeover provisions could limit the price that investors would be willing to pay for shares of our common stock. The following are examples of the anti-takeover provision that are included in our certificate of incorporation and bylaws as currently in effect:

- our board of directors is authorized, without prior stockholder approval, to designate and issue preferred stock, commonly referred to as “blank check” preferred stock, which may have rights senior to those of our common stock;
- stockholder action by written consent is prohibited;
- nominations for election to our board of directors and the submission of matters to be acted upon by stockholders at a meeting are subject to advance notice requirements; and
- our board of directors is expressly authorized to make, alter or repeal our bylaws.

In addition, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which may prohibit certain business combinations with stockholders owning 15% or more of our outstanding voting stock. Further, in April 2017, we adopted a rights agreement that would, under certain specified circumstances and for so long as the rights issued under the rights agreement are outstanding, give the holders of our common stock the right to acquire additional shares of our capital stock, which would make it more difficult for a third party to acquire a significant percentage of our outstanding capital stock or attempt a hostile takeover of our Company. These and other provisions in our certificate of incorporation and bylaws and of Delaware law, as well as the existence of our rights agreement, could make it more difficult for stockholders or potential acquirers to obtain control of our board of directors or initiate actions that are opposed by our board of directors, including a merger, tender offer, proxy contest or other change of control transaction involving our Company. Any delay or prevention of a change of control transaction or changes in our board of directors could prevent the consummation of a transaction in which our stockholders could receive a substantial premium over the then-current market price for our common stock.

The price and trading volume of our common stock has and may continue to fluctuate significantly.

Our common stock has been publicly traded since November 2006. The price and trading volume of our common stock are volatile and have in the past fluctuated significantly. This volatility could continue, in which case an active trading market in our common stock may never be sustained and stockholder may not be able to sell their shares at the desired time or the desired price. The market price at which our common stock trades may be influenced by many factors, including, among others, the following:

- our operating and financial performance and prospects, including our ability to achieve and sustain profitability in the future;
- investor perception of us and the industry in which we operate;
- the availability and level of research coverage of and market-making in our common stock;
- changes in earnings estimates or buy/sell recommendations by analysts;
- any financial projections we may provide to the public, any changes to these projections or our failure to meet these projections;
- our announcement of significant strategic transactions or relationships or the initiation of legal proceedings, including patent infringement actions;
- the results of legal proceedings in which we are involved;
- sales of newly issued common stock or other securities or the perception that such sales may occur; and
- general political, economic and market conditions, including volatility or uncertainty in these conditions.

In addition, shares of our common stock and the public stock markets in general have experienced, and may continue to experience, extreme price and trading volume volatility, at times irrespective of the state of the business of any particular company. These fluctuations may adversely affect the market price of our common stock.

In 2007, following a drop in the market price of our common stock, securities litigation was initiated against us. Given the historic volatility of our securities and securities in our industry, we may become engaged in this type of litigation again in the future. Securities litigation, like other types of litigation, is expensive and time-consuming and could subject us to unfavorable results.

We do not currently intend to pay dividends on our common stock, and any return to investors is expected to come, if at all, only from potential increases in the price of our common stock.

We intend to use all available funds to finance our operations. Accordingly, while payment of dividends rests within the discretion of our board of directors, no cash dividends on our common shares have been declared or paid by us in the past and we have no intention of paying any such dividends in the foreseeable future. Any return to investors is expected to come, if at all, only from potential increases in the price of our common stock.

We may not be able to maintain our NASDAQ listing.

During 2015 and into early 2016, as well as during April and early May of 2017, there have been periods in which we were not compliant with various applicable continued listing standards of the NASDAQ Stock Market ("NASDAQ"), including NASDAQ's rule requiring that the bid price of our common stock close at or above a minimum of $1.00 per share. Although we received compliance letters from NASDAQ notifying us that we had regained compliance with the applicable continued listing requirements and we believe we are currently in compliance with all such requirements for the NASDAQ Capital Market, we may again fail to comply with these requirements in the future. In that case, we would receive additional deficiency letters from NASDAQ and our common stock could be delisted from trading on the NASDAQ Capital Market. Such a delisting could cause our common stock to be classified as a "penny stock," among other potentially detrimental consequences, any of which could significantly impact our stockholders' ability to sell their shares of our common stock or to sell these shares at a price that a stockholder may deem acceptable.

Item 6. Exhibits.

The information required by this Item 6 is set forth on the Exhibit Index that immediately follows the signature page to this report and is incorporated herein by reference.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Date: May 16, 2017

NETLIST, INC.
a Delaware corporation
(Registrant)

By: /s/ Chun K. Hong

Chun K. Hong
President, Chief Executive Officer and Chairman of the Board
(Principal Executive Officer)

By: /s/ Gail M. Sasaki

Gail M. Sasaki
Vice President and Chief Financial Officer
(Principal Financial Officer)

EXHIBIT INDEX

Exhibit No.	Description
3.1	Restated Certificate of Incorporation of Netlist, Inc. (incorporated by reference to exhibit 3.1 of the registration statement on Form S-1 of the registrant (No. 333-136735) filed with the SEC on October 23, 2006).
3.1.1	Certificate of Designation of the Series A Preferred Stock of Netlist, Inc. (incorporated by reference to exhibit 3.1 of the registrant's Current Report on Form 8-K filed with the SEC on April 17, 2017).
3.2	Amended and Restated Bylaws of Netlist, Inc. (incorporated by reference to exhibit number 3.1 of the registrant's Current Report on Form 8-K filed with the SEC on December 20, 2012).
10.1	Amendment to Loan and Security Agreement, dated March 27, 2017 and effective as of January 29, 2017, by and between Netlist, Inc. and Silicon Valley Bank (incorporated by reference to exhibit 10.1 of the registrant's Current Report on Form 8-K filed with the SEC on March 29, 2017).
31.1+	Certification of Chief Executive Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities and Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2+	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities and Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32*	Certification by Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS+	XBRL Instance Document
101.SCH+	XBRL Taxonomy Extension Schema Document
101.CAL+	XBRL Taxonomy Extension Calculation Linkbase Document
101.LAB+	XBRL Taxonomy Extension Label Linkbase Document
101.PRE+	XBRL Taxonomy Extension Presentation Linkbase Document
101.DEF+	XBRL Taxonomy Extension Definition Linkbase Document

+ Filed herewith.
* Furnished herewith.

EXHIBIT 31.1

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

I, Chun K. Hong, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Netlist, Inc., a Delaware corporation (the "Registrant");

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 we 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.

May 16, 2017

/s/ Chun K. Hong
Chun K. Hong
President, Chief Executive Officer and Chairman of the Board
(Principal Executive Officer)

EXHIBIT 31.2

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

I, Gail M. Sasaki, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Netlist, Inc., a Delaware corporation (the "Registrant");

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 we 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.

May 16, 2017	/s/ Gail M. Sasaki
	Gail M. Sasaki Vice President and Chief Financial Officer (Principal Financial Officer)

Exhibit 32

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

In connection with the Quarterly Report on Form 10-Q of Netlist, Inc., a Delaware corporation ("Netlist") for the quarter ended April 1, 2017 (the "Report"), Chun K. Hong, president, chief executive officer and chairman of the board of Netlist, and Gail M. Sasaki, vice president and chief financial officer of Netlist, each hereby certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to his or her knowledge:

(1) the Report fully complies with the requirements of Section 13(a) of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of Netlist, Inc.

May 16, 2017	/s/ Chun K. Hong Chun K. Hong President, Chief Executive Officer and Chairman of the Board (Principal Executive Officer)
May 16, 2017	/s/ Gail M. Sasaki Gail M. Sasaki Vice President and Chief Financial Officer (Principal Financial Officer)