NANOMETRICS INC Form 10-Q May 03, 2017

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended April 1, 2017

OR

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

For the transition period from to

Commission file number: 000-13470

NANOMETRICS INCORPORATED

(Exact name of registrant as specified in its charter)

Delaware 94-2276314

(State or other jurisdiction of incorporation or organization) (I.R.S. Employer Identification Number)

1550 Buckeye Drive

Milpitas, California 95035 (Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: (408) 545-6000

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

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

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

Large accelerated filer

Non-accelerated filer

(Do not check if a smaller reporting company)

Emerging growth company

Accelerated filer

Smaller reporting 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 by Rule 12b-2 of the Exchange Act) Yes No

As of April 28, 2017, there were 25,251,692 shares of common stock, \$0.001 par value, issued and outstanding.

NANOMETRICS INCORPORATED

INDEX TO QUARTERLY REPORT ON FORM 10-Q

FOR THE QUARTER ENDED APRIL 1, 2017

PART I. FINANCIAL INFORMATION

Item 1.	Financial Statements	3
	Condensed Consolidated Balance Sheets at April 1, 2017 and December 31, 2016 (Unaudited)	3
	Condensed Consolidated Statements of Operations for the Three Months Ended April 1, 2017 and March 26, 2016 (Unaudited)	4
	Condensed Consolidated Statements of Comprehensive Income for the Three Months Ended April 1, 2017 and March 26, 2016 (Unaudited)	5
	Condensed Consolidated Statements of Cash Flows for the Three Months Ended April 1, 2017 and March 26, 2016 (Unaudited)	6
	Notes to Condensed Consolidated Financial Statements (Unaudited)	7
Item 2.	Management's Discussion and Analysis of Financial Condition and Results of Operations	21
Item 3.	Quantitative and Qualitative Disclosures about Market Risk	27
Item 4.	Controls and Procedures	28
PART II.	OTHER INFORMATION	
Item 1A.	Risk Factors	30
Item 6.	<u>Exhibits</u>	31
Signature	e <u>s</u>	32
2		

PART I — FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS NANOMETRICS INCORPORATED

CONDENSED CONSOLIDATED BALANCE SHEETS

(In thousands except share and per share amounts)

(Unaudited)

	April 1, 2017	December 31, 2016
ASSETS		
Current assets:		
Cash and cash equivalents	\$47,417	\$ 47,062
Marketable securities	84,679	82,899
Accounts receivable, net of allowances of \$74 and \$73, respectively	48,419	39,457
Inventories	41,544	38,837
Inventories-delivered systems	3,280	2,457
Prepaid expenses and other	5,925	5,667
Total current assets	231,264	216,379
Property, plant and equipment, net	43,176	44,226
Goodwill	9,227	8,940
Intangible assets, net	361	412
Deferred income tax assets	19,103	17,399
Other assets	405	474
Total assets	\$303,536	\$ 287,830
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$18,614	\$ 11,342
Accrued payroll and related expenses	8,456	12,656
Deferred revenue	12,166	9,168
Other current liabilities	7,293	8,047
Income taxes payable	983	813
Total current liabilities	47,512	42,026
Deferred revenue	856	816
Income taxes payable	857	841
Deferred tax liability	21	20
Other long-term liabilities	377	353
Total liabilities	49,623	44,056
Commitments and contingencies (Note 9)		
Stockholders' equity:		

Preferred stock, \$0.001 par value; 3,000,000 shares authorized;			
no shares issued or outstanding	_	_	
Common stock, \$0.001 par value, 47,000,000 shares authorized: 25,227,935			
and 25,070,889, respectively, issued and outstanding	25	25	
Additional paid-in capital	273,735	271,969	
Accumulated deficit	(15,737)	(22,174)
Accumulated other comprehensive income	(4,110)	(6,046)
Total stockholders' equity	253,913	243,774	
Total liabilities and stockholders' equity	\$303,536	\$ 287,830	

See Notes to Condensed Consolidated Financial Statements

NANOMETRICS INCORPORATED

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

(In thousands except per share amounts)

(Unaudited)

	Three Months Ended	
	April 1,	March 26,
	2017	2016
Net revenues:		
Products	\$48,175	\$39,214
Service	11,139	8,275
Total net revenues	59,314	47,489
Costs of net revenues:		
Cost of products	25,478	18,079
Cost of service	5,337	4,484
Amortization of intangible assets	52	435
Total costs of net revenues	30,867	22,998
Gross profit	28,447	24,491
Operating expenses:		
Research and development	8,694	8,068
Selling	7,938	7,249
General and administrative	6,307	5,420
Amortization of intangible assets	_	24
Total operating expenses	22,939	20,761
Income from operations	5,508	3,730
Other (income) expense:		
Interest income	1	9
Interest expense	(40	(117)
Other income, net	(3)	225
Total other income (expense), net	(42	117
Income before income taxes	5,466	3,847
Provision for income taxes	114	380
Net income	\$5,352	\$3,467
Net income per share:		
Basic	\$0.21	\$0.14
Diluted	\$0.21	\$0.14
Weighted average shares used in per share calculation:		
Basic	25,133	24,308
Diluted		

NANOMETRICS INCORPORATED

CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(In thousands)

(Unaudited)

	Three M Ended	lonths
	April	March
	1, 2017	26, 2016
Net income	\$5,352	\$3,467
Other comprehensive income (loss):		
Change in foreign currency translation adjustment	1,945	952
Net change on unrealized gains on available-for-sale investments	(9)	35
Other comprehensive income (loss):	1,936	987
Comprehensive income	\$7,288	\$4,454

See Notes to Condensed Consolidated Financial Statements

NANOMETRICS INCORPORATED

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

(In thousands)

(Unaudited)

	Three Months Ended	
	April 1, 2017	March 26, 2016
Cash flows from operating activities:		
Net income	\$5,352	\$3,467
Reconciliation of net income to net cash provided by operating activities:		
Depreciation and amortization	1,854	2,176
Stock-based compensation	2,164	1,689
Disposal of fixed assets	63	99
Inventory write-down	406	651
Deferred income taxes	(479)	(20
Changes in fair value of contingent payments to Zygo Corporation	_	55
Changes in assets and liabilities:		
Accounts receivable	(6,874)	(5,197)
Inventories	(2,695)	
Inventories-delivered systems	(823	
Prepaid expenses and other	(88	
Accounts payable, accrued and other liabilities	970	(1,468)
Deferred revenue	3,039	2,643
Income taxes payable	186	(1,037)
Net cash provided by operating activities	3,075	499
Cash flows from investing activities:		
Sales of marketable securities	10,181	
Maturities of marketable securities	24,531	13,153
Purchases of marketable securities	(36,514)	(12,953)
Purchases of property, plant and equipment	(47)	(610)
Net cash used in investing activities	(1,849)	(410)
Cash flows from financing activities:		
Payments to Zygo Corporation related to acquisition	_	(84)
Proceeds from sale of shares under employee stock option		
plans and purchase plan	1,217	934
Taxes paid on net issuance of stock awards	(1,755)	(658)
Net cash provided by (used in) financing activities	(538)	192
Effect of exchange rate changes on cash and cash equivalents	(333)	238
Net increase (decrease) in cash and cash equivalents	355	519

Cash and cash equivalents, beginning of period	47,062	38,154
Cash and cash equivalents, end of period	\$47,417	\$38,673
Supplemental disclosure of non-cash investing activities:		
Transfer of property, plant and equipment to inventory, net	\$22	\$491

See Notes to Consolidated Financial Statements

NANOMETRICS INCORPORATED

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

(Unaudited)

Note 1. Nature of Business and Basis of Presentation

Description of Business – Nanometrics Incorporated ("Nanometrics" or the "Company") and its wholly-owned subsidiaries design, manufacture, market, sell and support optical critical dimension ("OCD"), thin film and overlay dimension metrology and inspection systems used primarily in the manufacturing of semiconductors, solar photovoltaics ("solar PV") and high-brightness LEDs ("HB-LED"), as well as by customers in the silicon wafer and data storage industries. Nanometrics' metrology systems precisely measure a wide range of film types deposited on substrates during manufacturing to control manufacturing processes and increase production yields in the fabrication of integrated circuits. The Company's OCD technology is a patented critical dimension measurement technology that is used to precisely determine the dimensions on the semiconductor wafer that directly control the resulting performance of the integrated circuit devices. The thin film metrology systems use a broad spectrum of wavelengths, high-sensitivity optics, proprietary software, and patented technology to measure the thickness and uniformity of films deposited on silicon and other substrates as well as their chemical composition. The overlay metrology systems are used to measure the overlay accuracy of successive layers of semiconductor patterns on wafers in the photolithography process. Nanometrics' inspection systems are used to find defects on patterned and unpatterned wafers at nearly every stage of the semiconductor production flow. The corporate headquarters of Nanometrics is located in Milpitas, California.

Basis of Presentation – The accompanying condensed consolidated financial statements ("financial statements") have been prepared on a consistent basis with the audited consolidated financial statements as of December 31, 2016, and include all normal recurring adjustments necessary to fairly state the information set forth therein. All significant intercompany accounts and transactions have been eliminated in consolidation.

The financial statements have been prepared in accordance with the regulations of the United States Securities and Exchange Commission ("SEC") for interim periods in accordance with S-X Article 10, and, therefore, omit certain information and footnote disclosure necessary to present the statements in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP"). The operating results for interim periods are not necessarily indicative of the operating results that may be expected for the entire year. These financial statements should be read in conjunction with the audited consolidated financial statements and notes thereto for the fiscal year ended December 31, 2016, which were included in the Company's Annual Report on Form 10-K filed with the SEC on March 3, 2017.

Fiscal Period – The Company uses a 52/53 week fiscal year ending on the last Saturday of the calendar year. All references to the guarter refer to Nanometrics' fiscal quarter. The fiscal quarters reported herein are 13 week periods.

Use of Estimates – The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reported period. Actual results could differ materially from those estimates. Estimates are used for, but not limited to, revenue recognition, the provision for doubtful accounts, the provision for excess, obsolete, or slow moving inventories, valuation of intangible and long-lived assets, warranty accruals, income taxes, valuation of stock-based compensation, and contingencies.

Revenue Recognition – The Company derives revenue from the sale of process control metrology and inspection systems and related upgrades ("product revenue") as well as spare part sales, billable service and service contracts (together "service revenue"). Upgrades are system software and hardware performance upgrades that extend the features and functionality of a product. Upgrades are included in product revenue, which consists of sales of complete, advanced process control metrology and inspection systems (the "system(s)"). Nanometrics' systems consist of hardware and software components that function together to deliver the essential functionality of the system. Arrangements for sales of systems and upgrades often include defined customer-specified acceptance criteria.

In summary, the Company recognizes revenue when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the seller's price is fixed or determinable, and collectability is reasonably assured.

NANOMETRICS INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

(Unaudited)

For repeat product sales to existing customers, revenue recognition occurs at the time title and risk of loss transfer to the customer, which usually occurs upon shipment from the Company's manufacturing location, if it can be reliably demonstrated that the product has successfully met the defined customer specified acceptance criteria and all other recognition criteria have been met. For initial sales where the product has not previously met the defined customer specified acceptance criteria, product revenues are recognized upon the earlier of receipt of written customer acceptance or expiration of the contractual acceptance period. In Japan, where contractual terms with the customer specify risk of loss and title transfers upon customer acceptance, revenue is recognized upon receipt of written customer acceptance, provided that all other recognition criteria have been met.

The Company warrants its products against defects in manufacturing. Upon recognition of product revenue, a liability is recorded for anticipated warranty costs. On occasion, customers request a warranty period longer than the Company's standard warranty. In those instances, where extended warranty services are separately quoted to the customer, the associated revenue is deferred and recognized as service revenue ratably over the term of the extended warranty period. The portion of service contracts and extended warranty services agreements that are uncompleted at the end of any reporting period are included in deferred revenue.

The Company sells software that is considered to be an upgrade to a customer's existing systems. These standalone software upgrades are not essential to the tangible product's functionality and are accounted for under software revenue recognition rules which require vendor specific objective evidence ("VSOE") of fair value to allocate revenue in a multiple element arrangement. Revenue from software sales is recognized when the software is delivered to the customer, provided that all other recognition criteria have been met.

The majority of other upgrades are sold based on published specifications. For simple upgrades that do not require major configuration, revenue is recognized at the time title and risk of loss transfer to the customer, which is usually upon shipment. For complex and extensive upgrades, specific acceptance or prior acceptance for a similar upgrade is required in order to recognize revenue.

Revenue related to spare parts is recognized upon shipment. Revenue related to billable services is recognized as the services are performed. Service contracts may be purchased by the customer during or after the warranty period and revenue is recognized ratably over the service contract period.

Frequently, the Company delivers products and various services in a single transaction. The Company's deliverables consist of tools, installation, upgrades, billable services, spare parts, and service contracts. The Company's typical multi-element arrangements include a sale of one or multiple tools that include installation and standard warranty. Other arrangements consist of a sale of tools bundled with service elements or delivery of different types of services. The Company's tools, upgrades, and spare parts are generally delivered to customers within a period of up to six months from order date. Installation is usually performed soon after delivery of the tool. The portion of revenue associated with installation is deferred based on relative selling price and that revenue is recognized upon completion of the installation and receipt of final acceptance. Billable services are billed on a time and materials basis and performed as requested by customers. Under service contract arrangements, services are provided as needed over the fixed arrangement term, which terms can be up to twelve months. The Company does not grant its customers a general right of return or any refund terms and imposes a penalty on orders cancelled prior to the scheduled shipment date.

The Company regularly evaluates its revenue arrangements to identify deliverables and to determine whether these deliverables are separable into multiple units of accounting. The Company allocates the arrangement consideration among the deliverables based on relative selling prices. The Company has established VSOE for some of its products and services when a substantial majority of selling prices falls within a narrow range when sold separately. For deliverables with no established VSOE, the Company uses best estimate of selling price to determine standalone selling price for such deliverable. The Company does not use third party evidence to determine standalone selling price since this information is not widely available in the market as the Company's products contain a significant element of proprietary technology and the solutions offered differ substantially from competitors. The Company has established a process for developing estimated selling prices, which incorporates historical selling prices, the effect of market conditions, gross margin objectives, pricing practices, as well as entity-specific factors. The Company monitors and evaluates estimated selling price on a regular basis to ensure that changes in circumstances are accounted for in a timely manner.

When certain elements in multiple-element arrangements are not delivered, or accepted at the end of a reporting period, the relative selling prices of undelivered elements are deferred until these elements are delivered and/or accepted. If deliverables cannot be accounted for as separate units of accounting, the entire arrangement is accounted for as a single unit of accounting and revenue is deferred until all elements are delivered and all revenue recognition requirements are met.

NANOMETRICS INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

(Unaudited)

Note 2. Recent Accounting Pronouncements

Accounting Standards Adopted

In March 2016, the FASB issued an accounting standards update that simplifies several aspects of the accounting for share-based payment award transactions, including income tax consequences, classification of awards as equity or liability, and classification on the statement of cash flows. The new standard requires adoption of certain amendments relevant to the Company to be applied using a modified retrospective transition method by means of cumulative effect adjustment to retained earnings as of the beginning of the fiscal year 2017.

The new standard permits entities to make an accounting policy election related to how forfeitures will impact the recognition of compensation cost for stock-based compensation. The Company has elected to account for forfeitures as they occur and adopted this change on a modified retrospective basis. The cumulative effect of this change resulted in a \$0.1 million increase to accumulated deficit as of January 1, 2017.

Furthermore, the standard requires excess tax benefits and tax deficiencies to be recorded in the income statement when the awards vest or are settled rather than paid-in capital. The Company recorded the cumulative effect of this change as a \$1.2 million reduction to accumulated deficit to reflect the recognition of excess tax benefits in prior years, with a corresponding adjustment to deferred tax assets and long-term tax liabilities. The Company adopted the guidance related to the recognition of excess tax benefits and deficiencies as income tax expense or benefit on a modified retrospective basis. In addition, the Company elected to report cash flows related to excess tax benefits on a prospective basis. The presentation requirements for cash flows related to employee taxes paid for withheld shares had no impact to the Company's statement of cash flows since such cash flows have historically been presented as a financing activity.

In July 2015, the FASB issued an accounting standards update which simplifies the measurement of inventory by requiring inventory to be measured at the lower of cost and net realizable value. The new standard applies only to inventories for which cost is determined by methods other than last-in-first-out and the retail inventory method. Effective in the first quarter of fiscal 2017, the Company adopted this guidance. The adoption of this guidance did not have a significant impact on the Company's consolidated financial condition and results of operation.

Accounting Standards Not Yet Adopted

In January 2017, the Financial Accounting Standards Board (the "FASB") issued an accounting standard update which simplifies the subsequent measurement of goodwill and removes step 2 from the goodwill impairment test. Instead, an entity should record an impairment charge based on excess of a reporting unit's carrying amount over its fair value. The standard is effective for public companies for fiscal years beginning after December 15, 2019. Early adoption is permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. The adoption of this guidance is not expected to have a significant impact on the Company's consolidated financial condition and results of operations.

In October 2016, the FASB issued an accounting standard update which requires the recognition of the income tax consequences of an intra-entity transfer of an asset, other than inventory, when the transfer occurs. This standard will

be effective for annual reporting periods beginning after December 15, 2017, including interim reporting period within those annual periods. Early adoption is permitted. This standard update is required to be adopted using the modified retrospective approach, with a cumulative catch-up adjustment to retained earnings in the period of adoption. The Company is currently evaluating the impact of adopting this standard on its consolidated financial condition and results of operations.

In August 2016, the FASB issued an accounting standard which addresses eight specific cash flow classification issues. This update is effective for public companies for fiscal years beginning after December 15, 2017 and interim periods within those fiscal years. Early adoption is permitted, including in an interim period. If early adopted in an interim period, any adjustments should be reflected as of the beginning of the fiscal year that includes that interim period, and all the amendments must be adopted in the same period. The standard is to be applied through a retrospective transition method to each period presented. If it is impracticable to apply retrospectively for some of the issues, the amendments for those issues would be applied prospectively as of the earliest date practicable. The adoption of this guidance is not expected to have a significant impact on the Company's consolidated statement of cash flows.

NANOMETRICS INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

(Unaudited)

In June 2016, the FASB issued an accounting standard which requires measurement and timely recognition of expected credit losses for financial assets. The update is effective for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years. Early adoption is permitted as of the fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. The standard is to be applied through a cumulative-effect adjustment to retained earnings as of the beginning of the first reporting period in which the guidance is effective. The Company is currently evaluating the effect of this update on its consolidated financial condition and results of operations.

In February 2016, the FASB issued an accounting standards update which requires lessees to record a right-of-use asset and a corresponding lease liability on the balance sheet (with the exception of short-term leases). For lessees, leases will continue to be classified as either operating or financing in the income statement. The standard is effective for public companies for annual reporting periods beginning after December 15, 2018, including interim periods within those fiscal years. Early adoption is permitted. This standard is required to be applied with a modified retrospective transition approach. The Company generally does not finance purchases of equipment or other capital, but does lease some equipment and facilities. The Company is currently evaluating the impact of this standard on its consolidated financial statements and related disclosures but anticipates most its existing operating lease commitments will be recognized as operating lease liabilities and right-of-use assets.

In May 2014, the FASB issued an accounting standards update which requires an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers. The updated standard will replace most existing revenue recognition guidance in U.S. GAAP when it becomes effective and permits the use of either the retrospective or cumulative effect transition method. In August 2015, the FASB deferred for one year the effective date of the new revenue standard, with early adoption permitted but not earlier than the original effective date. Consequently, the new standard will be effective for the Company on December 31, 2017 and the Company does not plan to adopt early. The Company has not yet selected a transition method and is currently evaluating the effect that the updated standard will have on its consolidated financial statements and related disclosures.

While the Company continues to assess the impact of the new standard, the Company believes the most likely impact will be to the accounting for arrangements that include incentives or services bundled with purchases. Under current U.S. GAAP, the revenue attributable to these incentives is recognized when the incentives performance conditions are met. While the Company currently expects revenue related to these arrangements to remain unchanged, the nature of the performance obligations may change the timing of the revenue recognition. The Company is currently evaluating the impact of the new standard on these arrangements and will continue to monitor industry activities and other guidance provided by the accounting profession and regulators and adjust our approach and implementation plans as required.

Note 3. Fair Value Measurements and Disclosures

The Company determines the fair values of its financial instruments based on the fair value hierarchy established in FASB Accounting Standards Codification ("ASC") 820, Fair Value Measurement, which requires an entity to maximize

the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. The classification of a financial asset or liability within the hierarchy is based upon the lowest level input that is significant to the fair value measurement. The fair value hierarchy prioritizes the inputs into the following three levels that may be used to measure fair value:

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

Level 2 — Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets and liabilities in active markets or inputs that are observable for the asset or liability, either directly or indirectly through market corroboration, for substantially the full term of the financial instrument.

Level 3 — Unobservable inputs that are supported by little or no market activity and are significant to the fair value of the assets or liabilities. Such unobservable inputs include an estimated discount rate used in the Company's discounted present value analysis of future cash flows, which reflects the Company's estimate of debt with similar terms in the current credit markets. As there is currently minimal activity in such markets, the actual rate could be materially different.

NANOMETRICS INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

(Unaudited)

Fair value is defined as the price that would be received upon the sale of an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The standard assumes that the transaction to sell the asset or transfer the liability occurs in the principal or most advantageous market for the asset or liability and establishes that the fair value of an asset or liability shall be determined based on the assumptions that market participants would use in pricing the asset or liability.

The following tables present the Company's assets and liabilities measured at estimated fair value on a recurring basis, excluding accrued interest components, categorized in accordance with the fair value hierarchy (in thousands), as of the following dates:

	April Fair V	1, 2017 Value				Decen Fair V	nber 31, 20 alue	016	
	Meası	irements				Measu	irements		
	Using	Input Typ	oes			Using Input Types			
	Level		Lev	vel	m 1	Level		Lev	
Assets:	1	Level 2	3		Total	1	Level 2	3	Total
Cash equivalents:									
Money market funds	\$858	\$ —	\$	_	\$858	\$959	\$—	\$ -	— \$959
Commercial paper and corporate debt	Ψ 00 0	Ψ	4		Ψ 32 3	Ψ	Ψ	Ψ	φ <i>y</i> 0 <i>y</i>
		1 000			4 000		• 400		• 400
securities		1,000			-,		2,499		2,499
Total cash equivalents	\$858	\$1,000	\$	—	\$1,858	\$959	\$2,499	\$ -	— \$3,458
Marketable securities:									
U.S. Treasury securities and U.S. Government									
agency debt securities	_	11,709			11,709		17,072	-	— 17,072
Certificates of deposits		21,505			21,505		23,019	-	_ 23,019
Commercial paper		22,323		—	22,323		22,402	-	_ 22,402
Municipal securities and corporate debt									
securities		25,869			25,869		14,943	-	— 14,943
Asset-backed Securities		3,273			3,273		5,463	-	_ 5,463
Total marketable securities	\$ —	\$84,679	\$	_	\$84,679	\$-	\$82,899	\$ -	- \$82,899
Total ⁽¹⁾	\$858	\$85,679	\$	_	\$86,537	\$959	\$85,398	\$ -	_ \$86,357

⁽¹⁾ Excludes \$45.6 million and \$43.6 million held in operating accounts as of April 1, 2017 and December 31, 2016, respectively. See "Cash and Investments" in Note 4 of the Notes to Consolidated Financial Statements for more information.

The fair values of the marketable securities that are classified as Level 1 in the table above were derived from quoted market prices for identical assets or liabilities in active markets that the Company has the ability to access. The fair value of marketable securities that are classified as Level 2 in the table above were derived from non-binding market consensus prices that were corroborated by observable market data, quoted market prices for similar instruments, or pricing models, such as discounted cash flow techniques with all significant inputs derived from or corroborated by observable market data. There were no transfers of instruments between Level 1, Level 2 and Level 3 during the financial periods presented.

Derivatives

The Company uses foreign currency exchange forward contracts to mitigate variability in gains and losses generated from the re-measurement of certain monetary assets and liabilities denominated in foreign currencies. These derivatives are carried at fair value with changes recorded in other income (expense), net in the consolidated statements of operations. Changes in the fair value of these derivatives are largely offset by re-measurement of the underlying assets and liabilities. The derivatives have maturities of approximately 30 days.

The settlement of forward foreign currency contracts included in the three months ended April 1, 2017 and March 26, 2016 was a gain of \$0.4 million and a loss of \$0.5 million, respectively. These are included in other income (expense), net, in the consolidated statements of operations.

NANOMETRICS INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

(Unaudited)

The following table presents the notional amounts and fair values of the Company's outstanding derivative instruments in U.S. Dollar equivalent (in millions):

	As of A	April	1,			
	2017			As of December 3	31, 2016	
		Fair	Value		Fair Va	lue
	Notion	al				
	Amou	nAssk	tability	Notional Amount	AsselLia	ability
Undesignated Hedges:						
Forward Foreign Currency Contracts						
Purchase	18.7		0.1	12.6		
Sell	5.9	_	_	1.3		_

Note 4. Cash and Investments

The following tables present cash, cash equivalents, and available-for-sale investments as of the following dates (in thousands):

	April 1, 20	017		
	•			Estimated
		Gross	Gross	
				Fair
		Unrealized	Unrealized	Market
	Amortized	l		
	Cost	Gains	Losses	Value
Cash	\$45,559	\$ —	\$ —	\$45,559
Cash equivalents:				
Money market funds	858	<u> </u>	_	858
Commercial paper and corporate debt securities	1,000	_	_	1,000
Marketable securities:		_	<u> </u>	
U.S. Treasury securities	3,006	_	(1)	3,005
U.S. Government agency securities	8,710	_	(6)	8,704
Certificate of deposits	21,500	5		21,505
Commercial paper	22,325	<u>—</u>	(2)	22,323
Corporate debt securities	25,875	_	(6)	25,869
Asset-backed securities	3,274	_	(1)	3,273

Total cash, cash equivalents, and marketable securities \$132,107 \$ 5 \$ (16) \$132,096

December 31, 2016

	December	51, 2010		
				Estimated
		Gross	Gross	
				Fair
		Unrealized	Unrealized	Market
	Amortized			
	Cost	Gains	Losses	Value
Cash	\$43,604	\$ —	\$ —	\$43,604
Cash equivalents:				
Money market funds	959			959
Commercial paper and corporate debt securities	2,499			2,499
Marketable securities:				
U.S. Treasury securities	5,667		_	5,667
U.S. Government agency securities	11,412		(7)	11,405
Certificates of deposits	23,000	19		23,019
Commercial paper	22,402			22,402
Corporate debt securities	14,194	_	(6)	14,188
Municipal securities	756		(1)	755
Asset-backed securities	5,466	_	(3)	5,463
Total cash, cash equivalents, and marketable securities	\$129,959	\$ 19	\$ (17)	\$129,961

Available-for-sale marketable securities, readily convertible to cash, with maturity dates of 90 days or less are classified as cash equivalents, while those with maturity dates greater than 90 days are classified as marketable securities within short-term assets. All

NANOMETRICS INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

(Unaudited)

marketable securities as of April 1, 2017 and December 31, 2016, were available-for-sale and reported at fair value based on the estimated or quoted market prices as of the balance sheet date.

Realized gains and losses on sale of securities are recorded in other income, net, in the Company's statement of operations. Net realized gains and losses for three months ended April 1, 2017 and March 26, 2016 were not material.

Unrealized gains or losses, net of tax effect, are recorded in accumulated other comprehensive income (loss) within stockholders' equity. Both the gross unrealized gains and gross unrealized losses for the three months ended April 1, 2017 and March 26, 2016 were insignificant and no marketable securities had other than temporary impairment.

All marketable securities as of April 1, 2017 and December 31, 2016, had maturity dates of less than two years.

Note 5. Accounts Receivable

The Company maintains arrangements under which eligible accounts receivable in Japan are sold without recourse to unrelated third-party financial institutions. These receivables were not included in the consolidated balance sheets as the criteria for sale treatment had been met. The Company pays administrative fees as well as interest ranging from 0.62% to 1.68% based on the anticipated length of time between the date the sale is consummated and the expected collection date of the receivables sold. The Company sold \$5.2 million and \$14.2 million of receivables during the three months ended April 1, 2017 and March 26, 2016, respectively. There were no material gains or losses on the sale of such receivables. There were no amounts due from such third party financial institutions at April 1, 2017 and December 31, 2016.

NANOMETRICS INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

(Unaudited)

Note 6. Financial Statement Components

The following tables provide details of selected financial statement components as of the following dates (in thousands):

Inventories:	At April 1, 2017	December 31, 2016
Raw materials and sub-assemblies	\$23,185	\$ 23,506
Work in process	14,383	10,347
Finished goods	3,976	4,984
Inventories	41,544	38,837
Inventories-delivered systems	3,280	2,457
Total inventories	\$44,824	\$ 41,294
Property, plant and equipment, net: ⁽¹⁾ Land Building and improvements Machinery and equipment	\$15,571 20,566 37,122	\$ 15,568 20,532 35,659
Furniture and fixtures	2,419	2,282
Software	9,776	9,756
Capital in progress	2,036	2,748
Total property, plant and equipment, gross	87,490	
Accumulated depreciation and amortization	(44,314)	·
Total property, plant and equipment, net	\$43,176	\$ 44,226
(1) Total depreciation and amortization exper \$1.7 million for the three months ended Apr 2016, respectively.	nse was \$1.	8 million and
Other Current Liabilities: Accrued warranty	\$4,244	
recrued warranty	ΨΤ,∠ΤΤ	