NETLIST INC
Form 10-Q
August 14, 2018
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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 June 30, 2018

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 every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit 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 Exchange Act). Yes No

As of August 10, 2018, there were 111,311,243 shares of the registrant's common stock outstanding.

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NETLIST, INC. AND SUBSIDIARIES

QUARTERLY REPORT ON FORM 10-Q

FOR THE THREE AND SIX MONTHS ENDED JUNE 30, 2018

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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)

	June 30, 2018 (unaudited)	December 30, 2017 (audited)
ASSETS		
Current Assets:		
Cash and cash equivalents	$ 6,981	$ 6,720
Restricted cash	1,100	2,800
Accounts receivable, net of reserves of $41 (2018) and $44 (2017)	2,831	2,997
Inventories	3,465	4,105
Prepaid expenses and other current assets	581	303
Total current assets	14,958	16,925
Property and equipment, net	364	459
Other assets	1,396	1,406
Total assets	$ 16,718	$ 18,790
LIABILITIES AND STOCKHOLDERS' DEFICIT		
Current Liabilities:		
Accounts payable	$ 6,805	$ 6,120
Revolving line of credit	2,133	2,024
Accrued payroll and related liabilities	595	807
Accrued expenses and other current liabilities	356	338
Note payable	115	-
Total current liabilities	10,004	9,289
Convertible promissory note and accrued interest, net of debt discount	15,022	14,766
Long-term warranty liability	70	61
Total liabilities	25,096	24,116
Commitments and contingencies		
Stockholders' deficit:		
Preferred stock, $0.001 par value - 10,000 shares authorized: Series A preferred stock, $0.001 par value; 1,000 shares authorized; none issued and outstanding	-	-
	102	80

Common stock, $0.001 par value - 150,000 shares authorized; 102,333 (2018) and 79,314 (2017) shares issued and outstanding		
Additional paid-in capital	157,656	152,640
Accumulated deficit	(166,136)	(158,046)
Total stockholders' deficit	(8,378)	(5,326)
Total liabilities and stockholders' deficit	$ 16,718	$ 18,790

See accompanying notes.

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NETLIST, INC. AND SUBSIDIARIES

Unaudited Condensed Consolidated Statements of Operations

(in thousands, except per share amounts)

	Three Months Ended		Six Months Ended	
	June 30, 2018	July 1, 2017	June 30, 2018	July 1, 2017
Net revenues	$ 8,426	$ 11,404	$ 17,305	$ 20,830
Cost of sales(1)	7,944	10,760	16,444	19,506
Gross profit	482	644	861	1,324
Operating expenses:				
Research and development(1)	783	1,487	1,791	2,983
Intellectual property legal fees	1,388	915	3,599	1,381
Selling, general and administrative(1)	1,585	1,951	3,276	3,865
Total operating expenses	3,756	4,353	8,666	8,229
Operating loss	(3,274)	(3,709)	(7,805)	(6,905)
Other expense, net:				
Interest expense, net	(133)	(138)	(280)	(286)
Other (expense) income, net	(10)	-	(5)	2
Total other expense, net	(143)	(138)	(285)	(284)
Loss before provision for income taxes	(3,417)	(3,847)	(8,090)	(7,189)
Provision for income taxes	-	-	-	-
Net loss	$ (3,417)	$ (3,847)	$ (8,090)	$ (7,189)
Net loss per common share:				
Basic and diluted	$ (0.04)	$ (0.06)	$ (0.09)	$ (0.12)
Weighted-average common shares outstanding:				
Basic and diluted	91,685	61,844	87,073	61,763

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

Cost of sales	$ 6	$ 13	$ 12	$ 29
Research and development	56	114	136	180
Selling, general and administrative	111	254	266	436
Total stock-based compensation	$ 173	$ 381	$ 414	$ 645

See accompanying notes.

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NETLIST, INC. AND SUBSIDIARIES

Unaudited Condensed Consolidated Statements of Cash Flows

(in thousands)

	Six Months Ended	
	June 30, 2018	July 1, 2017
Cash flows from operating activities:		
Net loss	$ (8,090)	$ (7,189)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	132	144
Interest accrued on convertible promissory note	150	150
Amortization of debt discount	107	108
Stock-based compensation	414	645
Issuance of warrant in lieu of payment	12	-
Changes in operating assets and liabilities:		
Accounts receivable	166	(68)
Inventories	640	(1,748)
Prepaid expenses and other assets	76	122
Accounts payable	685	2,620
Accrued payroll and related liabilities	(212)	(296)
Accrued expenses and other liabilities	27	2
Net cash used in operating activities	(5,893)	(5,510)
Cash flows from investing activities:		
Acquisition of property and equipment	(37)	(53)
Net cash used in investing activities	(37)	(53)
Cash flows from financing activities:		
Net borrowings under line of credit	109	656
Payments on debt	(230)	(230)
Proceeds from issuance of common stock, net	4,612	-
Proceeds from exercise of stock options and warrants	-	157
Net cash provided by financing activities	4,491	583
Net change in cash, cash equivalents and restricted cash	(1,439)	(4,980)
Cash, cash equivalents and restricted cash at beginning of period	9,520	12,576
Cash, cash equivalents and restricted cash at end of period	$ 8,081	$ 7,596
Reconciliation of cash, cash equivalents and restricted cash at end of period:		
Cash and cash equivalents	$ 6,981	$ 4,496
Restricted cash	1,100	3,100
Cash, cash equivalents and restricted cash at end of period	$ 8,081	$ 7,596

See accompanying notes.

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NETLIST, INC. AND SUBSIDIARIES

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

June 30, 2018

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), provides high-performance modular memory subsystems to customers in diverse industries that require enterprise and storage class memory solutions to empower critical business decisions. The Company has a history of introducing disruptive new products, such as one of the first load-reduced dual in-line memory modules ("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, in-memory databases, high performance computing and advanced data storage solutions. The Company also resells NAND flash, DRAM products and other component products to end-customers that are not reached in the distribution models of the component manufacturers, including storage customers, appliance customers, system builders and cloud and datacenter customers.

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, protection and enforcement of technology innovations it believes are essential to its business. The Company's early pioneering work in these areas has been broadly adopted in industry-standard registered dual in-line memory module ("RDIMM") LRDIMM and 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 the Company's patents through enforcement actions against parties it believes are infringing them.

Netlist was incorporated in June 2000 and is headquartered in Irvine, California. The Company has established a manufacturing facility in the People's Republic of China ("PRC"), which became operational in July 2007.

Liquidity

The Company incurred net losses of $3.4 million and $8.1 million for the three and six months ended June 30, 2018, respectively, and $13.4 million and $11.2 million for the fiscal years ended December 30, 2017 and December 31, 2016, respectively. The Company has historically financed its operations primarily with revenues generated from operations, including product sales, proceeds from issuances of equity and debt securities including convertible debt 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 5, 6 and 8).

On August 22, 2017, the Company completed an underwritten public offering (the "2017 Offering"), pursuant to which it sold 8,500,000 shares of its common stock at a price to the public of $0.60 per share. The net proceeds to the Company from the 2017 Offering were $4.4 million, after deducting underwriting discounts and commissions and offering expenses paid by the Company.

On November 14, 2017, the Company entered into an At Market Issuance Sales Agreement (the "Sales Agreement") with B. Riley FBR, Inc. (the "Agent") to sell shares of its common stock, with aggregate gross proceeds of up to $9.0 million, from time to time, through an "at-the-market" equity offering program under which the Agent will act

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as sales agent (the "ATM Program") (see Note 9). As of June 30, 2018, the Company had sold 25,983,098 shares of its common stock in the ATM Program for net proceeds of $6.6 million, after deducting sales commissions and other offering expenses paid by the Company. In addition, subsequent to June 30, 2018 through August 10, 2018, the Company sold 8,978,094 shares of its common stock for approximate net proceeds of $1.3 million, after deducting sales commissions and other offering expenses paid by the Company.

On May 17, 2018, the Company entered into a Board approved arm's length Share Purchase Agreement (the "Purchase Agreement") with a trust controlled by C.K. Hong, the Company's President, Chief Executive Officer and Chairman of the Board, pursuant to which the Company sold to Mr. Hong's trust 5,405,405 shares of the Company's common stock, par value $0.001 per share, at a price per share of $0.148 (which equals the most recent consolidated closing bid price of the Company's common stock, as reported by the Nasdaq Capital Market, as of the signing of the Purchase Agreement). The aggregate net proceeds received by the Company were $0.8 million.

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 its 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 5) and funds raised through the ATM Programs, 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

Significant Accounting Policies

Basis of Presentation

The accompanying 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. Certain information and footnote disclosures normally included in the consolidated financial statements prepared in accordance with U.S. GAAP have been condensed or omitted pursuant to the rules and regulations of the SEC. Therefore, these condensed consolidated financial statements should be read in conjunction with the audited

consolidated financial statements and notes thereto as of and for the year ended December 30, 2017, included in the Company's Annual Report on Form 10-K filed with the SEC on March 30, 2018 and Form 10-K/A as of April 30, 2018, as amended to include in Part III the information that was to be incorporated by reference from the definitive proxy statement for the 2018 annual meeting of our stockholders in reliance on General Instruction G(3) to Form 10-K, because such proxy statement was not expected to be filed until July of 2018 in connection with a date for such annual meeting in August 2018.

The accompanying condensed consolidated financial statements as of and for the three and six months ended June 30, 2018 are unaudited. In the opinion of management, all adjustments for the fair presentation of the Company's condensed consolidated financial statements have been made. The adjustments are of a normal recurring nature except as otherwise noted. The results of operations for the interim periods are not necessarily indicative of the results to be expected for other periods or the full fiscal year.

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.

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Fiscal Year

The Company operates under a 52 or 53 week fiscal year ending on the Saturday closest to December 31. For 2018, the Company's fiscal year is scheduled to end on December 29, 2018 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 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. The Company bases its estimates and assumptions 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 and assumptions on an ongoing 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 liability; 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 the realization of deferred tax assets. The Company bases its estimates on 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 ongoing basis. Actual results may differ materially from these estimates which may result in material adverse effects on the Company's operating results and financial position.

Revenue Recognition

Our net sales are generated primarily from (i) resales of NAND flash, DRAM products and other component products to end-customers that are not reached in the distribution models of the component manufacturers, including storage customers, appliance customers, system builders and cloud and datacenter customers and (ii) sales of high-performance modular memory subsystems primarily to original equipment manufacturers ("OEMs") in the server, high-performance computing and communications markets.

The Company’s products are sold through ship-and-bill performance obligations, and the revenue is recognized at the point in time when the ownership is transferred to customers. 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. Product returns are estimated at the time of sale using the expected value method and are recorded as a reduction in sales. The Company offers a standard product warranty to its customers and has no other post-shipment obligations. All amounts billed to customers related to shipping and handling are included in net sales, while costs incurred by the Company for shipping and handling are included in cost of sales. See Note 3.

Cash and Cash Equivalents

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

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Restricted Cash

Restricted cash consists of cash to secure standby letters of credit. Restricted cash was $1.1 million as of June 30, 2018 and related to two standby letters of credit. Restricted cash was $2.8 million as of December 30, 2017 and related to three standby letters of credit.

Fair Value of Financial Instruments

The Company follows Financial Accounting Standards Board (“FASB”) Accounting Standards Codification (“ASC”) Topic 820, Fair Value Measurement, to account for the fair value of certain assets and liabilities. ASC Topic 820 defines fair value, establishes a framework for measuring fair value and expands disclosures about fair value measurements. ASC Topic 820 emphasizes that fair value is a market-based measurement, not an entity-specific measurement. Therefore, a fair value measurement should be determined based on the assumptions that market participants would use in pricing the asset or liability. As a basis for considering market participant assumptions in fair value measurements, ASC Topic 820 establishes a fair value hierarchy that distinguishes between market participant assumptions based on market data obtained from sources independent of the reporting entity (observable inputs that are classified within Levels 1 and 2 of the hierarchy) and the reporting entity’s own assumptions about market participant assumptions (unobservable inputs classified within Level 3 of the hierarchy).

Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the Company has the ability to access. An active market is defined as a market in which transactions for the assets or liabilities occur with sufficient frequency and volume to provide pricing information on an ongoing basis. Level 2 inputs are inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly or indirectly. Level 2 inputs may include quoted prices for similar assets and liabilities in active markets, as well as inputs that are observable for the asset or liability (other than quoted prices), such as interest rates, foreign exchange rates and yield curves that are observable at commonly quoted intervals. Level 3 inputs are unobservable inputs for the asset or liability, which are typically based on an entity’s own assumptions, as there is little, if any, related market activity. In instances where the determination of the fair value measurement is based on inputs from different levels of the fair value hierarchy, the level in the fair value hierarchy within which the entire fair value measurement falls is based on the lowest level input that is significant to the fair value measurement in its entirety. The Company’s assessment of the significance of a particular input to the fair value measurement in its entirety requires judgment and considers factors specific to the asset or liability.

The Company’s financial instruments consist principally of cash and cash equivalents, restricted cash, accounts receivable, accounts payable, accrued expenses, a revolving line of credit, a note payable and a convertible promissory note. The Company considers the carrying values of cash and cash equivalents, restricted cash, accounts receivable, accounts payable, accrued expenses, and a note payable to approximate the fair value for these financial instruments based upon an evaluation of the underlying characteristics, market data and because of the short period of time between origination of the instruments and their expected realization. The fair values of the Company’s revolving line

of credit and convertible promissory note are determined using current applicable rates for similar instruments as of the balance sheet date and an assessment of the credit rating of the Company. The carrying value of the Company's revolving line of credit at June 30, 2018 and December 30, 2017 approximates fair value because the Company's interest rate yield is near current market rates for comparable debt instruments. The fair value of the Company's convertible promissory note was estimated using a discounted cash flow analysis using borrowing rates available to the Company for debt instruments with similar terms and maturities. The Company has determined that the valuation of its convertible promissory note is classified in Level 2 of the fair value hierarchy. The carrying value and estimated fair value of the convertible promissory note as of June 30, 2018 were $14.2 million and $12.0 million, respectively. The carrying value and estimated fair value of the convertible promissory note as of December 30, 2017 were $14.1 million and $12.3 million, respectively.

Allowance for Doubtful Accounts

The Company performs credit evaluations of its 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

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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 generally 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 its 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 accounts. 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 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 4), 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 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 net realizable value 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

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amortization of disposed assets are removed from the accounts and any resulting gain or loss is included in other expense, net.

Debt Issuance 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 and 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 June 30, 2018. 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 standard product warranties generally ranging from one to three years, depending on the product and negotiated terms of any purchase agreements with its customers and has no other post-shipment obligations. 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, and the Company does not offer separately priced extended warranty or product maintenance contracts. The Company records an estimate for warranty related costs at the time of sale in cost of sales based on its historical and estimated future product return rates and expected repair or replacement costs (see Note 4). 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

Prior to the early-adoption of FASB ASU No. 2018-07, Compensation – Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting ("ASU 2018-07") in the second quarter of 2018, the Company accounted for equity issuances to non-employees in accordance with ASC Topic 505, Equity. All transactions in which goods or services were the consideration received for the issuance of equity instruments were accounted for based on the fair value of the consideration received or the fair value of the equity instrument issued, whichever was more reliably measurable. The measurement date used to determine the estimated fair value of the equity instrument issued was the earlier of the date on which the third-party performance was complete or the date on which it was probable that performance would occur. Upon the adoption of ASU No. 2018-07, the Company accounts for all stock-based awards in accordance with ASC Topic 718.

In accordance with ASC Topic 718, 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

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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 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 weighted-average of the vesting period and the contractual expiration date of the option. This calculation is in accordance with ASC Topic 718, as amended by certain SEC guidance providing for a safe harbor method 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.

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 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 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, Income Taxes, 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.

Contingent Legal Expense

Contingent legal fees are expensed in the condensed consolidated statements of operations in the period that the related revenues are recognized. In instances where there are no recoveries from potential infringers, no contingent legal fees are paid; however, the Company may be liable for certain out of pocket legal costs incurred pursuant to the underlying legal services agreement.

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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 debt instruments, 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.

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 and six months ended June 30, 2018 and July 1, 2017.

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, computed using the treasury stock method and shares issuable upon conversion of the Samsung Venture Investment Co. ("SVIC") Note (see Note 6). In periods of losses, basic and diluted loss per share are the same, as the effect of stock options, warrants and unvested restricted share awards on loss per share is anti-dilutive.

Business Risks and Uncertainties

The Company's results of operations, liquidity and financial condition are exposed to a number of risks and uncertainties. See the discussion in "Risk Factors" in Part II, Item 1A of this Quarterly Report on Form 10-Q in which these condensed consolidated financial statements are included for more discussion.

Adoption of New Accounting Pronouncements

In May 2014, the FASB issued ASU No. 2014-09, Revenue from Contracts with Customers (Topic 606), which supersedes nearly all existing revenue recognition guidance, including industry-specific guidance. Subsequent to the issuance of ASU No. 2014-09, the FASB clarified the guidance through several Accounting Standards Updates; hereinafter the collection of revenue guidance is referred to as "Topic 606." Topic 606 is based on the principle that an entity should recognize revenue to depict the transfer of goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. Topic 606 also requires additional disclosures about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments and assets recognized from costs incurred to fulfill a contract. The Company adopted Topic 606 on December 31, 2017 using the modified retrospective transition method; accordingly, Topic 606 has been applied to the fiscal 2018 financial statements and disclosures going forward, but the comparative information has not been restated and continues to be reported under the accounting standards in effect for those periods. We expect the impact of the adoption of Topic 606 to be immaterial to our operating results on an ongoing basis. See Note 3, "Revenue Recognition," for additional details on this implementation and the required 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

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in how certain cash receipts and cash payments are classified in the statement of cash flows. 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. The Company adopted these standards in the first quarter of 2018 by using the retrospective transition method, which required the following disclosures and changes to the presentation of its consolidated financial statements: cash, cash equivalents and restricted cash reported on the condensed consolidated statements of cash flows now includes restricted cash of $3.1 million, $3.1 million and $2.8 million as of December 31, 2016, July 1, 2017 and December 30, 2017, respectively, as well as previously reported cash and cash equivalents.

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. The Company adopted ASU 2016-16 in the first quarter of 2018 by using the modified retrospective transition approach, which did not have an impact on its consolidated financial statements.

In May 2017, the FASB issued ASU No. 2017-09, Compensation – Stock Compensation (Topic 718): Scope of Modification Accounting ("ASU 2017-09"), which provides clarity and reduces diversity in practice and reduce cost and complexity when calculating stock compensation, on a change to the terms and conditions of a share-based award. ASU 2017-09 is effective beginning after December 15, 2017 for annual reporting periods, and interim periods within those annual periods. The Company adopted ASU 2017-09 in the first quarter of 2018, which did not have an impact on its consolidated financial statements.

In June 2018, the FASB issued ASU 2018-07, Compensation – Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting, which expands the scope of Topic 718 to include share-based payment transactions for acquiring goods and services from nonemployees, which is currently addressed in FASB ASC Topic 505, Equity. ASU 2018-07 specifies that Topic 718 applies to all share-based payment transactions in which a grantor acquires goods or services to be used or consumed in a grantor's own operations by issuing share-based payment awards. The amendments also clarify that Topic 718 does not apply to share-based payments used to effectively provide (1) financing to the issuer or (2) awards granted in conjunction with selling goods or services to customers as part of a contract accounted for under Topic 606. ASU 2018-07 is effective for fiscal years beginning after December 15, 2018, including interim periods within that fiscal year. Early adoption is permitted, but no earlier than an entity's adoption date of Topic 606, Revenue from Contracts with Customers. The Company adopted ASU 2018-07 on April 1, 2018, which did not have a material impact on its consolidated financial statements.

Recently Issued Accounting Pronouncements

In February 2016, the FASB issued ASU No. 2016-02, Leases (Topic 842), as amended ("ASC 842"), which amends a number of aspects of lease accounting, including requiring lessees to recognize operating leases with a term greater than one year on their balance sheet as a right-of- use asset and corresponding liability, measured at the present value of the lease payments. ASC 842 is effective for interim and annual reporting periods beginning after December 15, 2018 (fiscal year 2019 for the Company), with early adoption permitted. ASC 842 should be applied under a modified retrospective transition approach with an option to apply the guidance either at the beginning of the earliest comparative period presented in the adoption-period financial statements, or to apply the new guidance at the adoption date. The Company is currently evaluating the impact of adopting ASC 842 on its consolidated financial statements.

Note 3—Revenue Recognition

In May 2014, the FASB issued Topic 606, which modifies how all entities recognize revenue. Topic 606 outlines a comprehensive five-step revenue recognition model based on the principle that an entity should recognize revenue to depict the transfer of promised goods or services to customers at an amount that reflects the consideration the entity expects to be entitled to in exchange for those goods or services. We adopted Topic 606 on December 31, 2017 using the modified retrospective transition method. For the three and six months ended June 30, 2018 and July 1, 2017,

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the vast majority of our revenue was derived from the sale of tangible products for which we recognize revenue at a point in time. The contracts that relate to these product shipments are predominantly purchase orders that have firm purchase commitments generally only for a short period of time. As a result, the adoption of Topic 606 did not have a material effect on our condensed consolidated financial statements, and no cumulative catch-up adjustment to the opening balance of accumulated deficit was required. We used the related practical expedients that allow us to not disclose the transaction price allocated to remaining unsatisfied obligations and an explanation of when we expect to recognize the related revenue. In adopting Topic 606, we applied the new guidance only to contracts that were not completed on December 30, 2017.

Revenues are recognized when control is transferred to customers, in an amount that reflects the consideration the Company expects to be entitled to in exchange for those goods and services. Revenue recognition is evaluated through the following five steps: (i) identification of the contract, or contracts, with a customer; (ii) identification of the performance obligations in the contract; (iii) determination of the transaction price; (iv) allocation of the transaction price to the performance obligations in the contract; and (v) recognition of revenue when or as a performance obligation is satisfied.

Nature of Goods and Services

The Company derives revenue primarily from: (i) resales of NAND flash, DRAM products and other component products to end-customers that are not reached in the distribution models of the component manufacturers, including storage customers, appliance customers, system builders and cloud and datacenter customers; (ii) sales of high-performance modular memory subsystems primarily to OEMs in the server, high-performance computing and communications markets; and (iii) engineering services. However, the Company had no engineering services revenues for the three and six months ended June 30, 2018 and July 1, 2017.

Substantially all of the Company’s net product revenues relate to products sold at a point in time through ship-and-bill performance obligations. At contract inception, an assessment of the goods and services promised in the contracts with customers is performed and a performance obligation is identified for each distinct promise to transfer to the customer a good or service (or bundle of goods or services). To identify the performance obligations, the Company considers all of the goods or services promised in the contract regardless of whether they are explicitly stated or are implied by customary business practices. Contracts with customers are comprised of customer purchase orders, invoices (including the Company’s standard terms and conditions), and written contracts.

Revenue Disaggregation

The Company operates in one reportable segment, which is the design, manufacture and sale of high-performance memory subsystems for the server, high-performance computing and communications markets and component

products purchased for the purpose of resale. The Company evaluates financial performance on a Company-wide basis.

We consider sales disaggregated at the product and service level to depict how the nature, amount, timing and uncertainty of revenues and cash flows are impacted by changes in economic factors. The following table disaggregates our sales by major source for the three and six months ended June 30, 2018:

Product:

	Three Months Ended June 30, 2018	Six Months Ended June 30, 2018
	(in thousands)	
Resales of third-party products	$ 6,335	$ 13,442
Specialty DIMMs	2,091	3,863
Total net product revenues	$ 8,426	$ 17,305

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Performance Obligations

Our net product revenues and related cost of sales are primarily the result of promises to transfer products to our customers. For performance obligations related to substantially all of our ship-and-bill products, control transfers at a point in time when title transfers upon shipment of the product to the customer, and for some sales, control transfers when title is transferred at time of receipt by the customer. Once a product has shipped or has been delivered, the customer is able to direct the use of, and obtain substantially all of the remaining benefits from, the asset. The Company considers control to have transferred upon shipment or delivery because the Company has a present right to payment at that time, the customer has legal title to the asset, the Company has transferred physical possession of the asset, and the customer has the significant risks and rewards of ownership of the asset.

Amounts billed to our customers for shipping and handling are recorded in net product revenues. Shipping and handling costs incurred by the Company are included in cost of sales.

Significant Payment Terms

For ship-and-bill type contracts with customers, the invoice states the final terms of the sale, including the description, quantity, and price of each product purchased. Payment terms are typically due within 30 days after delivery but, in limited instances, can range up to 60 days after delivery. Accordingly, our contracts with customers do not include a significant financing component.

Variable Consideration

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. Product returns give rise to variable consideration that decreases the transaction price. Estimates of variable consideration and determination of whether to include estimated amounts in the transaction price are based largely on an assessment of the anticipated performance and all information (historical, current and forecasted) that is reasonably available.

Returns for products sold are estimated using the expected value method and are recorded as a reduction in reported revenues at the time of sale based upon historical product return experience and is adjusted for known trends to arrive at the amount of consideration to which the Company expects to receive. Estimated amounts are included in the transaction price to the extent it is probable that a significant reversal of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is resolved.

Warranties

The Company offers a standard product warranty to customers of its memory subsystem products and has no other post-shipment obligations. Our liability associated with this warranty is, at our option, to repair the product, replace the product, or provide the customer with a credit.

The Company establishes provisions for estimated warranties. Estimated future warranty costs are recorded in the period in which the sale is recorded and are included in “Cost of sales.” The Company calculates its accrual requirements based on historic warranty loss experience that is periodically adjusted for recent actual experience, including the timing of claims during the warranty period and actual costs incurred.

The Company does not offer separately priced extended warranty or product maintenance contracts.

Contract Assets

Typically, we invoice the customer and recognize revenue once we have satisfied our performance obligation. Accordingly, our contract assets comprise accounts receivable. Generally, we do not have material amounts of other contract assets since revenue is recognized as control of goods is transferred or as services are performed.

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Contract Liabilities (Deferred Revenue)

Contract liabilities are recorded when cash payments are received in advance of the Company's performance. There were no such contract liabilities (deferred revenue) as of June 30, 2018.

Practical Expedients and Exemptions

We have elected the following practical expedients allowed under Topic 606:

- Payment terms with our customers, which are one year or less, are not considered a significant financing component.

- Shipping and handling fees and costs incurred in connection with products sold are recorded in cost of sales and are not considered a performance obligation to our customers.

- Our performance obligations on our orders are generally satisfied within one year from a given reporting date and, therefore, we omit disclosure of the transaction price allocated to remaining performance obligations on open orders.

- The Company expenses incremental direct costs of obtaining a contract (sales commissions) when incurred because the amortization period is generally 12 months or less. The Company does not incur costs to fulfill a customer contract that meet the requirements for capitalization.

- The Company has applied the portfolio approach to its ship-and-bill contracts that have similar characteristics as it reasonably expects that the effects on the financial statements of applying this guidance to the portfolio of contracts would not differ materially from applying this guidance to the individual contracts within the portfolio.

Note 4—Supplemental Financial Information

Inventories

Inventories consisted of the following as of the dates presented:

	June 30, 2018	December 30, 2017
	(in thousands)	
Raw materials	$1,474	$ 768
Work in process	322	88
Finished goods	1,669	3,249
	$3,465	$ 4,105

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Warranty Liabilities

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

	Six Months Ended	
	June 30, 2018	July 1, 2017
	(in thousands)	
Beginning balance	$ 152	$ 89
Estimated cost of warranty claims charged to cost of sales	155	97
Cost of actual warranty claims	(131)	(73)
Ending balance	176	113
Less current portion	(106)	(68)
Long-term warranty liability	$ 70	$ 45

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		Six Months Ended	
	June 30, 2018	July 1, 2017	June 30, 2018	July 1, 2017
	(in thousands, except per share data)			
Basic and diluted net loss per share:				
Numerator: Net loss	$ (3,417)	$ (3,847)	$ (8,090)	$ (7,189)
Denominator: Weighted-average common shares outstanding, basic and diluted	91,685	61,844	87,073	61,763
Basic and diluted net loss per share	$ (0.04)	$ (0.06)	$ (0.09)	$ (0.12)

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		Six Months Ended	
	June 30, 2018	July 1, 2017	June 30, 2018	July 1, 2017
	(in thousands)		(in thousands)	
Common share equivalents	12,627	13,006	12,628	13,155

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.

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Major Customers and Products

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

	Three Months Ended				Six Months Ended			
	June 30, 2018		July 1, 2017		June 30, 2018		July 1, 2017	
Customer:								
Customer A	28	%	*	%	20	%	*	%
Customer B	*	%	16	%	*	%	*	%
Customer C	*	%	*	%	*	%	11	%

*Less than 10% of net sales during the period.

The Company's accounts receivable are concentrated with three customers at June 30, 2018 representing 29%, 18% and 11% of aggregate gross receivables, respectively. At December 30, 2017, three customers represented 15%, 13% and 12% 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 these customers could significantly reduce the Company's net sales and adversely affect its operating results. The Company tries to mitigate risks associated with foreign receivables by purchasing comprehensive foreign credit insurance.

The Company resells certain component products to end-customers that are not reached in the distribution models of the component manufacturers, including storage customers, appliance customers, system builders and cloud and datacenter customers. For the three and six months ended June 30, 2018 and July 1, 2017, resales of these products represented approximately 75%, 76%, 91% and 91%, respectively, of the Company's net revenues.

Cash Flow Information

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

	Six Months Ended	
	June 30,	July 1,

	2018	2017
	(in thousands)	
Supplemental disclosure of non-cash financing activities:		
Debt financing of insurance	$ 344	$ 220

Note 5—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 June 30, 2018 and December 30, 2017, (i) letters of credit were outstanding in the amount of $1.1 million and $2.8 million, respectively, (ii) the Company had outstanding borrowings of $2.1 million and $2.0 million, respectively, and (iii) availability under the revolving line of credit was $0.02 million and $0.1 million, respectively.

On January 29, 2016, the Company and SVB entered into an amendment to the SVB Credit Agreement to, among other things, adjust the rate at which advances under the SVB Credit Agreement accrue interest to the Wall Street

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Journal “prime rate” plus 2.75% (prior to such 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 to, among other things, (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. On April 12, 2017, the Company and SVB entered into a further amendment to the SVB Credit Agreement to, among other things, obtain SVB’s consent in connection with the Company’s rights agreement with Computershare Trust Company, N.A., as rights agent (see Note 9), and make certain administrative changes in connection with the Company’s funding arrangement with TR Global Funding V, LLC, an affiliate of TRGP Capital Management, LLC (“TRGP”) (see Note 8). On March 20, 2018, the Company and SVB entered into another amendment to the SVB Credit Agreement to among other things, (i) extend the maturity date of advances under the SVB Credit Agreement to March 31, 2019 and (ii) revise certain inventory reporting requirements under the SVB Credit Agreement.

For all periods before April 20, 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 6). Certain of these lien priorities were modified in April and May 2017 in connection with the Company’s establishment of a funding arrangement with TRGP for certain of the Company’s litigation expenses in connection with certain of its legal proceedings against SK hynix, a South Korean memory semiconductor supplier (“SK hynix”). On May 3, 2017, TRGP entered into an intercreditor agreement with each of SVIC and SVB, and on April 20, 2017, 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, SVB’s security interests in the Company’s assets have been modified as follows: 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. See Note 8 for additional information about the funding arrangement with TRGP, the Intercreditor Agreements and the Company’s legal proceedings against SK hynix.

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 June 30, 2018 the Company was in compliance with its covenants under the SVB Credit Agreement.

Note 6—Debt

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

	June 30, 2018	December 30, 2017
	(in thousands)	
Convertible promissory note, SVIC, net of debt discount of $761 and $868 in 2018 and 2017, respectively	$ 14,239	$ 14,132
Accrued interest on convertible promissory note with SVIC	783	634
Notes payable	115	-
	15,137	14,766
Less current portion	(115)	-
	$ 15,022	$ 14,766

On November 18, 2015, in connection with entering into the JDLA with Samsung, the Company issued to SVIC a Senior Secured Convertible Note (“SVIC Note”) and Stock Purchase Warrant (“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

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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 of debt issuance costs 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 and six months ended June 30, 2018 and July 1, 2017, the Company amortized $54,000, $107,000, $54,000 and $108,000, 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. In May 2017, SVIC, SVB and TRGP entered into additional Intercreditor Agreements to modify certain of these lien priorities (see Note 8). 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.

The SVIC Note subjects the Company to certain affirmative and negative operating covenants. As of June 30, 2018, the Company was in compliance with its covenants under the SVIC Note.

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		Six Months Ended	
	June 30, 2018	July 1, 2017	June 30, 2018	July 1, 2017
	(in thousands)		(in thousands)	
Interest expense:				
SVB	$ 6	$ 8	$ 24	$ 21

SVIC	128	129	257	258
Others	1	4	3	16
	135	141	284	295
Interest income	(2)	(3)	(4)	(9)
	$ 133	$ 138	$ 280	$ 286

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Note 7—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		Six Months Ended	
	June 30, 2018	July 1, 2017	June 30, 2018	July 1, 2017
	(in thousands)		(in thousands)	
Provision for income taxes	$ -	$ -	$ -	$ -
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 March 31, 2018 and December 30, 2017. 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 21% and 34% for the six months ended June 30, 2018 and July 1, 2017, respectively, due to providing the full valuation allowance against net deferred tax assets.

The Company did not have any unrecognized tax benefits as of June 30, 2018 and December 30, 2017.

Note 8—Commitments and Contingencies

TRGP Agreement and Related Intercreditor Agreements

On May 3, 2017, the Company and 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 certain its legal proceedings against SK hynix (see "Litigation and Patent Reexaminations" in this Note 8 below), including costs incurred since January 1, 2017 and costs to be incurred in the future in the Company's first action in the U.S. International Trade Commission ("ITC") and its U.S. district court proceedings, but excluding the Company's second ITC action and its proceedings in international courts (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 funded 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 funded 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 funded 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.

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In connection with the TRGP Agreement, in May 2017, TRGP, SVIC and SVB entered into 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 funded 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 funded 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 funded under the TRGP Agreement), 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 funded under the TRGP Agreement, a second priority security interest in the Company's patent portfolio other than the patents that are the subject of the SK hynix proceedings funded under the TRGP Agreement, and a third priority security interest in the Company's patents that are the subject of the SK hynix proceedings funded under the TRGP Agreement. The Company consented and agreed to the terms of each of the Intercreditor Agreements.

Legal expenses incurred by the Company but paid by TRGP pursuant to the terms of the TRGP Agreement are excluded from the Company's consolidated financial statements in each period in which the TRGP Agreement remains in effect. For the six months ended June 30, 2018, the Company excluded legal expenses of $1.5 million ($11.7 million since January 1, 2017 through June 30, 2018), as a result of TRGP's payment of these expenses under the TRGP Agreement. Any settlement or other cash proceeds the Company may recover in the future in connection with the funded SK hynix proceedings would be reduced by the aggregate amount of legal expenses excluded by the Company as a result of TRGP's payment of these expenses under the TRGP Agreement, plus the premium amount due to TRGP under the terms of the TRGP Agreement at the time of any such recovery.

Litigation and Patent Reexaminations

The Company owns numerous patents and continues to seek to grow and strengthen its patent portfolio, which covers various aspects of the Company's innovations and includes 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 and enforcing its intellectual property rights, including with patent infringement proceedings it files against third parties and defense of 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"). The Company expects these activities to continue for the foreseeable future, with no guarantee that any ongoing or future patent protection or 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 based on claims that it has infringed on the intellectual property rights of others.

Any litigation, regardless of its outcome, is inherently uncertain, involves a significant dedication of resources, including time and capital, and diverts management's attention from our other activities. As a result, any current or

future infringement claims or patent challenges by or against third parties, whether or not eventually decided in the Company's favor or settled, could materially adversely affect the Company's business, financial condition and results of operations. Additionally, the outcome of pending or future litigation and related patent reviews and 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 or otherwise monetize its intellectual property rights 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

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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. On October 3, 2017, the examiner issued a determination as to the patentability of certain of the pending claims, which were found to be unpatentable. On June 1, 2018, the PTAB reversed the Examiner and found the pending amended claims to be patentable. On July 2, 2018, Google requested rehearing of the PTAB's decision. The proceeding will now return to the PTAB for reconsideration of its 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

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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. On October 2, 2017, the examiner issued a determination as to the patentability of the pending claims, which were found to be unpatentable. On June 1, 2018, the PTAB reversed the Examiner and found the pending amended claims to be patentable. The proceeding is currently pending subject to Smart Modular’s decision to appeal to the Federal Circuit. 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 USPTO 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. On May 9, 2017, the PTAB issued a decision on appeal affirming the rejection of all claims. Netlist requested rehearing of the PTAB’s decision on June 6, 2017. The PTAB denied the rehearing request on August 8, 2017. On October 6, 2017, Netlist appealed the decision to the Court of Appeals for the Federal Circuit, which Netlist dismissed on March 19, 2018, thereby terminating the proceedings with the rejection of all ‘274 patent claims becoming final. 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

On September 13, 2012, 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. Accruals have not been recorded for loss contingencies related to Smart Modular’s complaint because it is not probable that a loss has been incurred and the amount of any such loss cannot be reasonably estimated.

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 had the opportunity present evidence and arguments and the examiner issued a determination on May 8, 2017, which found all pending claims to be unpatentable. On December 12, 2017, the PTAB agreed with the examiner and found all pending claims to be unpatentable. Smart Modular appealed the PTAB's decision to the Court of Appeals for the Federal Circuit. On March 28, 2018, the Eastern District Court stayed the proceedings related to the '295 patent.

Smart Modular and SanDisk Litigation

On July 1 and August 23, 2013, the Company filed complaints against Smart Modular, Smart Storage Systems (which was subsequently acquired by SanDisk Corporation ("SanDisk")), Smart Worldwide Holdings ("Smart

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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 final 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 in the ITC (the "First ITC Action") and the Central District Court. These proceedings are based on the alleged infringement by SK hynix's RDIMM and LRDIMM enterprise memory products of six of the Company's U.S. patents. On October 31, 2017, the Company filed additional legal proceedings for patent infringement against SK hynix in the ITC (the "Second ITC Action") based on the alleged infringement by SK hynix's RDIMM and LRDIMM products of two additional U.S. patents owned by the Company. In all of the ITC proceedings, the Company has requested exclusion orders that direct 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 in connection with the First ITC Action, and held a hearing on the merits of the investigation from May 8, 2017 until May 11, 2017. On November 14, 2017, the ITC issued a final initial determination for the First ITC Action, finding no infringement of the asserted patents and no violation of Section 337 of the Tariff Act, and on January 16, 2018, the ITC issued a final determination for the First ITC Action, affirming the findings of no infringement and no violation and terminating the investigation. The Company is appealing this final determination to the Court of Appeals

for the Federal Circuit.

On January 11, 2018, the ITC set a 19-month target date of July 3, 2019 for an investigation related to the Second ITC Action, with a final initial determination for the Second ITC Action being filed no later than March 1, 2019. Based on this target date, the ITC scheduled a hearing on the merits of the investigation related to the Second ITC Action to begin on November 9, 2018 and conclude on November 19, 2018. On April 12, 2018, the ITC granted SK hynix's motion for summary determination of non-infringement and terminated the Second ITC Action in its entirety. On April 23, 2018, the Company filed a petition seeking ITC review of this decision. On May 29, 2018, the ITC Commission remanded the Second ITC Action back to the ALJ to resolve the parties' claim construction disputes and continue the investigation. On June 14, 2018, the ITC extended the target date for the final determination to August 5, 2019, with a final initial determination due by April 5, 2019. Based on this extended target date, the ITC scheduled a hearing on the merits to begin on December 14, 2018 and conclude on December 21, 2018.

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 First ITC Action and the Central District Court proceedings, the last of which is scheduled to conclude no later than July 2018.

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Between December 19, 2017 and February 7, 2018, SK hynix filed additional petitions in the USPTO requesting Inter Partes Review of the patents asserted in the Second ITC Action. The PTAB will determine whether to institute the requested reviews no later than August 2018.

On July 17, 2017, the Central District Court granted in part SK hynix's request to stay the infringement proceedings pending further order of the court.

On July 11, 2017, the Company filed legal proceedings for patent infringement against SK hynix and certain of its distributors in the courts of Germany and the PRC based on the alleged infringement by SK hynix's LRDIMM products of certain of the Company's patents in those jurisdictions. On January 25, 2018, the court in Germany held a preliminary hearing and set a trial date of December 6, 2018. In December 2017, SK hynix filed petitions challenging the validity of the patents asserted by the Company in Germany and the PRC. On June 3, 2018, the patent asserted in the PRC was found to be invalid. On June 19, 2018, the Company withdrew the patent infringement suits filed in the PRC.

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, among others: (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 TRGP, 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 investment or loan documents, as applicable; 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 9—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 June 30, 2018 or December 30, 2017.

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

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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 8).

On April 16, 2018, the Company entered into an amendment (the "Amendment") to the Rights Agreement. The Amendment amends the definition of "Expiration Date" in the Rights Agreement to incorporate all of the Company's legal proceedings against SK hynix, and amends the definition of "Final Expiration Date" in the Rights Agreement to mean the close of business on April 17, 2019. Accordingly, the Amendment extends the final expiration of the Rights issued pursuant to the Rights Agreement from April 17, 2018 to April 17, 2019. As a result, and pursuant to the Amendment, the Rights will expire and become unexercisable on or before, in accordance with the terms of the Rights Agreement, the close of business on April 17, 2019.

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") designating 1,000,000 shares of its serial preferred stock as Series A Preferred Stock and 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.

Common Stock

On May 31, 2017, the Company's stockholders approved an amendment to the Company's Restated Certificate of Incorporation to increase the number of shares of its common stock that it is authorized for issuance from 90,000,000 to 150,000,000.

On August 22, 2017, the Company completed an underwritten public offering (the "2017 Offering"), pursuant to which it sold 8,500,000 shares of its common stock at a price to the public of $0.60 per share. The net proceeds to the Company from the 2017 Offering were $4.4 million, after deducting underwriting discounts and commissions and offering expenses paid by the Company.

On November 14, 2017, the Company entered into the Sales Agreement with the Agent to sell shares of its common stock, with aggregate gross proceeds of up to $9.0 million, from time to time, through the ATM Program. Under the Sales Agreement, the Company sets the parameters for the sale of shares, including the number of shares to be issued,

the time period during which sales are requested to be made, limitation on the number of shares that may be sold in any one trading day and any minimum price below which sales may not be made. The Sales Agreement provides that the Agent is entitled to compensation for its services in an amount equal to 3% of the gross proceeds from the sale of shares sold under the Sales Agreement. The Company has no obligation to sell any shares under the Sales Agreement and may suspend solicitation and offers under the Sales Agreement. As of June 30, 2018, the Company sold 25,983,098 shares (17,088,876 shares during the six months ended June 30, 2018) of its common stock in the ATM Program for net proceeds of $6.6 million ($3.8 million during the six months ended June 30, 2018), after deducting sales commissions and other offering expenses paid by the Company. In addition, subsequent to June 30, 2018 through August 10, 2018, the Company sold 8,978,094 shares of its common stock for approximate net proceeds of $1.3 million, after deducting sales commissions and other offering expenses paid by the Company.

On May 17, 2018, the Company entered into a Board approved arm’s length Purchase Agreement with a trust controlled by C.K. Hong, the Company’s President, Chief Executive Officer and Chairman of the Board, pursuant to which the Company sold to Mr. Hong’s trust 5,405,405 shares of the Company’s common stock, par value $0.001 per share, at a price per share of $0.148 (which equals the most recent consolidated closing bid price of the Company’s common stock, as reported by The Nasdaq Capital Market, as of the signing of the Purchase Agreement). The aggregate net proceeds received by the Company were $800,000.

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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 its 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 June 30, 2018, the Company was authorized to issue a maximum of 12,605,566 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 June 30, 2018, the Company had 2,248,817 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. Restricted stock awards vest in two equal annual installments over two years.

The following table summarizes the Company's stock option activities during the six months ended June 30, 2018:

	Options Outstanding	
	Number of Shares (in thousands)	Weighted-Average Exercise Price
Options outstanding at December 30, 2017	8,745	$ 1.39
Options granted	770	0.25
Options exercised	-	-
Options expired/forfeited	(1,114)	1.35
Options outstanding at June 30, 2018	8,401	$ 1.29

The following table summarizes the Company's restricted stock awards activities during the six months ended June 30, 2018:

	Restricted Stock Outstanding	
	Number of Shares (in thousands)	Weighted-Average Grant-Date Fair Value per Share
Balance outstanding at December 30, 2017	-	$ -
Restricted stock granted	525	0.25
Restricted stock forfeited	-	-
Restricted stock vested	-	-
Balance outstanding at June 30, 2018	525	$ 0.25

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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:

	Six Months Ended	
	June 30, 2018	July 1, 2017
Expected term (in years)	6.4	6.3
Expected volatility	108 %	87 %
Risk-free interest rate	2.62 %	2.06 %
Expected dividends	-	-
Weighted-average grant date fair value per share	$ 0.21	$ 0.76

As of June 30, 2018, the amount of unearned stock-based compensation estimated to be expensed from the Company's 2018 fiscal year through the Company's 2020 fiscal year related to unvested stock options and restricted stock is approximately $0.8 million, net of estimated forfeitures. The weighted-average period over which the unearned stock-based compensation is expected to be recognized is approximately 2.2 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 during the six months ended June 30, 2018:

	Number of Shares (in thousands)	Weighted Average Exercise Price
Warrants outstanding - December 30, 2017	4,924	$ 0.66
Warrants granted	50	$ 0.25
Warrants exercised	-	$ -
Warrants expired	(1,525)	$ 0.89
Warrants outstanding - June 30, 2018	3,449	$ 0.55

Note 10—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 June 30, 2018 and December 30, 2017, approximately $62,000 and $67,000, 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 11—Subsequent Events

The Company has performed an evaluation of events occurring subsequent to June 30, 2018, through the filing date of this Quarterly Report on Form 10-Q. Based on its evaluation, there are no events, except for the matter discussed elsewhere in the notes hereto, which require recognition or disclosure in the condensed consolidated financial statements.

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

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.

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 30, 2017, including the audited consolidated financial statements and related notes included in such report (the "2017 Annual Report"), which was filed with the Securities and Exchange Commission (the "SEC") on March 30, 2018, as amended as of April 30, 2018. In preparing this MD&A, we presume that readers have access to and have read the MD&A included in the 2017 Annual Report, pursuant to Instruction 2 to paragraph (b) of Item 303 of Regulation S-K promulgated by the SEC.

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 or 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 beliefs regarding the market and demand for our products or the component products we resell; our ability to develop and launch new products that are attractive to the market and stimulate customer demand for these products; our plans relating to our intellectual property, including our goals of monetizing, licensing, expanding and defending our patent portfolio; 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 expectations with respect to any strategic partnerships or other similar relationships we may pursue; our business strategies and objectives; and our expectations regarding our future operations and financial position, including 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 assumptions, expectations and beliefs regarding future events and are subject to known and unknown risks, uncertainties and other factors 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. In addition, we operate in a competitive and rapidly evolving industry in which new risks emerge from time to time, and it is not possible for us to predict all of the risks we may face, nor can we assess the impact of all factors on our business or the extent to which any factor or combination of factors could cause actual results to differ from our expectations. In light of these risks, uncertainties and other factors, our forward-looking statements should not be relied on as predictions of future

events. All forward-looking statements reflect our assumptions, expectations and beliefs only as of the date they are made, and except as required by law, we undertake no obligation to revise or update any forward-looking statements for any reason.

Overview

We provide high-performance modular memory subsystems to customers in diverse industries that require enterprise and storage class memory solutions to empower critical business decisions. We have a 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, in-

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memory databases, high performance computing and advanced data storage solutions. We also resell NAND flash, DRAM products and other component products to end-customers that are not reached in the distribution models of the component manufacturers, including storage customers, appliance customers, system builders and cloud and datacenter customers.

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, we have dedicated substantial resources to the development, protection and enforcement of technology innovations we believe are essential to our business. Our early pioneering work in these areas has been broadly adopted in industry-standard registered dual in-line memory modules (“RDIMM”), LRDIMM and 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.

We recorded total net revenues of $8.4 million, $17.3 million, $11.4 million and $20.8 million for the three and six months ended June 30, 2018 and July 1, 2017, respectively, and $38.3 million and $19.7 million for the years ended December 30, 2017 and December 31, 2016, respectively. We recorded gross profit of $0.5 million, $0.9 million, $0.6 million and $1.3 million for the three and six months ended June 30, 2018 and July 1, 2017, respectively, and $2.5 million and $7.4 million for the years ended December 30, 2017 and December 31, 2016, respectively. We also incurred net losses of $3.4 million, $8.1 million, $3.8 million and $7.2 million for the three and six months ended June 30, 2018 and July 1, 2017, respectively, and $13.4 million and $11.2 million for the years ended December 30, 2017 and December 31, 2016, respectively. We have historically financed our operations primarily with proceeds from issuances of equity and debt securities and revenues generated from operations, including from product sales and a non-recurring engineering (“NRE”) fee from our November 2015 joint development and license agreement (“JDLA”) with Samsung Electronics Co., Ltd (“Samsung”). 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 certain of our legal proceedings against SK hynix and, to a lesser extent, equipment leasing arrangements. See “Liquidity and Capital Resources” below for more information.

Recent Developments

Developments relating to SK Hynix Proceedings

We have taken 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"), U.S. district court and the courts of Germany and the People’s Republic of China (“PRC”). On January 25, 2018, the court in Germany held a preliminary hearing and set a trial date of December 6, 2018. On June 3, 2018, the patent asserted in the PRC was

found to be invalid. On June 19, 2018, the Company withdrew the patent infringement suits filed in the PRC. In our two separate ITC actions against SK hynix, we have requested exclusion orders that direct U.S. Customs and Border Protection to stop allegedly infringing SK hynix RDIMM and LRDIMM products from entering the United States. In our U.S. district court and international court proceedings, we are primarily seeking damages. All of our patents involved in these proceedings cover key features of RDIMM and LRDIMM products.

On January 16, 2018, the ITC issued a final determination regarding our first ITC action against SK hynix filed in September 2016, in which it concluded there was no infringement of the patents in this action and terminated the ITC's investigation related to these proceedings. We are appealing this final determination to the Court of Appeals for the Federal Circuit. In our second ITC action against SK hynix, on April 12, 2018, the ITC granted SK hynix's motion for summary determination of non-infringement and terminated the investigation in its entirety. On April 23, 2018, the Company filed a petition seeking ITC review of this decision. On May 29, 2018, the ITC Commission remanded the Second ITC Action back to the ALJ to resolve the parties' claim construction disputes and continue the investigation. On June 14, 2018, the ITC extended the target date for the final determination to August 5, 2019, with a final initial determination due by April 5, 2019. Based on this extended target date, the ITC scheduled a hearing on the merits to

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begin on December 14, 2018 and conclude on December 21, 2018; however, as with all legal proceedings, the timing and outcomes of the ITC action are inherently uncertain and subject to change.

Amendments to SVB Credit Agreement

On March 20, 2018, we and Silicon Valley Bank ("SVB") entered into another amendment to our credit agreement (as amended, the "SVB Credit Agreement") to among other things, (i) extend the maturity date of advances under the SVB Credit Agreement to March 31, 2019 and (ii) revise certain inventory reporting requirements under the SVB Credit Agreement.

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 of resales of certain component products, including NAND flash and DRAM products, and 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. Product sales are made primarily pursuant to stand-alone purchase orders, which generally have no cancellation or rescheduling penalty provisions. Our customers typically provide us with non-binding forecasts of future product demand over specific periods of time, but 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 then-current price of relevant component products, including DRAM ICs and NAND flash. We often ship products to our customers' international manufacturing sites, but all of our sales to date have been denominated in U.S. dollars.

The component products we resell include products we purchase for the purpose of resale, as well as excess component inventory we purchase for, but do not use in, our memory subsystems. We also resell excess component inventory to distributors and other users of memory integrated circuits, but these sales have historically been, and we expect will continue to be, a relatively small percentage of our net product sales.

We also sell our memory subsystem products, primarily to original equipment manufacturers ("OEMs"). Sales of our memory subsystem products have declined in recent periods, and we expect these declines could continue unless and until our next-generation products gain significantly greater customer and market acceptance.

Engineering Services

Pursuant to the terms of our JDLA with Samsung, during the fiscal year ended December 31, 2016, 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 we have received to date, but we could in the future receive additional fees of this type, from Samsung or other parties, depending on the terms of the relationships we may develop.

Cost of Sales and Gross Margin

Our cost of sales includes the cost of materials (including component products), labor and other manufacturing costs, depreciation and amortization of equipment expenses, inventory valuation provisions, stock-based compensation expenses, occupancy costs and other allocated fixed costs.

For resales of component products, including NAND flash and DRAM products, cost of sales includes the cost of the products we purchase for resale. We purchase these products from Samsung under the terms of the JDLA and from other suppliers on the terms we negotiate with these suppliers. For sales of our memory subsystem products, cost of sales also includes the DRAM ICs and NAND flash we purchase and incorporate into these products. As a result, the DRAM ICs and NAND flash we purchase for resale or for use in our products constitute a significant portion of our cost of sales in any period. Our cost of sales fluctuates between periods based on the cost to us to purchase DRAM ICs and

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NAND flash. We attempt to pass through these DRAM IC and NAND flash cost fluctuations to our customers, but any inability to do so negatively impacts our gross margin.

Research and Development

Research and development expenses consist primarily of employee and independent contractor compensation and related costs, stock based compensation expenses, NRE fees that we pay to third parties, 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 expenses 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.

Intellectual Property Legal Fees

Intellectual property legal fees consist of legal fees incurred for patent filings, protection and enforcement. Intellectual property legal fees are generally expensed as incurred. Although we expect intellectual property legal fees to generally increase over time as we continue to protect, defend and enforce and seek to expand our patent portfolio, these increases may not be linear but may occur in lump sums depending on the due dates of patent filings and their associated fees and the arrangements we may make with our legal advisors in connection with enforcement proceedings, which may include contingent fee arrangements in which we would pay these legal advisors on a scaled percentage of any negotiated fees, settlements or judgments awarded to us based on if, how and when the fees, settlements or judgments are obtained.

We expect our intellectual property legal fees may show different trends for so long as the TRGP Agreement remains in effect. Pursuant to the terms of the TRGP Agreement, the legal expenses we incur that are paid directly by TRGP are excluded in their entirety from our financial statements in each period in which the agreement remains in effect. In addition, any settlement or other cash proceeds we may recover in the future in connection with the SK hynix proceedings funded by TRGP would be reduced by the aggregate amount of legal expenses we exclude as a result of TRGP's payment of these expenses, plus the premium amount due to TRGP under the terms of the TRGP Agreement at the time of any such recovery. As a result, we expect our intellectual property legal fees could decrease or increase at a slower rate if and to the extent these fees are funded by TRGP, which would be the case if the TRGP Agreement remains in effect, the proceedings covered by the TRGP Agreement remain ongoing and our focus is directed to such proceedings (rather than other existing or potential future intellectual property legal proceedings). Additionally, we expect our intellectual property legal fees would be significantly higher in the period in which a recovery from the SK hynix proceedings covered by the TRGP Agreement, if any, occurs. In light of the final determination in our first ITC action and the current stay of our U.S. district court proceedings, which are the main SK hynix proceedings presently covered by the TRGP Agreement, as well as our current focus on our second ITC action against SK hynix, which is

not presently covered by the TRGP Agreement, the impact of the TRGP Agreement on our intellectual property legal fees may not be as significant in near-term future periods as it was in 2017.

Selling, General and Administrative

Selling, general and administrative expenses primarily consist of employee compensation and related costs, stock-based compensation expenses, independent sales representative commissions, professional service fees, promotional and other selling and marketing expenses, and occupancy and other allocated overhead costs. Selling expenses also includes the cost of materials and overhead related to products manufactured for customer qualifications, since working through the product approval and qualification process with OEMs and other potential customers of our memory subsystem products can comprise a significant portion of our selling effort for these products. Selling, general and administrative expenses are generally expensed as incurred.

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Provision for Income Taxes

Our net deferred tax assets consist primarily of net operating loss carryforwards. Because we provide a full valuation allowance against net deferred tax assets, our effective tax rate differs from the federal statutory rate and we do not recognize an income tax benefit related to losses incurred.

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 2017 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 in conformity with accounting principles generally accepted in the United States requires management 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 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 and assumptions on our historical experience, knowledge of current conditions and our beliefs of what could occur in the future considering available information. We review our estimates and assumptions on an ongoing basis. Actual results may differ from our estimates, which may result in material adverse effects on our consolidated operating results and financial position.

Our critical accounting policies and estimates are discussed in Note 2 to the condensed consolidated financial statements included in this report and the MD&A included in our 2017 Annual Report. Effective December 31, 2017, we adopted the requirements of Topic 606 using the modified retrospective transition method as further described in Note 2, Adoption of New Accounting Pronouncements and Note 3, Revenue Recognition to our condensed consolidated financial statements. We believe that the resulting accounting policy related to revenue recognition is a critical accounting policy because of the significance of revenue, the complexity of estimates for product returns and warranties and the significant degree of judgment in evaluating recognition criteria.

Except as noted above, there have been no other significant changes to our critical accounting policies as disclosed in our 2017 Annual Report.

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Results of Operations

The following table presents each line item of our condensed consolidated statement of operations as a percentage of total net sales for the three and six months ended June 30, 2018 compared to three and six months ended July 1, 2017:

	Three Months Ended		Six Months Ended	
	June 30, 2018	July 1, 2017	June 30, 2018	July 1, 2017
Net product sales	100 %	100 %	100 %	100 %
Cost of sales	94	94	95	94
Gross profit	6	6	5	6
Operating expenses:				
Research and development	9	13	10	14
Intellectual property legal fees	16	8	21	7
Selling, general and administrative	19	17	19	19
Total operating expenses	45	38	50	40
Operating loss	(39)	(33)	(45)	(33)
Other expense, net:				
Interest expense, net	(2)	(1)	(2)	(1)
Other income, net	—	—	—	—
Total other expense, net	(2)	(1)	(2)	(1)
Loss before provision for income taxes	(41)	(34)	(47)	(35)
Provision for income taxes	—	—	—	—
Net loss	(41) %	(34) %	(47) %	(35) %

Net Product Sales, Cost of Sales and Gross Profit

The following table presents net product sales, cost of sales and gross profit for the three and six months ended June 30, 2018 compared to three and six months ended July 1, 2017:

	Three Months Ended			
	June 30, 2018	July 1, 2017	Change	% Change
	(in thousands, except percentages)			
Net product sales	$ 8,426	$ 11,404	$ (2,978)	(26) %
Cost of sales	7,944	10,760	(2,816)	(26) %
Gross profit	$ 482	$ 644	$ (162)	(25) %

Gross margin	5.7%	5.6%	0.1	%

	Six Months Ended				
	June 30, 2018	July 1, 2017	Change	% Change	
	(in thousands, except percentages)				
Net product sales	$ 17,305	$ 20,830	$ (3,525)	(17)	%
Cost of sales	16,444	19,506	(3,062)	(16)	%
Gross profit	$ 861	$ 1,324	$ (463)	(35)	%
Gross margin	5.0%	6.4%	(1.4)	%	

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Net Product Sales

The decrease in our net product sales for the three months ended June 30, 2018 as compared to the three months ended July 1, 2017 resulted primarily from decreases of $4.5 million in sales of NAND flash and $0.1 million in sales of EXPRESSvault (“EV3”) products offset by increases of $1.4 million of other small outline dual in-line memory module (“SODIMM”) and RDIMM products and $0.2 million in sales of other very low profile (VLP) product sales.

The decrease in our net product sales for the six months ended June 30, 2018 as compared to the six months ended July 1, 2017 resulted primarily from decreases of $8.5 million in sales of NAND flash and $0.1 million in sales of EV3 products offset by increases of $4.6 million of other SODIMM and RDIMM products and $0.5 million in sales of other VLP product sales.

Our product revenues in all periods presented were impacted by fluctuating customer concentrations. Our largest customer in the three and six months ended June 30, 2018, which accounted for 28% and 20% of our net product sales, respectively, was a relatively new customer that made no purchases and contributed no net product sales in the three and six months ended July 1, 2017. Our two largest customers in the three and six months ended July 1, 2017, one of which accounted for 16% of our net product sales in the three-month period and the other of which accounted for 11% of our net product sales in the six-month period, did not contribute significant net product sales in the three and six months ended June 30, 2018.

Cost of Sales, Gross Profit and Gross Margin

The decrease in our cost of sales for the three and six months ended June 30, 2018 as compared to the three and six months ended July 1, 2017 resulted primarily from decreased net sales. Our gross margin fluctuates based on a change in our product mix over periods and the cost of the factory. For the three months ended June 30, 2018, our gross margin slightly increased to 5.7% from 5.6% for the three months ended July 1, 2017 due to strong demand and increases in the gross margin for our Specialty DIMMs offset by decreases in the gross margins for the resales of Samsung products. For the six months ended June 30, 2018, our gross margin decreased to 5.0% from 6.4% for the six months ended July 1, 2017 partially offset by higher gross margins for our Specialty DIMM products.

Research and Development

The following table presents research and development expenses for the three and six months ended June 30, 2018 and July 1, 2017:

	Three Months Ended			
	June 30, 2018	July 1, 2017	Change	% Change
	(in thousands, except percentages)			
Research and development	$ 783	$ 1,487	$ (704)	(47) %

	Six Months Ended			
	June 30, 2018	July 1, 2017	Change	% Change
	(in thousands, except percentages)			
Research and development	$ 1,791	$ 2,983	$ (1,192)	(40) %

The decrease in research and development expenses for the three months ended June 30, 2018 as compared to the three months ended July 1, 2017 resulted primarily from decreases of (i) $0.5 million in headcount, overhead and travel expenses and (ii) $0.2 million in consulting expenses.

The decrease in research and development expenses for the six months ended June 30, 2018 as compared to the six months ended July 1, 2017 resulted primarily from decreases of (i) $0.8 million in headcount, overhead and travel expenses and (ii) $0.3 million in consulting expenses.

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Intellectual Property Legal Fees

The following table presents intellectual property legal fees for the three and six months ended June 30, 2018 and July 1, 2017:

	Three Months Ended				
	June 30, 2018	July 1, 2017	Change	% Change	
	(in thousands, except percentages)				
Intellectual property legal fees	$ 1,388	$ 915	$ 473	52	%

	Six Months Ended				
	June 30, 2018	July 1, 2017	Change	% Change	
	(in thousands, except percentages)				
Intellectual property legal fees	$ 3,599	$ 1,381	$ 2,218	161	%

The increase in intellectual property legal fees for the three and six months ended June 30, 2018 as compared to the three and six months ended July 1, 2017 resulted primarily from an increase in legal expenses incurred to defend our patent portfolio internationally, including the costs incurred for our second ITC action, which was not subject to the TRGP agreement.

Selling, General and Administrative

The following table presents selling, general and administrative expenses for the three and six months ended June 30, 2018 and July 1, 2017:

Three Months Ended			
June 30, 2018	July 1, 2017	Change	% Change
(in thousands, except percentages)			

Selling, general and administrative	$ 1,585	$ 1,951	$ (366)	(19)	%

	Six Months Ended			
	June 30, 2018	July 1, 2017	Change	% Change
	(in thousands, except percentages)			
Selling, general and administrative	$ 3,276	$ 3,865	$ (589)	(15) %

The decrease in selling, general and administrative expenses for the three months ended June 30, 2018 as compared to the three months ended July 1, 2017 resulted primarily from a decrease of $0.4 million in sales and marketing headcount costs and related overhead and travel expenses.

The decrease in selling, general and administrative expenses for the six months ended June 30, 2018 as compared to the six months ended July 1, 2017 resulted primarily from decreases of (i) $0.5 million in sales and marketing headcount costs and related overhead and travel expenses and (ii) $0.1 million in fees for outside services.

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Other Expense, Net

The following table presents other expense, net for the three and six months ended June 30, 2018 and July 1, 2017:

	Three Months Ended				
	June 30, 2018	July 1, 2017	Change	% Change	
	(in thousands, except percentages)				
Interest expense, net	$ (133)	$ (138)	$ 5	4	%
Other expense, net	(10)	—	(10)	100	%
Total other expense, net	$ (143)	$ (138)	$ (5)	(4)	%

	Six Months Ended				
	June 30, 2018	July 1, 2017	Change	% Change	
	(in thousands, except percentages)				
Interest expense, net	$ (280)	$ (286)	$ 6	2	%
Other (expense) income, net	(5)	2	(7)	350	%
Total other expense, net	$ (285)	$ (284)	$ (1)	(0)	%

Interest expense, net, for the three and six months ended June 30, 2018 and July 1, 2017 consisted primarily of interest expense under the SVB Credit Agreement and the Senior Secured Convertible Note with an original principal amount of $15.0 million that we issued to an affiliate of Samsung Venture Investment Co. in November 2015 in connection with the JDLA (see Note 6 to our condensed consolidated financial statements included elsewhere in this quarterly report).

The decrease in other (expense) income, net, for the three and six months ended June 30, 2018 and July 1, 2017, which resulted primarily from exchange rate losses, was not significant.

Provision for Income Taxes

Our provision for income taxes was immaterial in all periods presented.

The federal statutory rate was 21% and 34% for the three and six months ended June 30, 2018 and July 1, 2017, respectively. In all periods presented, we continued to provide a full valuation allowance against our net deferred tax assets, which consist primarily of net operating loss carryforwards. In these 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, to make required payments of principal and interest under our outstanding debt instruments and, to a lesser extent, to fund capital expenditures.

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Working Capital

The following table presents working capital and cash and cash equivalents as of June 30, 2018 and December 30, 2017:

	June 30, 2018	December 30, 2017
	(in thousands)	
Current assets (1)	$ 14,958	$ 16,925
Current liabilities	10,004	9,289
Working capital	$ 4,954	$ 7,636

(1) Includes cash and cash equivalents of $6,981 and $6,720 as of June 30, 2018 and December 30, 2017, respectively.

Our working capital decreased by $2.7 million during the six months ended June 30, 2018. Our current assets decreased by $2.0 million primarily from a $1.7 million decrease in restricted cash due to a reduction in the standby letter of credit with one vendor which is secured by restricted cash, a $0.6 million decrease in inventories to support lower product sales and the sale of some slower moving inventory, a $0.2 million decrease in accounts receivable due to lower sales, partially offset by a $0.3 million increase in prepaid insurance and other prepaid expenses and $0.3 million increase in cash and cash equivalents. Our current liabilities increased by $0.7 million primarily from a $0.7 million increase in accounts payable from legal expenses to defend our intellectual property.

Cash Flows

The following table summarizes our cash flows for the six months ended June 30, 2018 and July 1, 2017:

	Six Months Ended	
	June 30, 2018	July 1, 2017
	(in thousands)	
Net cash provided by (used in):		
Operating activities	$ (5,893)	$ (5,510)
Investing activities	(37)	(53)
Financing activities	4,491	583
Net change in cash, cash equivalents and restricted cash	$ (1,439)	$ (4,980)

Operating Activities

Net cash used in operating activities for the six months ended June 30, 2018 was primarily the result of a net loss of $8.1 million, partially offset by (i) $0.8 million of net non-cash operating expenses, which primarily consisted of stock-based compensation, interest accrued on convertible debt, depreciation and amortization and amortization of a debt discount, and (ii) $1.4 million of net cash provided by operating activities due to changes in operating assets and liabilities, which were primarily from a $0.2 decrease in accounts receivable, $0.6 million decrease in inventories and $0.7 million increase in accounts payable, partially offset by a $0.2 million decrease in accrued payroll and related liabilities.

Investing Activities

Net cash used in investing activities for the six months ended June 30, 2018 and July 1, 2017 was the result of our purchases of property and equipment during the periods.

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Financing Activities

Net cash provided by financing activities for the six months ended June 30, 2018 was primarily the result of net proceeds of $3.8 million from the ATM Program and $0.8 million from the issuance of common stock to a trust controlled by our President, Chief Executive Officer and Chairman of the Board, partially offset by $0.2 million in payments of outstanding debt.

Net cash provided by financing activities for the six months ended July 1, 2017 was primarily the result of $0.7 million in net borrowings under the SVB Credit Agreement and $0.2 million in net proceeds from the exercise of equity awards, partially offset by $0.2 million in payments of outstanding debt.

Capital Resources

Our sources of cash have historically consisted of proceeds from issuances of equity and debt securities and revenues generated from operations, including from product sales and the NRE fee from our JDLA with Samsung. 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 certain of our legal proceedings against SK hynix and, to a lesser extent, equipment leasing arrangements.

2017 ATM Program

In November 2017, we entered into an At Market Issuance Sales Agreement (the “Sales Agreement”) with B. Riley FBR. Inc. (the “Agent”) to sell shares of our common stock, with aggregate gross proceeds of up to $9.0 million, from time to time, through an “at-the-market” equity offering program under which the Agent will act as sales agent (the “ATM Program”).

As of June 30, 2018, we had sold 25,983,098 shares (17,088,876 shares during the six months ended June 30, 2018) of our common stock in the ATM Program for net proceeds of $6.6 million ($3.8 million during the six months ended June 30, 2018), after deducting sales commissions and other offering expenses paid by us. In addition, subsequent to June 30, 2018 through August 10, 2018, we sold 8,978,094 shares of our common stock for approximate net proceeds of $1.3 million, after deducting sales commissions and other offering expenses paid by us.

TRGP Agreement

On May 3, 2017, we entered into a funding agreement (the "TRGP Agreement"), which generally provides that TRGP will directly fund the costs incurred by us or on our behalf in connection with our first ITC action and our U.S. district court proceedings against SK hynix. For the six months ended June 30, 2018, TRGP directly paid $1.5 million ($11.7 million from January 1, 2017 through June 30, 2018) on our behalf incurred in connection with these proceedings.

SVB Credit Agreement

On October 31, 2009, we entered into a credit agreement with SVB (as amended, the "SVB Credit Agreement"), which provides that we may borrow up to the lesser of 80% of eligible accounts receivable or $5.0 million, subject to certain adjustments as set forth in the SVB Credit Agreement. On March 20, 2018, we and SVB entered into another amendment to the SVB Credit Agreement to among other things, (i) extend the maturity date of advances under the SVB Credit Agreement to March 31, 2019 and (ii) revise certain inventory reporting requirements under the SVB Credit Agreement.

As of June 30, 2018 and December 30, 2017, the outstanding borrowings under the SVB Credit Agreement were $2.1 million and $2.0 million, respectively, with the borrowing availability of $0.02 million and $0.1 million, respectively. During the six months ended June 30, 2018 and July 1, 2017, we made net borrowings of $0.1 million and $0.7 million, respectively, under the SVB Credit Agreement.

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SVIC Note

On November 18, 2015, we issued to Samsung Venture Investment Co. ("SVIC") a Senior Secured Convertible Note ("SVIC Note"), which 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. Proceeds from the SVIC Note were used to repay a former loan from a different lender.

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, equity capital available under the ATM Program 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, sales under the ATM Program 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

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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

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed by us in reports we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and 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.

Our management conducted an evaluation, with the participation of our principal executive officer and principal financial officer, of the effectiveness of our disclosure controls and procedures as of the end of the period covered by this report. Based on this evaluation, our principal executive officer and our principal financial officer concluded that our disclosure controls and procedures were effective as of June 30, 2018.

Changes in Internal Control over Financial Reporting

During our fiscal quarter ended June 30, 2018, 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 Controls

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. This being said, we are not aware of any fraudulent activity.

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.

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PART II. OTHER INFORMATION

Item 1. Legal Proceedings

The information under “Litigation and Patent Reexaminations” in Note 8 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 securities 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 and the other information in this report. Each of these risk factors, either alone or 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 securities. As a result, you could lose some or all of any investment you have made or may make in our securities. In assessing these risks, you should also review the other information contained in this report, including our consolidated financial statements and the related notes, and the other filings we make with the Securities and Exchange Commission (“SEC”). 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 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 not be sustained and stockholders may not be able to sell their shares at a desired time or a 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;
- investor perceptions of us and the industry in which we operate;
- our ability to meet investor and analyst expectations for our operating results;
- the availability and level of research coverage of and market-making in our common stock;
- changes in 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;
- general political, economic and market conditions, including volatility or uncertainty in these conditions; and
- the other risk factors described in this report.

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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. Further, following periods of volatility in the overall market and the market price of a particular company's securities, securities litigation can sometimes be instituted against the company. Securities litigation, like other types of litigation, is expensive and time-consuming, and if such litigation is instituted against us in the future, we may incur substantial costs, management's attention and resources may be diverted, and we could be subject to damages in the event of unfavorable results.

We are not in compliance with certain Nasdaq listing requirements, and we may not be able to maintain our Nasdaq listing.

As previously reported in a Form 8-K, as filed with the SEC on September 29, 2017, on September 26, 2017, we received a letter from The Nasdaq Stock Market ("Nasdaq") notifying us that we were no longer in compliance with Nasdaq's requirement for continued listing on The Nasdaq Capital Market under Nasdaq Listing Rule 5550(a)(2), because, for a period of 30 consecutive business days, our common stock had not maintained a minimum closing bid price of $1.00 per share (the "Bid Price Rule"). We have also experienced several other periods of noncompliance with this rule in recent years, including during 2015 through early 2016 and during April and May of 2017. On January 3, 2018, we received another letter from Nasdaq notifying us that we no longer meet Nasdaq's requirements for continued listing on The Nasdaq Capital Market under Nasdaq Rule 5550(b)(2) (the "MVLS Rule") because, for a period of 30 consecutive business days, the market value of our common stock, calculated based on the then-most recent total shares outstanding multiplied by the closing bid price per shares, had not maintained a minimum of $35.0 million. As previously reported in a Form 8-K, as filed with the SEC on April 4, 2018, because of our failure to comply with the MVLS Rule and certain other Nasdaq continued listing standards, we were not automatically eligible for a 180-day extension of the deadline to regain compliance with the minimum bid price rule, which lapsed on March 26, 2018. As a result, our common stock became subject to delisting from The Nasdaq Capital Market on that date, and we received a letter from Nasdaq notifying us of such delisting determination on March 29, 2018. Under Nasdaq Listing Rules 5800 Series, we were entitled to and elected to appeal the delisting determination to a Nasdaq Hearings Panel (the "Panel"), in which we requested additional time to regain compliance with these Nasdaq rules.

As previously reported in Form 8-K, as filed with the SEC on May 21, 2018, we received a decision letter from Nasdaq notifying the Company that the Panel granted our request to continue its listing on The Nasdaq Capital Market (the "Nasdaq Grant"). The Nasdaq Grant is subject to a number of conditions we must satisfy in the months following such grant, including, among others, that we must evidence compliance with the Bid Price Rule and certain other Nasdaq listing requirements, including Nasdaq's minimum stockholders' equity requirement (the "Stockholders' Equity Requirement"), on or before September 25, 2018 (the "New Deadline"). As a result of the Nasdaq Grant, our common stock currently remains listed on The Nasdaq Capital Market under the symbol NLST.

As previously reported in Form 8-K, as filed with the SEC on July 12, 2018, we received a letter from Nasdaq notifying us that because of the continued non-compliance with the MVLS Rule and the Stockholders' Equity Requirement, we should present our plan to evidence compliance with the MVLS Rule for review by the Panel (the "Compliance Plan"). We intend to timely provide the Compliance Plan to the Panel, specifically regarding our plan to evidence compliance with the Stockholders' Equity Requirement.

Any failure to satisfy the conditions in the Nasdaq Grant related to the Bid Price Rule, or if we fail to regain compliance with all applicable Nasdaq rules and requirements by the New Deadline, of if we fail to regain compliance with the MVLS Rule or Stockholder's Equity Requirement, then our common stock would be delisted from trading on The Nasdaq Capital Market. Further, even if we are able to regain compliance by any new deadline but then again fail to comply with these or any other Nasdaq requirements in the future, then we would receive additional deficiency letters from Nasdaq and our common stock could be subject to delisting from The Nasdaq Capital Market at a later date. Any such delisting would cause our common stock to be classified as a "penny stock," among other potentially detrimental consequences, and could severely limit the liquidity of our common stock and materially adversely affect the price of our common stock. Any of these outcomes could significantly impact our stockholders' ability to sell their shares of our

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common stock or to sell these shares at a price that a stockholder may deem acceptable. Delisting from The Nasdaq Capital Market could adversely affect our ability to raise additional financing through the public or private sale of equity securities. Delisting could also have other negative results, including the potential loss of confidence by employees, the loss of institutional investor interest and fewer business development opportunities.

Future issuances of our common stock or rights to purchase our common stock, including pursuant to our equity incentive plans, could result in additional dilution to the percentage ownership of our stockholders and could cause the price of our common stock to decline.

We have historically funded our operations in large part with proceeds from equity and convertible debt financings, and we expect to continue to do so in the future. In addition to capital-raising purposes, we may also issue securities from time to time at prices and on other terms as we determine for acquiring other businesses or assets in exchange for shares of our common stock or other securities, issuing securities to collaborators in connection with strategic partnerships, attracting and retaining employees with equity compensation, or other purposes. If we sell common stock or other equity or convertible debt securities in the future, our then-existing stockholders could be materially diluted by such issuances and new investors could gain rights, preferences and privileges senior to the holders of our common stock, which could cause the price of our common stock to decline.

Sales of our common stock, or the perception that such sales could occur, could cause the market price of our stock to drop significantly, regardless of the state of our business.

As of June 30, 2018, there were 102,333,149 shares of our common stock outstanding, 8,401,108 shares of our common stock subject to outstanding stock options, 3,448,902 of our common stock subject to outstanding warrants, and 12,627,288 shares of our common stock subject to outstanding convertible notes. All outstanding shares of our common stock are eligible for sale in the public market under applicable federal securities laws, subject in certain cases to the requirements of Rule 144 under the Securities Act of 1933, as amended, and shares issued upon the exercise or conversion of outstanding stock options, warrants or convertible notes may also be eligible for sale in the public market, to the extent permitted by Rule 144 or other applicable securities laws and the provisions of the applicable stock option, warrant and convertible note agreements. If these shares are sold, or if it is perceived that they may be sold, in the public market, the trading price of our common stock could fall.

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 August 10, 2018, 9.5% of our outstanding common stock was held by our directors and officers, including 9.3% held by Chun K. Hong, our President, 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 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, including:

· 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;

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- 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. In addition, these anti-takeover provisions could reduce the price that investors are willing to pay for shares of our common stock.

We do not currently intend to pay dividends on our common stock, and any return to investors is expected to result, 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 all decisions about dividends are at the discretion of our board of directors, we have never declared or paid cash dividends on our capital stock in the past, and we have no intention of declaring or paying any such dividends in the foreseeable future. As a result, any return to investors is expected to result, if at all, only from potential increases in the price of our common stock.

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 will 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, increased demand for our memory subsystems and other product offerings and our ability to monetize our intellectual property. We may not be successful in any of these pursuits, and we may never achieve profitability or sustain profitability if achieved.

Our results of operations fluctuate significantly and are difficult to predict.

Our operating results have fluctuated significantly in the past, and we expect they will continue to fluctuate from period to period due to a variety of factors, many of which are beyond our control. Factors relating to our business that may contribute to these fluctuations include, among others, the amount and timing of sales of products, the prices we charge for products, changes in product mix, customer mix or other similar factors, the rate and timing of our billing and collections cycles and the timing and amount of our commitments and other payments, as well as the other risk factors described in this report. In addition, our results may be impacted by events that do not recur regularly, in the same amounts or at all in other periods, including events that may result in our incurrence of cash or non-cash charges or gains in certain periods.

These fluctuations in our operating results may render period-to-period comparisons less meaningful, and investors should not rely on the results of any one period as an indicator of future performance. Moreover, these

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fluctuations in our operating results could cause our performance in any particular period to fall below the expectations of investors or securities analysts or any guidance we have provided to the public, which could negatively affect the trading price of our common stock.

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.

To support our activities in the near term, we expect to rely on cash provided by our operations and proceeds from issuances of debt and equity securities, including funds from our ongoing "at-the-market" common stock offering program established in November 2017 (the "ATM Program"), our 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"). Taking into account our planned activities and sources of capital, we believe 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 further deplete our capital without immediate, or any, cash returns.

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

- the acceptance of, and demand for, our products and the component products we resell to customers;
- 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 maintaining, defending and enforcing our intellectual property rights;
- our results of operations, including our levels of net product revenues and any other revenues we may receive, including non-recurring engineering ("NRE"), license, royalty or other fees;

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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;

- continued liquidity of our common stock to support ongoing sales under our ATM Program;

- the nature and timing of acquisitions or other strategic transactions or relationships in which we engage, if any; and

- the costs associated with the continued operation, and any future growth, of our business.

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,

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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. Further, even if our near-term liquidity expectations prove correct, we may still seek to raise capital through one or more of these financing alternatives. However, we may not be able to obtain capital when needed or desired, 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. Additionally, if we are not able to maintain the listing of our common stock on The Nasdaq Capital Market, the challenges and risks of equity financings may significantly increase, including potentially increasing the dilution of any such financing or decreasing our ability to effect such a financing at all. 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 may be unsuccessful in monetizing our intellectual property portfolio.

We dedicate substantial resources to developing technology innovations we believe are essential to our business. We intend to pursue monetization avenues for our intellectual property portfolio, potentially including licensing, royalty or other revenue-producing arrangements. However, we have not generated any such revenue stream from our intellectual property to date, and we may never be successful in achieving this objective.

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 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 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.

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, among others, 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. Even if we are able to secure these revenues, they may be negatively affected by factors that are entirely or partially outside our control, including reductions in our customers' sales prices, sales volumes and the general state of their business, as well as the terms of the license arrangements.

If we are not successful in monetizing our intellectual property portfolio, we may never recoup our investments of time, capital and other resources in the development, maintenance, defense and enforcement of this portfolio, which could materially harm our financial condition and prospects.

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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 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;

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- 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 and expect to continue to be involved in legal proceedings at the ITC to try to stop allegedly infringing SK hynix RDIMM and LRDIMM products from entering the United States, as well as legal proceedings in U.S. and international courts 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.

We have taken 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"), U.S. district court and the courts of Germany and the People's Republic of China (the "PRC"). In our two separate ITC actions, we have requested exclusion orders that direct U.S. Customs and Border Protection to stop allegedly infringing SK hynix registered dual in-line memory modules ("RDIMM") and load reduced dual in-line memory modules ("LRDIMM") products from entering the United States. In our U.S. district court and international court proceedings, we are primarily seeking damages.

Our first ITC action was resolved in January 2018 with a final determination of no infringement of the patents asserted in this action. The Company is appealing this final determination to the Court of Appeals for the Federal Circuit. In our second ITC action, the ITC terminated the investigation in April 2018, but then restarted the investigation in May 2018 following a Remand order from the ITC Commission and it remains ongoing. Although our U.S. and international court proceedings remain ongoing, the loss of the first ITC action could negatively impact our prospects for positive results in these other proceedings. The decision to pursue an appeal in the first ITC action, or to continue pressing forward with the second ITC action, will require significant resources, including capital expenditures and management attention. Moreover, if we are not successful in the appeal of the first ITC action, or if we do not achieve a positive result in the second ITC action, then we will have invested significant time and funds in these ITC actions that will not be recovered with any cash returns.

Our remaining proceedings against SK hynix, as with any intellectual property litigation, are expensive and time-consuming, regardless of the merits of the claims, and could divert management's attention from our other activities. Even if we are successful at the ITC, we would then need to enforce the order, which could also be expensive, time-consuming and a diversion to management. In addition, lawsuits in the ITC and in courts are subject to inherent uncertainties due to the complexity of the technical issues involved and various other factors, and we may not be successful in any of our actions. For example, 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 taken steps intended to solidify our position and strategy in connection with our proceedings against SK hynix. In May 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 certain of our SK hynix proceedings (including our first ITC action and our U.S. district court proceedings, but excluding our second ITC action and our proceedings in international courts), and in exchange for such funding, we have agreed to pay to TRGP the amount of its funding plus an escalating premium if and when we recover any proceeds from the funded proceedings, and we have granted to TRGP a first-priority lien on the claims underlying the funded proceedings and any proceeds received from the funded proceedings and a second-priority lien on our patents that are the subject of the funded 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

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with or obtain consent from TRGP in connection with certain decisions or other matters relating to the SK hynix proceedings. Further, our arrangement with TRGP only covers fees incurred in connection with certain of our outstanding proceedings against SK hynix, and we are responsible for funding costs related to our other outstanding proceedings and any future actions we may file. As a result, our ability to fund all of our proceedings against SK hynix may be limited to our own cash resources, in which case we may be forced to severely limit our pursuit of these claims and/or our other operations.

In addition, in April 2017, we adopted a rights agreement to implement a standard “poison pill.” In general terms, for so long as the rights issued under the rights agreement are outstanding, 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. The rights agreement expires on the earlier of the complete resolution of all our proceedings against SK hynix and April 17, 2019. 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 are and expect to continue to be involved in other 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 we are infringing others’ intellectual property rights also have been and may in the future be brought against us.

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. Further, any legal disputes with customers could cause them to cease buying or using our products or the component products we resell or delay their purchase of these products and could substantially damage our relationship with them.

Moreover, our ability to continue to pursue this strategy depends on our ability to obtain and protect patents, which is governed by an uncertain process. In addition to the patent issuance process established by law and the procedures of

the USPTO, we must also 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. Any failure to comply with the USPTO's or JEDEC's administrative procedures could jeopardize our ability to claim that our patents have been infringed.

Making use of new technologies and entering new markets increases the likelihood that others might allege that our products or the component products we resell infringe 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 on 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 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.

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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 on technologies and other intellectual property rights 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;
- receive little or no returns for our time and capital investments in the litigation;
- 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 or the component products we resell, 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, involves a significant dedication of resources, including time and capital, and diverts management's attention from our other activities. As a result, any current or future infringement claims or patent challenges by or against third parties, whether or not eventually decided in our favor or settled, could materially adversely affect our business, financial condition and results of operations. Additionally, the outcome of pending or future litigation and related patent reviews and reexaminations, as well as any delay in their resolution, could affect our ability to continue to sell our products, protect against competition in the current and expected markets for our products or license or otherwise monetize our intellectual property rights in the future.

The vast majority of our revenues in recent periods have been generated from resales of component products, including primarily products sourced from Samsung, and any decline in these product resales could significantly harm our performance.

The vast majority of our revenues in recent periods have been generated from resales of component products, including NAND flash memory ("NAND flash") and dynamic random access memory integrated circuits ("DRAM ICs" or "DRAM") products. We resell these component products to end-customers that are not reached in the distribution models of the component manufacturers, including storage customers, appliance customers, system builders and cloud and datacenter customers.

These component product resales are subject to a number of risks. For example, demand for these products could decline at any time for a number of reasons, including, among others, changing customer requirements or preferences, product obsolescence, introduction of more advanced or otherwise superior competing products by our competitors, the ability of our customers to obtain these products or substitute products from alternate sources (including from the manufacturer directly), customers reducing their need for these products generally, or the other risk factors described in this report. We have no long-term agreements or other commitments with respect to sales of these or any of the other products we sell. As a result, any decrease in demand for these products from us would reduce our sale levels and could materially adversely impact our revenues.

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In addition, we have historically obtained the majority of the component products we resell from Samsung. We may experience supply shortages from Samsung at any time and for a variety of reasons, including, among others, spikes in customer demand that cannot be satisfied, any problems that arise with Samsung's manufacturing operations or facilities that cause disruptions or delays, or any failure to comply with the terms of the JDLA regarding the supply of these products. If we choose, or if we are forced, to seek to supply the component products we resell from other suppliers, we may not be able to identify other suppliers that are available and able to produce the particular components with the specific product specifications and in the quantities our customers require, or we may not be able to make arrangements with any other suppliers in a timely manner to avoid delays in satisfying customer orders. Further, even if we are able to make arrangements with other suppliers for sufficient component products to replace any undersupply from Samsung, we may not be able to make these arrangements on financial and other terms comparable to those we have negotiated with Samsung under the JDLA. As a result, any inability to obtain sufficient component products from Samsung could increase our cost of sales for component product resales if we are forced to pay higher prices to obtain the products from other suppliers. Moreover, all of our supply arrangements for these component products, including the terms of the JDLA and any arrangements we may establish with other suppliers, are subject to the other supply and manufacturing risks discussed elsewhere in these risk factors.

Increased reliance on product resales also has a substantial impact on our results of operations. Because the cost of the component products we purchase for resale is added to our cost of sales for these products, our gross margin on resales of component products is significantly lower than our gross margin on sales of our own memory subsystem products. As a result, increased resales of component products as a percentage of our total product revenues have a significant negative impact on our gross margin and gross profit. This gross margin and gross profit differential between memory product sales and component product resales would be amplified if our costs to purchase component products were to increase.

The occurrence of any one or more of these risks could cause our performance to materially suffer.

Our performance has historically been substantially dependent on sales of NVvault, and we may never be able to replace the revenues lost from the rapid decline in NVvault sales in recent periods.

We have historically been substantially dependent on sales of our NVvault non-volatile dual in-line memory modules ("NVDIMM"). However, we have experienced a sharp decline in demand for and sales of NVvault in recent periods. This rapid decline has been due in large part to the loss of our former most significant NVvault customer, Dell, beginning in 2012. We have recognized no NVvault sales to Dell in the past several years, and we expect no future demand from Dell for these products.

Although we continue to pursue qualifications of NVvault with original equipment manufacturers ("OEMs") and potential new customer applications, we have had limited success with these efforts to date and may not be successful in the future. In addition, although we have introduced NVvault product extensions and other next-generation products, including most recently our HybriDIMM memory subsystem, the rate and degree of customer adoption of

these products has been slower and smaller than expected, and these trends could continue or these products may never gain significant customer or market acceptance. We believe our future operating results will depend on our ability to grow demand for and sales of our memory subsystem products, by securing new NVvault customers or successfully commercializing NVvault product extensions and other next-generation products. However, we may not be successful in these pursuits. If we are not able to achieve these objectives, we may never be able to secure revenues and gross profits at levels sufficient to replace lost NVvault sales and our results of operations and prospects could be materially harmed.

We are subject to risks relating to our focus on developing our HybriDIMM and NVvault products for our target customer markets.

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. Although we expect these memory subsystems to continue to account for a portion of our revenues, we have experienced declines in sales of these products in recent periods, and these declines could continue or intensify in the future. We believe market acceptance of these products or derivative products that incorporate our core memory subsystem technology is critical to

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our success, and any continued decline in sales of these products could have a material adverse impact on our performance and long-term prospects.

We have invested significant research and development time and capital in the design of ASIC and hybrid devices, including our NVvault family of products and most recently our next-generation HybriDIMM memory subsystem. These products are subject to significant risks, including:

- we are dependent on a limited number of suppliers for the DRAM ICs, NAND flash 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 required to create these products as a result of issues that are specific to our suppliers or the industry as a whole;

- HybriDIMM and some of our other next-generation products may require additional time including the services and attention of key employees who have competing demands on their available time and may require capital investment to bring the products to market;

- our development and commercialization strategies for these products;

- we are required to demonstrate the quality and reliability of our products to and qualify them with our customers before purchases are made, which requires investments of time and resources in significant and unpredictable amounts prior to the receipt of any revenues from these customers; and

- our 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.

These and other risks associated with 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 developing these technologies.

Additionally, if the demand for servers deteriorates, if the demand for our products to be incorporated in servers continues to decline, or if demand for our products deteriorates because customers in our other target markets change their requirements or preferences or otherwise reduce their need for these types of products generally, our operating results would be adversely affected, and we would be forced to diversify our product portfolio and our target customer markets in order to try to replace revenues lost from the further decreases in product sales. We may not be able to achieve this diversification, and any inability to do so may adversely affect our business, operating performance and prospects.

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

Our target markets are characterized by a limited number of large companies, and consolidation in one or more of these markets may further increase this concentration. As a result, sales to small numbers of customers have historically represented a substantial portion of our net product revenues, and we expect this concentration to continue. Additionally, the composition of major customers and their respective contributions to our net product revenues have fluctuated and will likely continue to fluctuate from period to period as our existing and prospective customers progress through the life cycle of the products they produce and sell and experience resulting fluctuations in their product demand. We believe our performance depends in significant part on our ability to establish and maintain relationships with and effect substantial sales to our large customers.

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 decrease, delay or discontinue their purchase of our products or the component products we resell. In

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addition, the prices customers pay for products are subject to fluctuations, and large or key customers may exert pressure on us to make concessions in the prices at which we sell products to them. Further, we may not be able to sell some of our 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 or the component products we resell, 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 often account for a substantial portion of our net product revenues, the failure of any one of these customers to pay on a timely basis would negatively impact our cash flows. As a result, our net product revenues and operating results could be materially adversely affected by the loss of any of our customers, particularly our large or key customers, a decrease in product sales to any of our customers, including as a result of normal fluctuations in demand or other factors, reductions in the prices at which we sell products to any of our customers, including as a result of price concessions or general declines in average sale prices, or difficulties collecting payments from any of our customers.

Our ability to maintain or increase our 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, our customers' continued incorporation of our products or the component products we resell into their systems, and our customers' sales activity and business results. 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.

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

Our ability to fulfill customer orders for or produce qualification samples of our memory subsystem products, as well as orders for the component products we resell, is dependent on a sufficient supply of FPGAs, ASICs, DRAM ICs and NAND flash, which are essential components of our memory subsystems. We have no long term supply contracts for any of these component products. 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 an affiliate of Samsung, from which we obtained a large portion of our component products purchased for resale and our total inventory purchases in 2016 and 2017. We also use consumables and other components, including 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 certain of our memory subsystem products, and we have been forced to procure the component products we resell from other suppliers to the extent sufficient product is not available from Samsung to meet customer demand or in the event of other Samsung supply issues. We are continually working to secure adequate supplies of the components necessary to fill customers' orders 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 or failures 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 these products or not purchase these products from us at all, which could cause our net product revenues 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 of our products 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, we may experience significant increases in our cost of sales if we are forced to procure components from alternative suppliers and are not able to negotiate favorable terms with these suppliers, or we may be forced to cease our sales of products dependent on the components or resales of the components we sell to customers directly.

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Our dependence on a small number of suppliers and the lack of any guaranteed sources for the essential components of our products and the components we resell expose us to several risks, including the inability to obtain an adequate supply of these 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.

Declines in customer demand for our products in recent periods have caused us to reduce our purchases of DRAM ICs and NAND flash for use as components in our products. 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 these raw materials may be impaired due to the practice of some suppliers of allocating their products to customers with the highest regular demand.

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

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. Even 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, as qualification does not ensure product sales. As a result, we could receive no or limited revenues from a customer even after our investment of time and resources in the qualification process with this customer, 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. Our net product revenues to these customers can decline significantly during this

re-qualification process.

Likewise, changes in our products, our manufacturing facilities, our production processes or our component suppliers may require a new qualification process. For example, if our memory, NAND flash and DRAM component suppliers discontinue production of these 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 forecasts 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 pace with rapid technology change or new competitive products. If we experience delays 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 excess and obsolete inventory that we may not be able

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to sell to another customer and could reduce our net product revenues and customer base, any of which could materially harm our operating results and business.

If we are unable to timely and cost-effectively develop new or enhanced products that achieve customer and market acceptance or technologies we can monetize, our revenues and prospects 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 the continued and timely development of new products and technologies and improvement of existing products and technologies 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 memory subsystems and our key technology competencies;
- identify and adjust to the changing requirements and preferences of our existing and potential future customers and markets;
- 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 on which we rely to produce new products or product enhancements;
- 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 or product enhancements we may develop, 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 commercialization and 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 technologies 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, gain market acceptance or attract monetization opportunities, as our product and technology development efforts are inherently risky due to the challenges of foreseeing changes or developments in technology, predicting changes in customer requirements or preferences or anticipating the adoption of new industry standards. Moreover, we have invested significant resources in our product and technology development efforts, which would be lost if we fail to generate revenues from these efforts. If any if these risks occur, our revenues, 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. In addition, we resell certain component products to storage customers, appliance customers, system builders

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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. We also face competition from the manufacturers and distributors of the component products we resell to customers, as these manufacturers and distributors could decide at any time to sell these component products to these customers directly. 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 the components we resell to them, or could develop internal solutions or enter into strategic relationships with, or acquire, other high-density memory module or component providers. Any of these actions could reduce our customers' demand for our products or the component products we resell. Additionally, some of our significant suppliers could choose to sell component products to customers directly, which would adversely affect our ability to resell these products, or may choose to manufacture competitive memory subsystem products themselves or reduce our supply of essential components of our products, which could adversely affect our ability to manufacture and sell our memory subsystems.

We believe our ability to compete in our current target markets and potential future markets will depend in part on our ability to successfully and timely develop, introduce and sell at attractive prices new and enhanced products or technologies and otherwise respond to changing market requirements, which we may not be able to do faster and better than our competitors. Moreover, many of our competitors have substantially greater financial, technical, marketing, distribution and other resources, broader product lines, lower cost structures, greater brand recognition, more influence on industry standards, more extensive or established patent portfolios and longer standing relationships with customers and suppliers. We may not be able to compete effectively against any of these organizations. If we are unable to compete effectively, then our market position and prospects could deteriorate and our revenues could decline.

If our proprietary rights are not protected, 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 and other proprietary rights. We have submitted a number of patent applications regarding our proprietary processes and technology, many of which have resulted in issued patents. For our pending patent applications, it is uncertain when or if any of the claims in these applications will be allowed or result in issued patents, in which case the technologies or processes sought to be patented would remain unprotected from use by third parties. In addition, although we intend to continue filing patent applications with respect to new processes and technologies we develop, patent protection may not be available for some of these processes or technologies. Further, even if we are successful in obtaining patent protection, these protections could be limited in scope by the USPTO, a court or applicable foreign authorities or challenged by third parties by way of review or reexamination proceedings and subsequently invalidated, which would reduce the protections these patents are able to provide. Moreover, patent

protection is limited as to duration and all of our issued patents will eventually expire, at which time the previously protected technologies would become widely available for use by third parties, including our competitors.

Despite our efforts to protect our intellectual property rights, these efforts 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;

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· result in valid patents, including international patents, from any of our pending or future applications; or

· otherwise adequately protect our intellectual property rights.

Moreover, monitoring for any unauthorized use of our technologies is costly, time-consuming and difficult. This is particularly true in foreign countries, such as the 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, if any of our issued patents or other intellectual property protections are limited, invalidated or circumvented by third parties, or if we are not able to obtain extensions of existing patents upon their expiration or issuance of new patents to maintain protections provided by expiring patents, we could face increased competition for our products and technologies 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.

Changes in domestic and global economic and political conditions make it 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 the products we resell. For instance, the current political instability in Korea could impact our operations and financial condition as a result of our relationships with Samsung, a South Korea-based company, as a key supplier, as well as our ongoing legal proceedings against SK hynix.

In addition, sales of our products and the products we resell are dependent on demand by customers in our target markets. These markets are characterized by wide fluctuations in product supply and demand and have been cyclical in the past, which may result in substantial period-to-period fluctuations in our operating results. In addition, these markets have in the past 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 sale prices decline, all of which would materially adversely impact our business and operating results. 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 demand and sales, our gross margins and cash flows would be negatively impacted. Further, such a downturn could decrease the perceived value of our intellectual property portfolio and reduce our ability to pursue our intellectual property monetization objectives.

During challenging economic times, our customers may face challenges gaining timely access to sufficient credit, which could impair their ability to make timely payments to us. This may negatively affect 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 customer 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. 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.

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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 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, our product sales are made primarily pursuant to stand-alone 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 our customers' ability to 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 or the component products we resell. These facts, combined with the short turnaround times that apply to most orders, makes it difficult to predict our production and inventory needs and allocate production capacity and capital for inventory purchases effectively. As a result, we attempt to forecast the demand for the components needed to manufacture our products and to resell to customers directly, 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 any 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 component or finished goods inventory, which may not be able to be used in other products or resold and may become obsolete before any such use or resale. If there is a subsequent decline in the prices of components, the value of our inventory would fall and we may be required to write-down the value of our component inventory, which may result in a significant increase in our cost of sales and decrease in our gross margin. In the past, we have had to write-down inventory due to obsolescence, excess quantities and declines in market value below our costs. As a result, 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 demand by our customers could strain our resources. If we underestimate customer demand, we may not have sufficient inventory of necessary components on hand to meet that demand and we may need to try to procure additional quantities, which may not be available or may only be available at high prices or on otherwise unfavorable terms. We also may not have sufficient manufacturing capacity at any given time to meet any demands for rapid increases in production of our memory subsystem products. Any shortages of inventory or manufacturing capacity could lead to delays in the delivery of products, which may force us to forego sales opportunities, reduce our net product revenues and damage our customer relationships.

In addition, if our product demand forecasts are wrong, we may understate or overstate the provision required for excess and obsolete inventory. 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 the determination. Conversely, 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 the inventories are sold.

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

Our industry has historically been characterized by declines in average sale prices. If sale price declines are not offset by corresponding decreases in costs or increases in sales volume or sales of products with higher margins, these sale price declines could have a material adverse effect on our operating results.

The prices customers pay for the products we sell can fluctuate due to many factors, including, among others, competitive conditions in our key customer markets, changes in customer requirements or preferences, volatility in the market prices for DRAM ICs, NAND flash and other component products, and changes in manufacturing efficiencies or capacities. Market prices for component products have historically constituted a substantial portion of the total cost of our memory subsystems and in recent periods have constituted the vast majority of the cost of resales of these products

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to customers directly. As a result, fluctuations in the prices for these component products, due to overcapacity in worldwide supply or increased manufacturing efficiencies, implementation of new manufacturing processes or expansion of manufacturing capacity by component suppliers, among other factors, significantly impact our costs to sell our products or component products.

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 through 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 sudden price increases. Alternatively, if there are declines in the prices of these components, we may be required to reduce our selling prices for subsequent purchase orders, which may result in a decline in our net product revenues.

Our manufacturing operations involve significant risks.

We maintain a manufacturing facility in the PRC at which we produce most of our products. These 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 new and more complex products, the risk of encountering delays, difficulties or higher costs increases. In addition, 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, decrease our gross margin, decrease our control over manufacturing processes, limit our ability to satisfy customer requirements and 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 occur, our operations, performance and customer relationships could be severely harmed.

We also may need to expand our existing manufacturing facility or establish a new facility in the future. 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 components for our products and the component products we resell, which exposes us to risks.

Components that are used in our products, as well as all of the component products we resell, are designed and manufactured by third parties. In addition, some of our memory subsystem products rely on significantly customized components. The ability and willingness of third parties to enter into these engagements with us and perform in accordance with these engagements is largely outside 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 the components we use in our products or the components we resell, 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 products with components from a new vendor is also significant. Additionally, even if an alternative manufacturer is available, we may not be able

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to engage the manufacturer on acceptable terms, which could result in increased costs, timing requirements or other adverse changes. Further, we may not be able to redesign the customized components used in our products to be manufactured by a new manufacturer, in which case we could infringe on the intellectual property of our current design or manufacturing partner when we manufacture the products with a new design or manufacturing partner. Such an occurrence could force us to stop selling certain of our products or could 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 infringement or 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 at an acceptable cost and to allocate a portion of their manufacturing capacity sufficient to meet our needs. However, these component manufacturers may not be able to achieve these tasks. Additionally, our manufacturing partners may not continue to devote adequate resources to produce our products or the component products we resell, or continue to advance the process design technologies on which the customer qualifications of our products are based. Any of these risks could limit our ability to meet customer demand and materially adversely affect our business and operating results.

If our products or the component products we resell 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 and the component products we resell to meet strict quality standards. If the products fail to meet these standards, our customers may discontinue purchases from us until we are able to resolve the quality issues that are causing these failures, which we may not be able to do. These “quality holds” can be costly and time-consuming to resolve. In addition, if the products we sell 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, 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 “quality holds,” 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, performance and financial condition, as well as our ability to attract and retain customers.

If a standardized memory solution that addresses the demands of our customers is developed, our net product revenues 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.

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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 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, the duration of these indemnities is generally perpetual after execution of an agreement, and the maximum potential amount of future payments we could be required to make under these indemnities 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 have a material adverse effect on our business and results of operations.

We depend on certain 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 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 continue to provide their services could delay the development and introduction of new or enhanced products or technologies, 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 our employees other than Chun K. Hong, our President, Chief Executive Officer and Chairman of our board of directors, and as a result most of our employees may terminate their employment with us at any time. We maintain "Key Man" life insurance on Mr. Hong, but we do not carry "Key Man" life insurance on any of our other 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 these 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 personnel 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 and technologies would be negatively impacted, which could harm our business. In addition, a general shortage of experienced engineers or other technical personnel could lead to increased recruiting, relocation and compensation costs to attract new recruits, which may increase our operating expenses or make these hires more difficult or impossible if increased recruiting costs exceed our resources.

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 to 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 or technologies, any of which could materially adversely affect our business and operating performance.

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

We primarily market and sell our products and the component products we resell 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.

Our 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 effectively market and support our products or the component products we resell, especially in markets in which we have not previously distributed these 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 or any benefits and our ability to market and sell our products or the component products we resell may be limited, which could materially harm our financial condition and operating results. Further, our reliance on 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 or the component products we resell, could market them in an ineffective manner or could otherwise be unsuccessful in selling adequate quantities of these products.

We are exposed to additional business, regulatory, political, operational, financial and economic risks related to our international sales and operations.

We sell products to foreign corporations and deliver 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 that performs most of the manufacturing activities for our memory subsystem products.

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 and that may impose materially different requirements. Further, the geographic distance from our headquarters in Irvine, California, compounds the difficulties of maintaining 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 or costs. Moreover, we will need to continue to overcome language and cultural barriers to effectively conduct these international operations. Failures in any of these areas could result in legal consequences or production delays and increased turnaround times, which could adversely affect our business. In addition, changes to the labor or other laws of the PRC or the economic and political conditions in the PRC, including

increased industrialization in recent years, could increase the costs of employing a local workforce or conducting our manufacturing operations in the PRC. Any of these factors could negatively impact any cost savings we experience from locating our manufacturing facility in the PRC. Additionally, our management has limited experience creating or overseeing foreign operations generally, and the ongoing administration and operation of our PRC facility may require substantial amounts of time and attention by our management team, particularly if we encounter operational, legal or cultural difficulties or disruptions at our PRC facility.

To date, all of our net product revenues have been denominated in U.S. dollars. In the future, however, some of our net product revenues 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, and any failure to so comply could adversely affect our liquidity and financial condition. Further, if we are able to repatriate funds from our Chinese operations, these

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funds would be subject to U.S. taxes. In addition, fluctuations in the exchange rate between RMB and U.S. dollars may adversely affect our expenses, the value of our assets and liabilities and the comparability of our period-to-period results.

Our international operations and sales are subject to a number of additional risks, including, among others, timing and availability of export licenses; difficulties in accounts receivable collections; difficulties managing distributors; lack of a significant local sales presence in a number of markets; difficulties obtaining government approvals; compliance with anti-bribery, data protection and other applicable U.S. and foreign laws, including the U.S. Foreign Corrupt Practices Act and similar anti-bribery laws in the non-U.S. jurisdictions in which we operate, as well as a wide variety of other complex foreign laws, regulations 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 on the importation or exportation of our products or the component products we resell, which could lead to a reduction in sales and profitability in that country. This risk of increased trade barriers or charges has become more pronounced because the trade policies of the current U.S. presidential administration, including withdrawal from the Trans-Pacific Partnership, imposition of tariffs on Chinese goods and services 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 same manner and at the same costs as we have in the past. The recent implementation of tariffs by the United States on goods manufactured in other countries, including PRC, could cause the costs of our products to increase, which could significantly impair the gross profit we receive and thereby harm our operating results significantly.

In addition, international turmoil and the threat of future terrorist attacks 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 volatile in recent years, resulting in significant fluctuations in local currencies and other instabilities. These conditions could continue or worsen, which could adversely affect our foreign operations and our performance.

The occurrence of any of these risks related 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, including Samsung for many of the component products we resell, 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 product manufacture and sale and cause significant delays in product shipments, which could harm our customer relationships, financial condition and results of operations. In the past, our PRC facility has suffered water damage as a result of

heavy rains and floods, which forced us to temporarily halt manufacturing at the facility while necessary repairs or equipment replacements were made. This incident caused us to incur additional expenses because we were forced to shift our manufacturing activities to a third-party facility in the PRC to mitigate the disruption in product shipments to our customers. If manufacturing at the PRC facility is disrupted for similar or other reasons in the future, we may again be subject to increased expenses in order to engage a third-party manufacturer, or, if we are not able to secure alternative manufacturing capabilities, our ability to sell products and our relationships with our customers could be materially harmed. Additionally, we may be forced to bear significant costs in order to repair any damage to our manufacturing equipment and facility. Any of these outcomes could have a material adverse effect on our business and results of operations.

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

We store key 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. Any failure or malfunctioning of our global information technology systems, errors or misuse by system users, difficulties

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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 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 processes, such as maintenance of our disclosure controls and procedures and internal control over financial reporting.

While our information technology systems include security measures designed to prevent unauthorized access, employee error, employee malfeasance or other causes, including intentional misconduct by computer hackers, could circumvent these measures and result in unauthorized access to these systems. Because the techniques used to gain unauthorized access to information technology systems evolve frequently and often are not recognized until successful, we may be unable to anticipate these techniques or implement adequate preventative measures in a timely manner. Any security breach could require significant resources to correct, if correction is possible, and could result in disruption to our business, misappropriation or loss of data, loss of confidence in us by our customers, damage to our reputation and legal liability. Further, any failure to implement appropriate security measures to protect our information or any breach or other failure of our systems that results in unauthorized access, manipulation, disclosure or loss of this information could result in our violation of any U.S. or foreign data protection laws that are applicable to us. These laws and their interpretation and application are constantly evolving, and they could be interpreted and applied in a manner that is inconsistent with our current practices or they could become more stringent over time. Efforts to comply with applicable data protection laws or any new interpretations of their application could involve significant time and substantial costs or require us to change our business practices and compliance procedures, and any failures to so comply could subject us to substantial civil or criminal fines or sanctions. Any of these outcomes could have a material negative impact on our business, performance and prospects.

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 also may be subject to a variety of laws and regulations relating to other matters, including workplace health and safety, labor and employment, foreign business practices (including the U.S. Foreign Corrupt Practices Act and applicable foreign anti-bribery laws), data protection, 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. Additionally, any changes to existing regulations or adoption of new regulations may result in significant additional expense to us or 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.

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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.

The U.S. Congress has enacted laws, and the SEC has 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. These laws and 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 laws and disclosure rules. To comply, 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 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 verifying the origins of the minerals used in our products or their manufacture. 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 we implement, we may not be able to satisfy customer preferences or requirements regarding the use of conflict minerals in the products they purchase, 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 fiscal year. In addition, if and when we are no longer a “smaller reporting company” under applicable SEC rules, Section 404 will require us to obtain an attestation report from our independent registered public accounting firm as to our internal control over financial reporting.

Effective internal control is necessary for us to produce accurate and reliable financial reports and is important in our efforts 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 significant deficiencies or material weaknesses, we may be unable to produce accurate and reliable financial reports or prevent fraud, which could result in a loss of customer or investor confidence in us or our public disclosures and negatively impact our stock price. Any of these outcomes could harm our financial condition and results of operations.

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, involve significant time and costs and negatively impact our financial reporting functions during the transition, any of which could have a material negative effect on our results of operations and financial condition.

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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, which we may not be able to do in a timely or cost-effective manner. In addition, our management team has relatively limited experience managing a rapidly growing business. As a result, they may not be able to manage any future growth we may experience. A 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 and results of operations.

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

From time to time, we evaluate opportunities to acquire businesses or technologies or pursue other strategic transactions or relationships, including collaboration or joint development arrangements, 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 or relationships entail a number of risks that could adversely affect our business and operating results, including, among others:

- difficulties 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 our business;

- insufficient increases in revenues to offset increased expenses associated with an acquisition or strategic transaction or relationship;

- difficulties retaining business relationships with our existing suppliers and customers or the suppliers and customers of an acquired company;

- overestimation of potential synergies or other benefits, or a delay in realizing these synergies or other benefits;

- 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 establish a strategic relationship, or dilution of existing stockholders or increased leverage relative to our earnings or to our equity capitalization if we issue debt or equity securities for these purposes;

- 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.

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

Item 2.Unregistered Sales of Equity Securities and Use of Proceeds

On July 13, 2018, the Company issued to a software development company a warrant to purchase up to 300,000 shares of its common stock at an exercise price per share of $0.11. Such warrant has a term of ten years and was issued as partial consideration for services to be rendered by such firm. On the same day, the Company issued to a consultant a warrant to purchase up to 150,000 shares of its common stock at an exercise price per share of $0.15. Such warrant has a term of ten years and was issued as partial consideration for services rendered.

Item 6.Exhibits

The information required by this Item 6 is set forth on the Exhibit Index.

EXHIBIT INDEX

Exhibit		Filed	Incorporated by Reference		
Number	Exhibit Description	Herewith	Form	File No.	Filing Date
3.1	Restated Certificate of Incorporation of Netlist, Inc.		10-Q	001-33170	08/15/2017
3.1.1	Certificate of Amendment to the Restated Certificate of Incorporation of Netlist, Inc.		10-Q	001-33170	08/15/2017
3.1.2	Certificate of Designation of the Series A Preferred Stock of Netlist, Inc.		10-Q	001-33170	08/15/2017
3.2	Amended and Restated Bylaws of Netlist, Inc.		8-K	001-33170	12/20/2012
31.1		X			

	Certification of Principal Executive Officer pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	
31.2	Certification of Principal Financial Officer pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	X
32*	Certification by Principal Executive Officer and Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.	X
101.INS	XBRL Instance Document	X

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	XBRL Taxonomy Extension Schema Document	X
101.SCH		
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document	X
101.LAB	XBRL Taxonomy Extension Label Linkbase Document	X
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document	X
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document	X

*Furnished herewith. This certification is being furnished solely to accompany this report pursuant to 18 U.S.C. 1350, and are not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and is not to be incorporated by reference into any filing of the registrant, whether made before or after the date hereof, regardless of any general incorporation by reference language in such filing.

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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: August 14, 2018 Netlist, Inc.

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

By: /s/ Gail Sasaki
Gail Sasaki
Vice President and Chief Financial Officer
(Principal Financial Officer)