NANOMETRICS INC Form 10-Q May 06, 2014

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

FORM 10-Q

(Mark One)

x Quarterly report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 For the quarterly period ended March 29, 2014

OR

o 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 0-13470

NANOMETRICS INCORPORATED

(Exact name of registrant as specified in its charter)

Delaware 94-2276314
(State or other jurisdiction of incorporation or organization) Identification No.)

1550 Buckeye Drive, Milpitas, CA 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 Q 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 such shorter period that the registrant was required to submit and post such file) Yes Q 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.

Large accelerated filer o Accelerated filer x
Non-accelerated filer o (Do not check if a smaller reporting company) Smaller reporting company o

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

As of April 28, 2014, there were 23,896,138 shares of common stock, \$0.001 par value, issued and outstanding.

Table of Contents

NANOMETRICS INCORPORATED INDEX TO QUARTERLY REPORT ON FORM 10-Q FOR QUARTER ENDED MARCH 29, 2014

PAR ^T	Γ I. FINAN	NCIAL INFORMATION	Page 3
	Item 1.	Financial Statements	<u>3</u>
		Condensed Consolidated Balance Sheets at March 29, 2014, and December 28, 2013 (Unaudited)	<u>3</u>
		Condensed Consolidated Statements of Operations for the Three Month Periods Ended March 29, 2014 and March 30, 2013 (Unaudited)	<u>4</u>
		Condensed Consolidated Statements of Comprehensive Income (Loss) for the Three Month Periods Ended March 29, 2014 and March 30, 2013 (Unaudited)	<u>5</u>
		<u>Condensed Consolidated Statements of Cash Flows</u> for the Three Month Periods Ended March 29, 2014 and March 30, 2013 (Unaudited)	<u>6</u>
		Notes to Condensed Consolidated Financial Statements (Unaudited)	7
	Item 2.	Management's Discussion and Analysis of Financial Condition and Results of Operations	<u>21</u>
	Item 3.	Quantitative and Qualitative Disclosures About Market Risk	<u>30</u>
	Item 4.	Controls and Procedures	<u>30</u>
PAR'	Г II. ОТНІ	ER INFORMATION	<u>32</u>
	Item 1.	Legal Proceedings	<u>32</u>
	Item 1A.	Risk Factors	<u>32</u>
	Item 5	Other Information	<u>32</u>
	Item 6.	Exhibits	<u>32</u>
	Signature	<u>s</u>	<u>34</u>
2.			

Table of Contents

PART I — FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

NANOMETRICS INCORPORATED

CONDENSED CONSOLIDATED BALANCE SHEETS

(In thousands, except share and per share amounts)

(Unaudited)

(Onaudited)	March 29, 2014	December 28, 2013
ASSETS		
Current assets:		
Cash and cash equivalents	\$38,833	\$44,765
Marketable securities	49,204	48,097
Accounts receivable, net of allowances of \$293 and \$293, respectively	32,417	31,436
Inventories	37,855	34,520
Inventories-delivered systems	2,249	6,901
Prepaid expenses and other	8,972	10,519
Deferred income tax assets	14,008	14,516
Total current assets	183,538	190,754
Property, plant and equipment, net	47,131	47,439
Goodwill	11,865	11,743
Intangible assets, net	7,139	7,864
Deferred income tax assets	4,345	4,338
Other assets	699	696
Total assets	\$254,717	\$262,834
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$7,409	\$10,604
Accrued payroll and related expenses	8,200	7,853
Deferred revenue	11,542	21,749
Other current liabilities	8,185	7,993
Income taxes payable	557	758
Total current liabilities	35,893	48,957
Deferred revenue	3,310	3,718
Income taxes payable	599	1,171
Other long-term liabilities	1,645	1,615
Total liabilities	41,447	55,461
Commitments and contingencies (Note 16)		
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; 23,876,666 and	24	2.4
23,537,275, respectively, issued and outstanding	24	24
Additional paid-in capital	248,824	244,733
Accumulated deficit	(36,401) (37,996)
Accumulated other comprehensive income	823	612
Total stockholders' equity	213,270	207,373

Total liabilities and stockholders' equity See Notes to Condensed Consolidated Financial Statements \$254,717

\$262,834

Table of Contents

NANOMETRICS INCORPORATED CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

(In thousands, except per share amounts)

(Unaudited)

	Three Months End	ed	
	March 29, 2014	March 30, 201	13
Net revenues:			
Products	\$43,280	\$13,079	
Service	8,296	11,473	
Total net revenues	51,576	24,552	
Costs of net revenues:			
Cost of products	21,639	7,960	
Cost of service	5,114	5,448	
Amortization of intangible assets	674	658	
Total costs of net revenues	27,427	14,066	
Gross profit	24,149	10,486	
Operating expenses:			
Research and development	8,314	7,447	
Selling	7,373	6,932	
General and administrative	6,338	5,512	
Amortization of intangible assets	108	198	
Total operating expenses	22,133	20,089	
Income (loss) from operations	2,016	(9,603)
Other income (expense)			
Interest income	14	25	
Interest expense	(100	(226)
Other expense, net	252	40	
Total other income (expense), net	166	(161)
Income (loss) before income taxes	2,182	(9,764)
Provision for (benefit from) income taxes	587	(4,182)
Net income (loss)	\$1,595	\$(5,582)
Net income (loss) per share:			
Basic	\$0.07	\$(0.24)
Diluted	\$0.07	\$(0.24)
Weighted shares used in per share calculation:			
Basic	23,711	23,341	
Diluted	24,159	23,341	
See Notes to Condensed Consolidated Financial Statements			
4			

Table of Contents

NANOMETRICS INCORPORATED CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS) (In thousands) (Unaudited)

	Three Months Ended		
	March 29, 2014	March 30, 2013	
Net income (loss)	\$1,595	\$(5,582)
Other comprehensive income (loss):			
Change in foreign currency translation adjustment	104	(1,944)
Net change on unrealized gains on available-for-sale investments	107	5	
Other comprehensive income (loss)	211	(1,939)
Comprehensive income (loss)	\$1,806	\$(7,521)

See Notes to Condensed Consolidated Financial Statements

Table of Contents

NANOMETRICS INCORPORATED CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (In thousands)

(Unaudited)

(Unaudited)			
	Three Months		
	March 29,	March 30,	
	2014	2013	
Cash flows from operating activities:			
Net income (loss)	\$1,595	\$(5,582)
Reconciliation of net income (loss) to net cash used in operating activities:			
Depreciation and amortization	2,429	2,108	
Stock-based compensation	1,634	1,457	
Excess tax benefit from equity awards		367	
Loss on disposal of fixed assets		12	
Inventory write-down	669	1,321	
Deferred income taxes	519	(4,065)
Changes in fair value of contingent consideration	(5) 389	
Changes in assets and liabilities:			
Accounts receivable	(967) 1,268	
Inventories	(3,142) (5,631)
Inventories-delivered systems	4,652	750	
Prepaid expenses and other	1,845	592	
Accounts payable, accrued and other liabilities	(2,536) (351)
Deferred revenue	(10,619) (796)
Income taxes payable	(766) (360)
Net cash used in operating activities	(4,692) (8,521)
Cash flows from investing activities:			
Maturities of marketable securities	7,000	10,111	
Purchases of marketable securities	(8,410) (11,292)
Purchases of property, plant and equipment	(2,193) (997)
Net cash used in investing activities	(3,603) (2,178)
Cash flows from financing activities:			
Payments of contingent consideration	(100) (133)
Repayments of debt obligations		(227)
Proceeds from sale of shares under employee stock option and purchase	se 3,115	1 500	
plans	3,113	1,598	
Excess tax benefit from equity awards		(367)
Taxes paid on net issuance of stock awards	(659) (86)
Repurchases of common stock		(5,000)
Net cash provided by (used in) financing activities	2,356	(4,215)
Effect of exchange rate changes on cash and cash equivalents	7	(656)
Net decrease in cash and cash equivalents	(5,932) (15,570)
Cash and cash equivalents, beginning of period	44,765	62,915	•
Cash and cash equivalents, end of period	\$38,833	\$47,345	
See Notes to Condensed 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 thin film, optical critical dimension 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 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 Company's optical critical dimension 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 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 28, 2013, and include all normal recurring adjustments necessary to fairly present 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. 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 28, 2013, which were included in the Company's Annual Report on Form 10-K filed with the SEC on March 7, 2014.

Fiscal Period – The Company uses a 52/53 week fiscal year ending on the Saturday nearest to December 31. All references to the quarter refer to Nanometrics' fiscal quarter. The fiscal quarters presented herein include 13 weeks.

Reclassification – Certain prior year amounts have been reclassified to conform to the current year presentation.

Use of Estimates – The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America 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 systems ("product revenue") as well as spare part sales, billable service, service contracts and upgrades (together "service revenue"). Upgrades are a group of parts and/or software that change the existing configuration of a product and are included in service revenue. They are distinguished from product revenue, which consists 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 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.

_

Table of Contents
NANOMETRICS INCORPORATED
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
(Unaudited)

For 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 has 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 contract. 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.

As part of its customer services, 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 upgrades is recognized when the upgrades are delivered to the customer, provided that all other recognition criteria have been met.

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. 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. The Company does not grant its customers a general right of return or any refund terms and imposes a penalty on orders canceled 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. In accordance with revenue recognition guidance, 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 ("TPE") 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.

Note 2. Recent Accounting Pronouncements

Table of Contents
NANOMETRICS INCORPORATED
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
(Unaudited)

In July 2013, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update No. 2013-11, Income Taxes (Topic 740): Presentation of an Unrecognized Tax Benefit When a Net Operating Loss Carryforward, a Similar Tax Loss, or a Tax Credit Carryforward Exists (a consensus of the FASB Emerging Issues Task Force) ("ASU 2013-11"), which provides that a liability related to an unrecognized tax benefit would be offset against a deferred tax asset for a net operating loss carryforward, a similar tax loss or a tax credit carryforward if such settlement is required or expected in the event the uncertain tax position is disallowed. In situations in which a net operating loss carryforward, a similar tax loss or a tax credit carryforward is not available at the reporting date under the tax law of the jurisdiction or the tax law of the jurisdiction does not require, and the entity does not intend to use, the deferred tax asset for such purpose, the unrecognized tax benefit will be presented in the financial statements as a liability and will not be combined with deferred tax assets. The amendments should be applied prospectively to all unrecognized tax benefits that exist at the effective date. Retrospective application is permitted. ASU 2013-11 is effective for fiscal years and interim periods beginning after December 15, 2013. The Company adopted this standard during the three months ended March 29, 2014 resulting in a one-time tax benefit of \$0.3 million, a reduction in deferred tax assets of \$0.3 million, and a reduction in long-term income taxes payable of \$0.6 million.

Note 3. Fair Value Measurements and Disclosures

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 Company determines the fair values of its financial instruments based on the fair value hierarchy established in ASC 820, 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.

Table of Contents NANOMETRICS INCORPORATED NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS—(Continued) (Unaudited)

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):

	March 29, 2014 Fair Value Measurements Using Input Types		December 28, 2013 Fair Value Measurements Using Input Types					
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Assets:								
Cash equivalents:								
Money market funds	\$586	\$	\$	\$586	\$876	\$—	\$—	\$876
Commercial paper and corporat	e					750		750
debt securities						750		750
Total cash equivalents	586	_		586	876	750	_	1,626
Marketable securities: U.S. Treasury, U.S. Government and U.S. Government agency debt securities	5,023	11,772	_	16,795	5,036	11,980	_	17,016
Commercial paper and corporat debt securities	e	32,409	_	32,409	_	31,081	_	31,081
Total marketable securities	5,023	44,181	_	49,204	5,036	43,061	_	48,097
Total (1)	\$5,609	\$44,181	\$ —	\$49,790	\$5,912	\$43,811	\$ —	\$49,723
Liabilities: Contingent consideration payable	\$—	\$ —	\$2,678	\$2,678	\$	\$	\$2,783	\$2,783

 $^{^{(1)}}$ Excludes cash of \$38.2 million and \$43.1 million held in operating accounts as of March 29, 2014 and December 28, 2013, respectively.

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 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.

Changes in Level 3 liabilities (in thousands)		
Fair value at December 28, 2013	\$2,783	
Payments made to Zygo Corporation	(100)
Change in fair value included in earnings	(5)
Fair Value at March 29, 2014	\$2,678	

As of March 29, 2014, the Company had liabilities of \$2.7 million resulting from the acquisition of certain assets from Zygo Corporation ("Zygo"), which are measured at fair value on a recurring basis, with changes in fair value recorded in other income (expense), net. Of the \$2.7 million of Zygo liabilities at March 29, 2014, \$1.2 million was a current

liability and \$1.5 million was a long-term liability. As of December 28, 2013, the liabilities totaled \$2.8 million of which \$1.3 million was a current liability and \$1.5 million was a long-term liability. The fair values of these liabilities were determined using Level 3 inputs applying a discounted cash flow model incorporating assumptions that market participants would use in their estimates of fair value. Some of these assumptions included estimates for discount rate, timing and the amount of cash flows.

Note 4. Cash and Investments

Table of Contents NANOMETRICS INCORPORATED NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS—(Continued) (Unaudited)

The following table presents cash, cash equivalents, and available-for-sale investments as of March 29, 2014 and December 28, 2013 (in thousands):

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses		Estimated Fair Market Value
March 29, 2014					
Cash	\$38,247	_	\$ —		\$38,247
Cash equivalents:					
Money market funds	586	_	_		586
Marketable securities:					
Commercial paper and	d				
corporate debt	800				800
securities					
U.S. Treasury	5,022	1			5,023
securities	3,022	1			5,025
U.S. Government	11,768	6	(2)	11,772
agency securities			•		
Municipal securities	10,367	7	(1)	10,373
Corporate debt	21,238	5	(7)	21,236
securities	,		`	,	,
Total cash, cash	Φ 0.0 0.20	Ф 10	Φ (10	`	¢ 00 027
equivalents, and	\$88,028	\$19	\$(10)	\$88,037
marketable securities					
December 28, 2013					
Cash	\$43,139	\$—	\$—		\$43,139
Cash equivalents:	\$45,139	φ—	Φ—		Φ43,139
Money market funds	876				876
Commercial paper	750	_	_		750
Marketable securities:		_	_		730
U.S. Treasury					
Securities Securities	5,036	_	_		5,036
U.S. Government					
agency securities	11,980	4	(4)	11,980
Municipal securities	9,756	11	(4)	9,763
Corporate debt	•		•		
securities	21,316	7	(5)	21,318
Total cash, cash					
equivalents, and	\$92,853	\$22	\$(13)	\$92,862
marketable securities					

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 marketable securities as of March 29, 2014 and December 28, 2013 were

available-for-sale and reported at fair value based on the estimated or quoted market prices as of the balance sheet date. 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 month periods ended March 29, 2014 and March 30, 2013 were insignificant and no marketable securities had other than temporary impairment. All marketable securities as of March 29, 2014 and December 28, 2013, had maturity dates of less than two years and were not invested in foreign entities.

Note 5. Accounts Receivable

Table of Contents
NANOMETRICS INCORPORATED
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
(Unaudited)

The Company maintains arrangements under which eligible accounts receivables 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 1.23% 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 \$0.6 million and \$1.4 million of receivables during the three month periods ended March 29, 2014 and March 30, 2013, 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 March 29, 2014 and December 28, 2013, respectively.

Table of Contents

NANOMETRICS INCORPORATED

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

(Unaudited)

Note 6. Inventories

Inventories are stated at the lower of standard cost (which approximates actual cost on a first-in, first-out basis) or market. Inventories consist of the following (in thousands):

	At	
	March 29,	December 28,
	2014	2013
Raw materials and sub-assemblies	\$21,061	\$19,655
Work in process	8,917	7,597
Finished goods	7,877	7,268
Inventories	37,855	34,520
Inventories-delivered systems	2,249	6,901
Total inventories	\$40,104	\$41,421

The Company reflects the cost of systems that were invoiced upon shipment but deferred for revenue recognition purposes separate from its inventory held for sale as "Inventories-delivered systems."

Note 7. Property, Plant and Equipment

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

	At			
	March 29, 2014		December 28, 2013	
Land	\$15,572		\$15,569	
Building and improvements	19,402		19,403	
Machinery and equipment	26,708		27,820	
Furniture and fixtures	2,298		2,308	
Software	7,777		1,851	
Capital in progress	1,551		5,833	
Total property, plant and equipment, group	ss73,308		72,784	
Accumulated depreciation	(26,177)	(25,345)
Total property, plant and equipment, net	\$47,131		\$47,439	

Total depreciation expense for the three month periods ended March 29, 2014 and March 30, 2013 was \$1.6 million and \$1.3 million, respectively.

Table of Contents

NANOMETRICS INCORPORATED

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

(Unaudited)

Note 8. Goodwill and Intangible Assets

The following table summarizes the activity in the Company's goodwill during the three months ended March 29, 2014 (in thousands):

Balance as of December 28, 2013	\$11,743
Foreign currency movements	122
Balance as of March 29, 2014	\$11,865

Finite-lived intangible assets are recorded at cost, less accumulated amortization. Finite-lived intangible assets as of March 29, 2014 and December 28, 2013 consisted of the following (in thousands):

As of March 29, 2014		
Adjusted cost	Accumulated amortization	Net carrying amount
\$18,197	\$(11,738) \$6,459
9,584	(9,352) 232
1,927	(1,726) 201
2,252	(2,005) 247
80	(80) —
\$32,040	\$(24,901) \$7,139
As of December 28	3, 2013	
Adjusted cost	Accumulated amortization	Net carrying amount
\$18,095	\$(11,032	\$7,063
9,573	(9,263) 310
1,927	(1,700) 227
2,252	(1,988) 264
80	(80) —
\$31,927	\$(24,063	\$7,864
	Adjusted cost \$18,197 9,584 1,927 2,252 80 \$32,040 As of December 28 Adjusted cost \$18,095 9,573 1,927 2,252 80	Adjusted cost \$18,197 \$(11,738) 9,584 (9,352) 1,927 (1,726) 2,252 (2,005) 80 (80) \$32,040 \$(24,901) As of December 28, 2013 Adjusted cost \$18,095 \$(11,032) 9,573 (9,263) 1,927 (1,700) 2,252 (1,988) 80 (80)

The amortization of finite-lived intangibles is computed using the straight-line method. Estimated lives of finite-lived intangibles range from 2 to 10 years. Total amortization expense for each of the three month periods ended March 29, 2014 and March 30, 2013 was \$0.8 million and \$0.9 million, respectively.

At March 29, 2014, estimated future amortization expense of intangible assets were as follows (in thousands):

Table of Contents NANOMETRICS INCORPORATED NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS—(Continued) (Unaudited)

Fiscal years	Amount
2014 (remaining nine months)	\$2,337
2015	2,424
2016	1,966
2017	206
2018	140
Thereafter	66
Total future amortization expense	\$7,139

Note 9. Other Current Liabilities

Other current liabilities consist of the following (in thousands):

	At	
	March 29,	December 28,
	2014	2013
Accrued warranty	\$3,575	\$3,426
Accrued professional services	799	545
Customer deposits	947	867
Fair value of contingent payments to Zygo Corporation related to acquisition - cur portion	rent _{1,205}	1,344
Other	1,659	1,811
Total other current liabilities	\$8,185	\$7,993

Note 10. Line of Credit and Debt Obligations

Line of Credit - On April 23, 2012, the Company amended its revolving line of credit facility (i) to extend the maturity date of such facility by two years to April 30, 2014, (ii) decreased the unused revolving line commitment fee from 0.1875% per annum to 0.10% per annum, and (iii) reduced the minimum interest rate on borrowings from 5.75% to 3.00% per annum. The instrument governing the line of credit facility includes certain financial covenants regarding tangible net worth. The revolving line of credit agreement includes a provision for the issuance of commercial or standby letters of credit by the bank on behalf of the Company. The value of all letters of credit outstanding reduces the total line of credit available. The revolving line of credit is collateralized by a blanket lien on all of the Company's domestic assets excluding intellectual property and real estate. The minimum borrowing interest rate is 3.00% per annum. Borrowing is limited to the lesser of (a) \$7.5 million plus the borrowing base, or (b) \$20.0 million. The total borrowing available as of March 29, 2014 was \$12.9 million. As of March 29, 2014, the Company was not in breach of any restrictive covenants in connection with this line of credit. There were no outstanding amounts drawn on this facility as of March 29, 2014. Subsequent to the end of the quarter, the maturity date of this facility was extended to May 31, 2014. There were no other changes to the terms of this facility. Although management has no current plans to request advances under this credit facility, the Company may use the proceeds of any future borrowing for general corporate purposes, future acquisitions or expansion of the Company's business.

Mortgage Loan - In July 2008, the Company entered into a mortgage loan agreement with General Electric Commercial Finance ("GE") pursuant to which it borrowed \$13.5 million, secured, in part, by a lien on and security interest in the building and land comprising the Company's principal offices in Milpitas, California. The loan initially

bore interest at the rate of 7.18% per annum, which rate was scheduled to reset in August 2013 to 3.03% over the weekly average yield of five-year U.S Dollar Interest Rate Swaps as published by the Federal Reserve. Monthly principal and interest payments were based on a 20 year amortization for the first 60 months and 15 year amortization thereafter. The remaining principal balance of the loan and any accrued but unpaid interest will be due on August 1, 2018. According to the terms of the loan agreement, the Company could make annual pre-payments of up to 20% of the outstanding principal balance without incurring any penalty. GE subsequently sold the mortgage on March 31, 2011 to Sterling Saving Bank; however, no changes were made to the terms of the original loan agreement with GE as a result of the sale. In July 2012, the Company prepaid \$1.4 million of the loan, representing 20% of the outstanding balance at the time of prepayment. On July 18, 2013, the Company repaid \$4.8 million of the loan, representing the entire outstanding principal balance of the loan and all accrued interest. The Company did not incur any fees associated with

Table of Contents NANOMETRICS INCORPORATED NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS—(Continued) (Unaudited)

the prepayment of the loan. As of March 29, 2014, there was no outstanding balance and no available amounts to borrow on the loan.

Note 11. Net Income (Loss) Per Share

The Company presents both basic and diluted net income (loss) per share on the face of its condensed consolidated statements of operations. Basic net income (loss) per share are computed by dividing net income (loss) by the weighted-average number of shares of common stock outstanding for the period. Diluted net income (loss) per share are computed using the weighted-average number of shares of common stock outstanding plus the effect of all dilutive securities representing potential shares of common stock outstanding during the period.

A reconciliation of the share denominator of the basic and diluted net income (loss) per share computations for the three month periods ended March 29, 2014 and March 30, 2013 is as follows (in thousands):

	Three Months Ended	
	March 29, 2014	March 30, 2013
Weighted average common shares outstanding used in basic net income (loss) per share calculation	23,711	23,341
Dilutive common stock equivalents, using treasury stock method	448	_
Shares used in diluted net income (loss) per share computation	24,159	23,341

The Company excluded an insignificant amount of ESPP shares for the three month period ended March 29, 2014 since their inclusion would have been anti-dilutive. Since the Company had a net loss for the three month period ended March 30, 2013, 0.4 million potentially dilutive securities were not included in the computation of diluted shares for the period since inclusion of such shares would have been anti-dilutive. Accordingly, basic and diluted net loss per share were the same for the three month period ending March 30, 2013.

Note 12. Equity and Stock Based Compensation Plans Options

The fair value of each option award is estimated on the date of grant using the Black-Scholes valuation model and the assumptions noted in the following table. The expected life of options granted was calculated using the simplified method. The risk-free rate is based on the U.S. Treasury rates in effect during the corresponding period of grant. The expected volatility is based on the historical volatility of the Company's stock price. The dividend yield reflects that the Company has not paid any cash dividends since inception and does not intend to pay any cash dividends in the foreseeable future.

	Three Months Ended			
	March 29, Ma		March 30,	
	2014		2013	
Stock Options				
Expected life	4.6 years		4.5 years	
Expected volatility	56.79	%	73.12	%
Risk-free interest rate	1.53	%	0.86	%
Dividends	_		_	
Employee Stock Purchase Plan				
Expected life	0.5 years		0.5 years	
Expected volatility	32.60	%	27.61	%

Risk-free interest rate 1.00 % 0.11 % Dividends — — —

Table of Contents NANOMETRICS INCORPORATED NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS—(Continued) (Unaudited)

The weighted average fair value per share of the stock options awarded in the three month periods ended March 29, 2014 and March 30, 2013 was \$8.69 and \$8.88, respectively, based on the fair market value of the Company's common stock on the grant dates.

A summary of activity under the Company's stock option plans during the three month period ended March 29, 2014 is as follows:

	Number of Shares Outstanding (Options)	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value (in Thousands)
Options:				
Outstanding at December 28, 2013	1,909,039	\$13.22	4.02	\$10,341
Exercised	(217,848)	10.64		
Granted	44,300	18.28		
Cancelled	(34,342)	15.49		
Outstanding at March 29, 2014	1,701,149	\$13.64	4.03	\$8,510
Exercisable at March 29, 2014	1,069,675	\$12.31	3.18	\$6,772

The aggregate intrinsic value in the preceding table represents the total pretax intrinsic value, based on the Company's closing stock price of \$17.91 as of March 29, 2014, which would have been received by the option holders had all option holders exercised their options as of that date. The total intrinsic value of options exercised during the three month periods ended March 29, 2014 and March 30, 2013 was \$1.7 million and \$0.8 million, respectively.

Table of Contents

NANOMETRICS INCORPORATED

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

(Unaudited)

Restricted Stock Units ("RSUs")

A summary of activity for RSUs during the three month period ended March 29, 2014 is as follows:

	Number	Weighted
	of RSUs	Average Fair
	of KSUS	Value
Outstanding RSUs as of December 28, 2013	334,444	\$18.61
Granted	189,000	\$18.68
Released	(91,817) \$18.61
Cancelled	(8,073) \$18.43
Outstanding RSUs as of March 29, 2014	423,554	\$18.61

Stock-based Compensation Expense

Stock-based compensation expense for all share-based payment awards made to the Company's employees and directors pursuant to the employee stock option and employee stock purchase plans by function was as follows (in thousands):

	Three Months Ended		
	March 29, M		
	2014	2013	
Cost of products	\$61	\$45	
Cost of service	84	59	
Research and development	340	317	
Selling	427	440	
General and administrative	722	596	
Total stock-based compensation expense	\$1,634	\$1,457	

Note 13. Accumulated Other Comprehensive Income (Loss)

The following table shows a summary of changes in accumulated other comprehensive income (loss) by component for the three months ended March 29, 2014 (in thousands):

	Defined	Foreign	Unrealized	
	Benefit	Currency	Gain on	Total
	Pension Plans	Translations	Investment	
Balance as of December 28, 2013	\$(28)	\$635	\$5	\$612
Other comprehensive income	_	104	107	211
Balance as of March 29, 2014	\$(28)	\$739	\$112	\$823

Note 14. Warranties

The Company sells the majority of its products with a 12 months repair or replacement warranty from the date of acceptance or shipment date. The Company provides an accrual for estimated future warranty costs based upon the historical relationship of warranty costs to the cost of products sold. The estimated future warranty obligations related to product sales are recorded in the period in which the related revenue is recognized. The estimated future warranty

obligations are affected by the warranty periods, sales volumes, product failure rates, material usage, and labor and replacement costs incurred in correcting a product failure. If actual product failure rates, material usage, labor or replacement costs were to differ from the Company's estimates, revisions to the estimated warranty obligations would be required. For new product introductions where limited or no historical information exists, the Company may use warranty information from other previous product introductions to guide it

Table of Contents
NANOMETRICS INCORPORATED
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
(Unaudited)

in estimating its warranty accrual. The warranty accrual represents the best estimate of the amount necessary to settle future and existing claims on products sold as of the balance sheet date. The Company periodically assesses the adequacy of its reported warranty reserve and adjusts such amounts in accordance with changes in these factors. Components of the warranty accrual, which were included in the accompanying condensed consolidated balance sheets with other current liabilities, were as follows (in thousands):

	Three Months Ended	
	March 29, March 3	
	2014	2013
Beginning balance	\$3,426	\$4,203
Accruals for warranties issued during period	1,100	423
Aggregate changes in liabilities related to preexisting warranties	217	217
Settlements during the period	(1,168)	(1,188)
Ending balance	\$3,575	\$3,655

Note 15. Income Taxes

The Company accounts for income taxes under the provisions of ASC 740, Accounting for Income Taxes. The Company adjusts its effective tax rate each quarter to be consistent with the estimated annual effective tax rate. The Company also records the tax effect of unusual or infrequently occurring discrete items, including changes in judgment about valuation allowances and effects of changes in tax laws or tax rates, in the interim period in which they occur. The Company's effective tax rate reflects the impact of a portion of its earnings being taxed in foreign jurisdictions as well as a valuation allowance maintained on certain deferred tax assets.

The Company recorded a tax provision of \$0.6 million and a tax benefit of \$4.2 million for the three month periods ended March 29, 2014 and March 30, 2013, respectively. The change during the three months ended March 29, 2014, compared to the corresponding periods in 2013, was primarily related to the profitability of the Company during the three months ended March 29, 2014, as well as a one-time benefit of \$0.6 million recorded during the three month period ended March 30, 2013 related to the retroactive reinstatement of the 2012 Federal R&D tax credit. As of March 29, 2014, the Company continued to maintain a valuation allowance against certain net deferred tax assets as a result of uncertainties regarding the realization of the asset due to cumulative losses and uncertainty of future taxable income in various tax jurisdictions. In the event that the Company determines that the deferred tax assets are realizable, an adjustment to the valuation allowance will be reflected in the tax provision for the period such determination is made.

The Company is subject to taxation in the U.S. and various states including California, and foreign jurisdictions including South Korea, Japan and United Kingdom. Due to tax attribute carry-forwards, the Company is subject to examination for tax years from 2003 forward for U.S. tax purposes. The Company is also subject to examination in various states for tax years from 2002 forward. The Company is subject to examination for tax years from 2006 forward for various foreign jurisdictions.

On September 13, 2013, the U.S. Treasury Department and the IRS issued final regulations that address costs incurred in acquiring, producing, or improving tangible property (the "tangible property regulations"). The tangible property regulations are generally effective for tax years beginning on or after January 1, 2014, and may be adopted in earlier years. The tangible property regulations required the Company to make additional tax accounting method changes as of January 1, 2014. The impact of these changes was not material to the Company's consolidated financial

position or its results of operations.

The Company accrues interest and penalties related to unrecognized tax benefits in its provision for income taxes. The total amount of accrued penalties and interest was immaterial for the three month period ended March 29, 2014. During the next twelve months, the Company anticipates increases in its unrecognized tax benefits of approximately \$0.3 million.

Note 16. Commitments and Contingencies

Table of Contents
NANOMETRICS INCORPORATED
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS—(Continued)
(Unaudited)

Intellectual Property Indemnification Obligations – The Company will, from time to time, in the normal course of business, agree to indemnify certain customers, vendors or others against third party claims that the Company's products, when used for their intended purpose(s), or the Company's intellectual property, infringe the intellectual property rights of such third parties or other claims made against parties with which it enters into contractual relationships. It is not possible to determine the maximum potential amount of liability under these indemnification obligations due to the limited history of prior indemnification claims and the unique facts and circumstances that are likely to be involved in each particular claim. Historically, the Company has not made payments under these obligations and believes that the estimated fair value of these agreements is immaterial. Accordingly, no liabilities have been recorded for these obligations in the accompanying condensed consolidated balance sheets as of March 29, 2014 and December 28, 2013.

Note 17. Geographic and Significant Customer Information

The Company has one operating segment, which is the sale, design, manufacture, marketing and support of thin film and optical critical dimension systems. The following tables summarize total net revenues (based on the deployments and service location of the systems) and long-lived assets (excluding intangible assets) attributed to significant geographic regions (in thousands):

Three Months Ended		
March 29, 2014	March 30, 2013	
\$6,741	\$9,433	
3,684	5,212	
4,416	2,310	
15,488	644	
15,889	3,547	
5,358	3,406	
\$51,576	\$24,552	
	March 29, 2014 \$6,741 3,684 4,416 15,488 15,889 5,358	

	At	
	March 29, 2014	December 28, 2013
Long-lived tangible assets:		
United States	\$44,545	\$44,775
Japan	122	125
South Korea	401	445
All Other	2,063	2,094
Total long-lived tangible assets	\$47,131	\$47,439

Table of Contents

NANOMETRICS INCORPORATED

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

(Unaudited)

The following customers accounted for 10% or more of total accounts receivable:

	At			
	March 29, 2014		December 28, 2013	
Intel Corporation	19.0	%	14.4	%
SK Hynix	10.9	%	21.8	%
Samsung Electronics Co. Ltd.	21.9	%	27.4	%
Taiwan Semiconductor Mfg. Co.	18.1	%	12.1	%

The following customers accounted for 10% or more of total net revenues:

Three Months Ended

	March 29,		March 30,	
	2014		2013	
Intel Corporation	13.1	%	29.3	%
Samsung Electronics Co. Ltd.	51.7	%	***	

^{***} The customer accounted for less than 10% of total net revenues for that period.

Table of Contents

$_{\mbox{\scriptsize ITEM}}$ 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

This Quarterly Report on Form 10-Q contains forward-looking statements that involve risks and uncertainties. The statements contained in this document that are not purely historical are forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, including, without limitation, statements regarding future periods, financial results, revenues, margins, growth, customers, tax rates, product performance, and the impact of accounting rules on our business and the future implications of our statements regarding goals, strategy, and similar terms. We may identify these statements by the use of words such as "anticipate," "believe," "continue," "could," "estimate," "expect," "intend," "likely," "may," "might," "plan," "potential," "predict," "project," "should," "will," "would," and other similar expressions. All forward-looking statements included in this document are based on information available to us on the date hereof, and we assume no obligation to update any such forward-looking statements, except as may otherwise be required by law.

Our actual results could differ materially from those anticipated in these forward-looking statements as a result of certain risks, uncertainties and changes in circumstances, many of which may be difficult to predict or beyond our control, including those factors referenced in Part II, Item 1A, Risk Factors, and elsewhere in this document, and in Part I, Item 1A, Risk Factors, in our Annual Report on Form 10-K for the fiscal year ended December 28, 2013. In particular our results could vary significantly based on: changes in customer and industry spending; rate and extent of changes in product mix; adoption of new products; timing of orders, shipments, and acceptance of products; our ability to secure volume supply agreements; and general economic conditions. In evaluating our business, investors should carefully consider these factors in addition to any other risks and uncertainties set forth elsewhere. The occurrence of the events described in the risk factors and elsewhere in this report as well as other risks and uncertainties could materially and adversely affect our business, operating results and financial condition. While management believes that the discussion and analysis in this report is adequate for a fair presentation of the information presented, we recommend that you read this discussion and analysis in conjunction with (i) our audited consolidated financial statements and notes thereto for the fiscal year ended December 28, 2013, which were included in our 2013 Annual Report on Form 10-K filed with the Securities and Exchange Commission ("SEC") on March 7, 2014, and (ii) our other filings with the SEC.

We are an innovator in the field of metrology and inspection systems for semiconductor manufacturing and other industries. Our systems are designed to precisely monitor film thickness and critical dimensions that are necessary to control the manufacturing process and to identify defects that can affect production yields and performance. Principal factors that impact our revenue growth include capital expenditures by manufacturers of semiconductors to increase capacity and to enable their development of new technologies, and our ability to gain market share. The increasing complexity of the manufacturing processes for semiconductors is an important factor in the demand for our innovative metrology systems, as are the adoption of optical critical dimension metrology across fabrication processes, the adoption of immersion lithography and double patterning, the adoption of new types of thin film materials, the adoption of advanced packaging strategies and wafer backside inspection, and the need for improved process control to drive process efficiencies. Our strategy is to continue to innovate organically as well as to evaluate strategic acquisitions to address business challenges and opportunities.

Our revenues are primarily derived from product sales but are also derived from customer service and system upgrades ("services") for the installed base of our products. For the three months ended March 29, 2014, we derived 84% of our total net revenues from product sales and 16% of our total net revenues from services.

Overview

Nanometrics Incorporated, together with its subsidiaries, is a leading provider of advanced, high-performance process control metrology and inspection systems used primarily in the fabrication of integrated circuits, high-brightness LEDs ("HB-LED"), discrete components and data storage devices. Our automated and integrated systems address

numerous process control applications, including critical dimension and film thickness measurement, device topography, defect inspection, overlay registration, and analysis of various other film properties such as optical, electrical and material characteristics. Our process control solutions are deployed throughout the fabrication process, from front-end-of-line substrate manufacturing, to high-volume production of semiconductors and other devices, to advanced wafer-scale packaging applications. Our systems enable device manufacturers to improve yields, increase productivity and lower their manufacturing costs. Our defect inspection systems locate large area and microscopic defects on patterned and unpatterned wafers. This system can be used for inspection at nearly every stage of the semiconductor production flow.

Table of Contents

Nanometrics Products

We offer a diverse line of systems to address the broad range of process control requirements of the semiconductor manufacturing industry. In addition, we believe that our engineering expertise, strategic acquisitions, supplier alliances and short-cycle production strategies enable us to develop and offer advanced process control solutions in the future that should address industry advancement and trends. We categorize our systems as follows: Automated Standalone Systems

Our automated systems are made up of both semi-automated and fully automated metrology systems which are employed in both high-volume and low-volume production environments. The Atlas® II, Atlas II+, Atlas XP/Atlas XP+ and Atlas-M represent our line of high-performance metrology systems providing optical critical dimension ("OCI®), thin film metrology and wafer stress for transistor and interconnect metrology applications. The OCD technology is supported by our NanoCD® suite of solutions including our NanoDiffract® software and NanoGenTM scalable computing engine that enables visualization, modeling, and analysis of complex structures. The UniFireTM system enables users to measure multiple parameters at any given process step in the advanced packaging process flow for critical dimension, overlay, and topography applications. Our SPARKTM defect inspection system, offers ultra-fast inspection of patterned and unpatterned semiconductor wafers.

We continue to offer automated products for 200mm factories running at 90nm nodes and above, as well as systems supporting micro-electrical mechanical systems ("MEMS").

System Platform

The Lynx® platform enables cluster metrology factory automation for improved cost of ownership to our customers by combining our Atlas® II and IMPULSE®, UniFire metrology and SPARK inspection systems in configurations to provide high throughput, reduced footprint systems for leading 300mm wafer metrology applications including OCD and thin film process control.

Integrated Systems

Our integrated metrology ("IM") systems are installed directly onto wafer processing equipment to provide near real-time measurements for improved process control and maximum throughput. Our IM systems are sold directly to end customers and through OEM channels. The IMPULSE® system is our latest metrology platform for OCD and thin film metrology, and has been successfully qualified on numerous OEM platforms. Our 90x0 system is qualified for OEM and direct sales supporting thin film and OCD applications. Our NanoCD solutions suite is sold in conjunction with our IMPULSE® and legacy 90x0 systems. Our Trajectory® system provides in-line measurement of layers in thin film thickness and composition in semiconductor applications.

Materials Characterization

Our Materials Characterization products include systems that are used to monitor the physical, optical, electrical and material characteristics of discrete electronic industry, HB-LED, solar Photo-Voltaics ("PV"), compound semiconductor, strained silicon and silicon-on-insulator ("SOI") devices, including composition, crystal structure, layer thickness, dopant concentration, contamination and electron mobility.

Our VertexTM is a photoluminescence ("PL") mapping system designed for high-volume compound semiconductor metrology applications including power control and photonics applications. The RPMBlueTM is our latest PL mapping system designed specifically for the HB-LED market. We sell Fourier-Transform Infrared ("FTIR") automated and manual systems in the QS2200/3300 and QS1200 respectively. The FTIR systems are spectrometers designed for non-destructive wafer analysis for various applications. The NanoSpec[®] line, including the NanoSpec II products supporting thin film measurement across all applications in both low volume production and research applications.

We are continually working to strengthen our competitive position by developing new technologies and products in our market segment. In furtherance of our goals, we have:

Introduced new products in every core product line and primary market served;

Diversified our product line and addressed new markets through acquisitions, such as the 2011 acquisition of Nanda Technologies GmbH, a supplier of high sensitivity, high throughput defect inspection systems;

Continued development of new measurement and inspection technologies for advanced fabrication processes; and

Table of Contents

Researched and developed innovative applications of existing technology to new market opportunities within the solar PV, HB-LED, and data storage industries.

Important Themes and Significant Trends

The semiconductor equipment industry is characterized by cyclical growth. Changing trends in the semiconductor industry continue to drive the need for metrology as a major component of manufacturing systems. These trends include:

Proliferation of Optical Critical Dimension Metrology across Fabrication Processes. Our customers use photolithographic processes to create patterns on wafers. Critical dimensions must be carefully controlled during this process. In advanced node device definition, additional monitoring of thickness and profile dimensions on these patterned structures at CMP, Etch, and Thin Film processing is driving broader OCD adoption. Our proprietary OCD systems can provide the critical process control of these circuit dimensions that is necessary for successful manufacturing of these state-of-the-art devices. Nanometrics OCD technology is broadly adopted across NAND, DRAM, HDD, and logic semiconductor manufacturing processes.

Adoption of Advanced Packaging Processes. Our customers use photolithographic, etching, metallization and wafer thinning to enable next generation advanced packaging solutions for semiconductor devices. The new packaging leads to increased functionality in smaller, less expensive form factors. Advanced packages can be broken down into high density flip chip or bump packages that increase pin density allowing for more complex I/O on advanced CPU parts. Similar or different devices can be stacked at the wafer level using a Through Silicon Via ("TSV") process. The TSV process enables high density small form factor parts, being primarily driven by mobile consumer products (e.g. cellular telephones with integrated CMOS camera sensors). Increasingly advanced packaging technologies are being adopted by our end customers.

Adoption of New Types of Thin Film Materials. The need for ever increasing device circuit speed coupled with lower power consumption has pushed semiconductor device manufacturers to begin the replacement of the traditional aluminum etch back interconnect flows as well as conventional gate dielectric materials, all which drive a broader adoption of thin film and OCD metrology systems. To achieve greater semiconductor device speed, manufacturers have adopted copper in Logic/IDM and it is now proliferating in next generation DRAM and Flash nodes.

Additionally, to achieve improved transistor performance in logic devices and higher cell densities in memory devices, new materials including high dielectric constant (or high-k) gate materials are increasingly being substituted for traditional silicon-oxide gate dielectric materials. High-k materials comprise complex thin films including layers of hafnium oxide and a bi-layer of thin film metals. Our advanced metrology and inspection solutions are required for control of process steps, which are critical to enable the device performance improvements that these new materials allow.

Development of 3D Transistor Architectures. Our end customers continue to improve device density and performance by scaling front end of line transistor architectures. Many of these designs, including fin-fet transistors and 3D-NAND have buried features and high aspect ratio stacked features that enable improved performance and density. The advanced designs require additional process control to manage the complex shapes and materials properties, driving additional applications for both OCD and our UniFire systems.

Need for Improved Process Control to Drive Process Efficiencies. Competitive forces influencing semiconductor device manufacturers, such as price-cutting and shorter product life cycles, place pressure on manufacturers to rapidly achieve production efficiency. Device manufacturers are using our integrated and automated systems throughout the fabrication to ensure that manufacturing processes scale rapidly, are accurate and can be repeated on a consistent basis.

Reduced Number of Customers. Our market is characterized by an ongoing oligopsonistic trend which drives customer concentration. Our largest customer accounted for 51.7% of our total revenue in the three months ended March 29, 2014 and 29.3% of our total revenue in the three months ended March 30, 2013.

Critical Accounting Policies

The preparation of our financial statements conforms to accounting principles generally accepted in the United States of America, which requires management, in applying our accounting policies, to make estimates and judgments that have an important impact on our reported amounts of assets, liabilities, revenue, expenses and related disclosures at the date of our financial statements. On an on-going basis, management evaluates its estimates including those related to bad debts, inventory valuations, warranty obligations, impairment and income taxes. Management bases its estimates and judgments on historical experience and on various other factors that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from management's estimates. There were no significant changes in our critical accounting policies during the three months ended March 29, 2014. Please refer to Item 7, "Management's Discussion and Analysis of

Table of Contents

Financial Condition and Results of Operations," in our Annual Report on Form 10-K for the fiscal year ended December 28, 2013 for a complete discussion of our critical accounting policies.

Recent Accounting Pronouncements

See Note 2 of the Unaudited Condensed Consolidated Financial Statements for a description of recent accounting pronouncements, including the respective dates of adoption and effects or anticipated effects on our results of operations and financial condition.

Results of Operations

Net Revenues

Our net revenues by category for the three months ended March 29, 2014 and March 30, 2013 were as follows (in thousands, except percentages):

	Three Months	s Ended			
	March 29,	March 30,	Changes In		
	2014	2013	Amount	%	
Automated Systems	\$33,883	\$5,262	\$28,621	543.9	%
Integrated Systems	6,922	2,155	4,767	221.2	%
Materials Characterization	2,475	5,662	(3,187) (56.3)%
Total product revenues	43,280	13,079	30,201	230.9	%
Service revenues	8,296	11,473	(3,177) (27.7)%
Total net revenues	\$51,576	\$24,552	\$27,024	110.1	%

For the three month period ended March 29, 2014, total revenues increased by \$27.0 million relative to the comparable 2013 period.

This increase was primarily from an industry-wide improvement in memory-related semiconductor capital spending and from an increase in foundry penetration, supported by the adoption of multiple Atlas®, UniFireTM and IMPULSE® systems by multiple customers. The \$30.2 million increase in net product revenues was led by a \$28.6 million year-over-year increase in Automated Systems sales (primarily from Atlas® II, followed by UniFireTM) and a \$4.8 million increase in Integrated Systems sales (primarily from IMPULSE® systems). Net revenues from our Materials Characterization products decreased by \$3.2 million during this period, primarily due to non-recurring sales of several relatively high priced products into the bare silicon substrate market in the first quarter of 2013. Service revenues decreased by \$3.2 million during this period, relative to the comparable 2013 period, primarily due to upgrades of a large number of installed tools by a customer during the first quarter of 2013. Upgrades tend to fluctuate from quarter-to-quarter based on availability of new functionality from upgrades and customer production cycles which determine when customers purchase available upgrades.

With a significant portion of the world's semiconductor manufacturing capacity located in Asia, a substantial portion of our revenues continue to be generated in that region. Although sales to customers within individual countries of that region will vary from time-to-time, we expect that a substantial portion of our revenues will continue to be generated in Asia.

Gross Margin

Our gross margin for product and services for the three months ended March 29, 2014 and March 30, 2013 were as follows:

Table of Contents

	Three Months E	Three Months Ended		
	March 29,		March 30,	
	2014		2013	
Product	48.4	%	34.1	%
Services	38.4	%	52.5	%

The calculation of product gross margin includes both cost of products and amortization of intangible assets. Product gross margin for the three month period ended March 29, 2014, was 48.4% reflecting an increase of 14.3 percentage points from the comparable period in 2013. The increase during the three month period ended March 29, 2014, compared to the same period of the prior fiscal year, was primarily driven by the favorable impact of fixed costs, such as fixed overhead and amortization of intangible assets, against a significantly higher revenue base, and by the decrease in reserves for excess and obsolete inventory.

The gross margin for our services business was 38.4% for the three month period ended March 29, 2014, reflecting a decrease of 14.1 percentage points from the comparable period in 2013, due principally to a decrease in upgrade revenues, which typically have higher margins than system sales.

Operating Expenses
Our operating expenses for the three months ended March

Our operating expenses for the three months ended March 29, 2014 and March 30, 2013 comprised the following (in thousands, except percentages):

Three Months Ended

	THICC MOHINS EM	icu			
			Changes in		
	March 29, 2014	March 30, 2013	Amount	%	
Research and development	\$8,314	\$7,447	\$867	11.6	%
Selling	7,373	6,932	441	6.4	%
General and administrative	6,338	5,512	826	15.0	%
Amortization of intangible assets	108	198	(90) (45.5)%
Total operating expenses	\$22,133	\$20,089	\$2,044	10.2	%

Research and development. Research and development expenses increased by \$0.9 million for the three month period ended March 29, 2014, over the comparable period in 2013, primarily due to a \$0.5 million increase in labor costs associated with an increase in headcount, a \$0.3 million increase in spending for non-recurring engineering projects, including product design and prototype development, and a \$0.2 million increase in material spending to support the related development initiatives.

Selling. Selling expenses increased by \$0.4 million for the three month period ended March 29, 2014, over the comparable period in 2013, primarily due to a \$0.4 million increase in commission costs resulting from the 110.1% increase in net revenues during the period.

General and administrative. General and administrative expenses increased by \$0.8 million for the three month period ended March 29, 2014, over the comparable period in 2013, primarily due to a \$0.2 million increase in consulting fees to support the implementation of a new Enterprise Resource Planning ("ERP") system, a \$0.2 million increase in software amortization costs associated with our new ERP system, a \$0.2 million increase in legal and accounting fees, and a \$0.2 million increase in temporary employment costs.

Amortization of intangible assets. Amortization of intangible assets decreased for the three month period ended March 29, 2014, compared to the same period in 2013, as a result of the reduction in amortization due to intangible assets that became fully amortized in 2013.

Other Income (expense), net. Our other income (expense), net, consisted of the following categories (in thousands, except percentages):

Table of Contents

Three Months Ended

					Changes in				
	March 29, 2014		March 30, 2013		Amount		%		
Interest income	\$14		\$25		\$(11)	(44.0)%	%
Interest expense	(100)	(226)	126		(55.8)%	%
Other expense, net	252		40		212		530.0	9	6
Total other income (expense), net	\$166		\$(161)	\$327		(203.1)%	%

Interest expense for the three months ended March 29, 2014 was lower than the comparable prior year period due to the repayment of the entire outstanding balance of the mortgage on our headquarters during 2013. The increase in other expense, net, during the three month period ended March 29, 2014, compared to the same period of the prior fiscal year, was primarily from the change in fair value of contingent consideration payable as a result of fluctuation of unobservable inputs, which resulted in an increase of \$0.4 million in other expense during the three months ended March 30, 2013, compared to a nominal decrease adjustment during the three months ended March 29, 2014. Income Taxes

We account for income taxes under the provisions of ASC 740, Accounting for Income Taxes. We adjust the effective tax rate each quarter to be consistent with the estimated annual effective tax rate. We also record the tax effect of unusual or infrequently occurring discrete items, including changes in judgment about valuation allowances and effects of changes in tax laws or tax rates, in the interim period in which they occur. Our effective tax rate reflects the impact of a portion of its earnings being taxed in foreign jurisdictions as well as a valuation allowance maintained on certain deferred tax assets.

We recorded a tax provision of \$0.6 million and a tax benefit of \$4.2 million for the three month periods ended March 29, 2014 and March 30, 2013, respectively. The change during the three months ended March 29, 2014, compared to the corresponding period in 2013, was primarily related to our profitability during the three months ended March 29, 2014, as well as a one-time benefit of \$0.6 million recorded during the three month period ended March 30, 2013 related to the retroactive reinstatement of the 2012 Federal R&D tax credit.

As of March 29, 2014, we continued to maintain a valuation allowance against certain net deferred tax assets as a result of uncertainties regarding the realization of the asset due to cumulative losses and uncertainty of future taxable income in various tax jurisdictions. In the event that we determine that the deferred tax assets are realizable, an adjustment to the valuation allowance will be reflected in the tax provision for the period such determination is made. We are subject to taxation in the United States and various states including California, and foreign jurisdictions including South Korea, Japan and the United Kingdom. Due to tax attribute carry-forwards, we are subject to examination by the IRS for tax years beginning from the 2003 tax year for U.S. tax purposes. We are also subject to examination in various states for tax years beginning from the 2002 tax year. We are also subject to examination in various foreign jurisdictions beginning from the 2006 tax year.

On September 13, 2013, the U.S. Treasury Department and the IRS issued final regulations that address costs incurred in acquiring, producing, or improving tangible property (the "tangible property regulations"). The tangible property regulations are generally effective for tax years beginning on or after January 1, 2014. The tangible property regulations required us to make additional tax accounting method changes as of January 1, 2014. The impact of these changes was not material to our consolidated financial position or our results of operations.

We accrue interest and penalties related to unrecognized tax benefits in the provision for income taxes. The total amount of accrued penalties and interest was immaterial for the three month period ended March 29, 2014. During the next twelve months, we anticipate increases in our unrecognized tax benefits of approximately \$0.3 million. Liquidity and Capital Resources

We maintain an ongoing investment strategy of maintaining a portion of our cash and investments in available-for-sale investments with the objective of preserving capital and maintaining liquidity while mitigating

concentration risk and increasing yields. Our policy is to maintain a marketable securities portfolio consisting of highly rated investments that may include: obligations issued by the US Treasury and its agencies, corporate bonds and commercial paper, tax

Table of Contents

exempt debt obligations of US municipalities, and time deposits at commercial banks. Our policy is that, with the exception of US treasury and agency issues, no single issue at the time of purchase, may exceed 5% of the total portfolio or have a duration exceeding two years. At March 29, 2014, our cash and cash equivalents, and marketable securities totaled \$88.0 million and working capital was \$147.6 million, compared to \$92.9 million and \$141.8 million, respectively, as of December 28, 2013.

Our principal cash requirements include working capital, capital expenditures, and payment of taxes. In addition, we regularly evaluate our ability to repurchase our common stock and acquire other businesses and technologies. Our principal sources of liquidity are from our cash, cash equivalents and marketable securities, cash flow generated from our operations, and, to a lesser extent, available borrowings from a line of credit. Our liquidity is affected by many factors, including those that relate to our specific operations and those that relate to the uncertainties of global and regional economies and the sectors of the semiconductor industry which we operate in. Although our cash requirements will fluctuate based on the timing and extent of these factors, we believe our existing cash, cash equivalents and marketable securities, and borrowing availability, combined with cash currently projected to be generated from our operations, will be sufficient to meet our liquidity needs through at least the next twelve months. Cash Flows from Operating Activities

Cash used in operating activities for the three month period ended March 29, 2014 was \$4.7 million, which resulted primarily from the following factors: Net income of \$1.6 million and non-cash transactions of \$5.2 million, offset in part by an \$11.5 million reduction in non-cash working capital. Non-cash transactions primarily consisted of depreciation and amortization expense of \$2.4 million, stock based compensation of \$1.6 million, inventory write down of \$0.7 million, and a \$0.5 million decrease in deferred income taxes. The reduction in non-cash working capital as of March 29, 2014, compared to December 28, 2013, was primarily due to a \$10.6 million decrease in deferred revenue, a \$2.5 million decrease in accounts payables, accrued and other liabilities, a \$3.1 million increase in inventory and a \$1.0 million increase in accounts receivables, offset in part by a \$4.7 million decrease in inventory delivered systems and a \$1.8 million decrease in prepaid expenses and other.

Cash used by operating activities for the three month period ended March 30, 2013 was \$8.5 million, which resulted primarily from the following factors: Net loss of \$5.6 million and a \$4.5 million reduction in non-cash working capital offset in part by non-cash transactions of \$1.6 million. Non-cash transactions primarily consisted of depreciation and amortization expense of \$2.1 million, stock based compensation of \$1.5 million, inventory write down of \$1.3 million, and a \$0.4 million increase in the fair value of contingent consideration offset in part by \$4.1 million of deferred income taxes. The reduction in non-cash working capital as of March 30, 3013 compared to December 29, 2012 was primarily due to a \$5.6 million increase in inventory, and a \$0.8 million increase in deferred revenue, partially offset by a \$1.3 million decrease in accounts receivable as a result of lower sales volumes during the three month period ended March 30, 2013.

Cash Flows from Investing Activities

For the three month period ended March 29, 2014, \$8.4 million of cash was used for purchases of marketable securities, and \$2.2 million for capital asset purchases. These outflows were offset in part by \$7.0 million cash received from maturities of marketable securities.

For the three month period ended March 30, 2013, \$11.3 million of cash was used for purchases of marketable securities, and \$1.0 million for capital asset purchases. These outflows were offset by \$10.1 million cash received from maturities of marketable securities.

Cash Flows from Financing Activities

For the three month period ended March 29, 2014, \$2.4 million was provided by financing activities primarily from \$3.1 million, net of tax, received from the issuance of common stock from employee stock option exercises and stock purchased under the employee stock purchase program, partially offset by a \$0.7 million reduction related to the effect of excess tax benefits from the exercise of stock options and \$0.1 million paid to Zygo related to royalties and sustaining engineering payments.

For the three month period ended March 30, 2013, \$4.2 million was used for financing activities primarily composed of \$5.0 million used to repurchase common stock, \$0.2 million used to repay debt obligations and a \$0.4 million reduction related to the effect of excess tax benefits from the exercise of stock options. These payments were partially

offset by \$1.6 million net of tax received from the issuance of common stock from employee stock option exercises and stock purchased under the employee stock purchase program.

Table of Contents

Line of Credit

On April 23, 2012, we amended our revolving line of credit facility with Comerica Bank principally (i) to extend the maturity date of such facility by two years to April 30, 2014, (ii) decrease the unused revolving line commitment fee from 0.1875% per annum to 0.10% per annum, and (iii) reduce the minimum interest rate on borrowings from 5.75% to 3.00% per annum. On April 30, 2014, Comerica Bank extended the maturity date of such facility to May 31, 2014.

The instrument governing the line of credit facility includes certain financial covenants regarding tangible net worth. The revolving line of credit agreement includes a provision for the issuance of commercial or standby letters of credit by the bank on our behalf. The value of all letters of credit outstanding reduces the total line of credit available. The revolving line of credit is collateralized by a blanket lien on all of our domestic assets excluding intellectual property and real estate. The minimum borrowing interest rate is 3.00% per annum. Borrowing is limited to the lesser of (a) \$7.5 million plus the borrowing base, or (b) \$20.0 million. The total borrowing available as of March 29, 2014 was \$12.9 million. As of March 29, 2014, we were not in breach of any restrictive covenants in connection with this line of credit. There were no outstanding amounts drawn on this facility as of March 29, 2014. Although we have no current plans to request advances under this credit facility, we may use the proceeds of any future borrowing for general corporate purposes, future acquisitions or expansion of our business.

Mortgage Loan

In July 2008, we entered into a loan agreement with General Electric Commercial Finance ("GE") pursuant to which we borrowed \$13.5 million, secured, in part, by a lien on and security interest in the building and land comprising our principal offices in Milpitas, California. The loan initially bore interest at the rate of 7.18% per annum which rate was scheduled to reset in August 2013 to 3.03% over the weekly average yield of five-year U.S. Dollar Interest Rate Swaps as published by the Federal Reserve. Monthly principal and interest payments were based on a 20 year amortization for the first 60 months and 15 year amortization thereafter. The remaining principal balance of the loan and any accrued but unpaid interest was due on August 1, 2018. According to the terms of the loan agreement, we could make annual pre-payments of up to 20% of the outstanding principal balance without incurring any penalty. GE subsequently sold the mortgage on March 31, 2011 to Sterling Saving Bank; however, no changes were made to the terms of the original loan agreement with GE as a result of the sale. In July 2012, we prepaid \$1.4 million of the loan, respectively, representing 20% of the outstanding balance at the time of prepayment. On July 18, 2013, we repaid \$4.8 million of the loan, representing the entire outstanding principal balance of the loan and all accrued interest. We did not incur any fees associated with the prepayment of the loan. As of March 29, 2014, there was no outstanding balance and no available amount to borrow under the loan.

Repurchases of Common Stock

On May 29, 2012, our Board of Directors approved a program to repurchase up to \$20.0 million of our common stock, referred to as the 2012 program. Stock repurchases under this program may be made through open market and privately negotiated transactions, at times and in such amounts as management deems appropriate. The timing and actual number of shares repurchased is dependent on a variety of factors including price, corporate and regulatory requirements and other market conditions. During the three months ended March 30, 2013, we repurchased and retired 332,771 shares of our common stock under this approved program at the weighted average price of \$15.03 per share. We made no repurchases of our common stock during the three months ended March 29, 2014. As of March 29, 2014, \$11.5 million remained available for the future repurchase of shares of our common stock under the 2012 program.

Business Partnership

On June 17, 2009, we announced a strategic business relationship with Zygo under which we purchased inventory and certain other assets including the UniFire system from Zygo and the two companies entered into a supply agreement.

We will make payments to Zygo (with an estimated present value of \$2.7 million as of March 29, 2014, compared to \$2.8 million as of December 28, 2013) over a period of time as acquired inventory is sold and other aspects of the supply agreement are executed. We made royalty and sustaining engineering payments of \$0.1 million to Zygo in each of the three month periods ended March 29, 2014 and March 30, 2013, respectively.

We have evaluated and will continue to evaluate the acquisitions of products, technologies or businesses that are complementary to our business. These activities may result in product and business investments, which may affect our cash position and working capital balances. Some of these activities might require significant cash outlays.

Table of Contents

We believe our cash, cash equivalents, marketable securities, and borrowing availability will be sufficient to meet our needs through at least the next twelve months. Our ability to fund our working capital needs, planned capital expenditures and scheduled debt payments, as well as to comply with all of the financial covenants under our debt agreements, depends on our future operating performance and cash flow, which in turn are subject to prevailing economic conditions, and to financial, business and other factors, some of which are beyond our control.

Off-Balance Sheet Arrangements

As of March 29, 2014, we had no off-balance sheet arrangements or obligations.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Our exposure to market risk does not differ materially from that discussed in our Annual Report on Form 10-K for the fiscal year ended December 28, 2013, filed with the SEC on March 7, 2014. However, we cannot give any assurance as to the effect that future changes in interest rates or foreign currency rates will have on our consolidated financial position, results of operations or cash flows.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Our management evaluated, with the participation of our Chief Executive Officer, Timothy J. Stultz, and our Chief Financial Officer, Ronald W. Kisling, the effectiveness of our disclosure controls and procedures as of the end of the period covered by this Quarterly Report on Form 10-Q. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that as of March 29, 2014, our disclosure controls and procedures were effective to ensure that information we are required to disclose in reports that we file or submit under the Securities Exchange Act of 1934 were (i) recorded, processed, summarized and reported within the time periods specified in SEC rules and forms; and (ii) accumulated and reported to our management, including our Chief Executive Officer and Chief Financial Officer, to allow timely discussions regarding required disclosures.

Changes in Internal Control over Financial Reporting

During the first quarter of 2014, we implemented a new enterprise resource planning or ERP system. The new ERP system was designed and implemented, in part, to enhance the overall system of internal control over financial reporting through further automation and integration of business processes and was not implemented in response to any identified deficiency or material weakness in the Company's internal control over financial reporting. This implementation was significant in scale and complexity and significantly affected certain accounting functions. Both during and after the implementation, the Company attempted to maintain its internal control design to achieve all key financial reporting assertions. Other than the ERP implementation, during the quarter ended March 29, 2014, there were no changes in our internal controls over financial reporting that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations on Effectiveness of Controls

Our management, including our Chief Executive Officer and Chief Financial Officer, has designed our disclosure controls and procedures and our internal control over financial reporting to provide reasonable assurances that the controls' objectives will be met. However, management does not expect that disclosure controls and procedures or our internal control over financial reporting will prevent or detect all error and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. The design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Further, because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, within Nanometrics 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

error or mistake. Controls can also 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 based in part on certain assumptions about the likelihood of future events, and there can be no assurance that any

Table of Contents

system's design will succeed in achieving its stated goals under all potential future conditions. Projections of any evaluation of a system's control effectiveness into future periods are subject to risks. Over time, controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with policies or procedures.

PART II — OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

None.

ITEM 1A. RISK FACTORS

Investing in our securities involves a high degree of risk. In assessing these risks, you should carefully consider the information included in or incorporated by reference into this report, including our financial statements and the related notes thereto. You should carefully review and consider all of the risk factors set forth in Part 1, "Item 1A. Risk Factors" in our Annual Report on Form 10-K for the fiscal year ended December 28, 2013, filed with the SEC on March 7, 2014. The risks described in our Annual Report on Form 10-K are not the only ones we face. Additional risks and uncertainties that are not presently known to us or that we currently believe are immaterial may also impair our business operations. Our business, operating results and financial conditions could be materially harmed by any of these risks. The trading price of our common stock could decline due to any of these risks and investors may lose all or part of their investment. There have been no material changes in our risk factors from those discussed in our Annual Report on Form 10-K for the fiscal year ended December 28, 2013.

ITEM 5. OTHER INFORMATION

On April 30, 2014, Comerica Bank extended the maturity date of our revolving line of credit facility from April 30, 2014 to May 31, 2014. The extension is filed as Exhibit 10.1 in this Quarterly Report on Form 10-Q.

ITEM 6. EXHIBITS

The following exhibits are filed, furnished or incorporated by reference with this Quarterly Report on Form 10-O:

Exhibit No.	Description
3(i)	Certificate of Incorporation
3.1(1)	Certificate of Incorporation of the Registrant
3(ii)	Bylaws
3.2(2)	Bylaws of the Registrant
10	Material Contracts
	All Other Material Contracts
10.1(3)	Extension to the Loan and Security Agreement dated April 30, 2014
31	Rule 13a-14(a)/15d-14(a) Certifications
31.1(3)	Certification of Timothy J. Stultz, principal executive officer of the Registrant, pursuant to rule 13a-14(a) or rule 15a-14(a) of the Securities Exchange Act of 1934, as amended, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2(3)	Certification of Ronald W. Kisling, principal financial officer of the Registrant, pursuant to rule 13a-14(a) or rule 15a-14(a) of the Securities Exchange Act of 1934, as amended, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32 32.1(3)	Section 1350 Certifications Certification of Timothy J. Stultz, principal executive officer of the Registrant, and Ronald W. Kisling, principal financial officer of the Registrant, pursuant to rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, and U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101(4)	The following financial statements, formatted in XBRL: (i) Condensed Consolidated Balance Sheets at March 29, 2014 and December 28, 2013, (ii) Condensed Consolidated Statements of Operations for the three months ended March 29, 2014 and March 30, 2013, (iii) Condensed Consolidated Statements of Cash Flows for the three months March 29, 2014 and March 30, 2013, and (v) Notes to Unaudited Condensed Consolidated Financial Statements, tagged as blocks of text. The information is Exhibit 101 is "furnished" and not "filed", as provided in Rule 402 of Regulation S-T.
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

Incorporated by reference to Exhibit 3.1 filed with the Registrant's Current Report on Form 8-K (SEC File No. 000-13470) filed with the Securities and Exchange Commission ("SEC") on October 5, 2006.

⁽²⁾ Incorporated by reference to Exhibit 3.1 filed with the Registrant's Current Report on Form 8-K (SEC File No. 000-13470) filed with the SEC on April 12, 2012.

⁽³⁾ Filed herewith.

⁽⁴⁾ Furnished herewith.

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.

NANOMETRICS INCORPORATED (Registrant)

By: /S/ RONALD W. KISLING Ronald W. Kisling Chief Financial Officer (Principal Financial Officer)

Dated: May 5, 2014

Table of Contents

EXHIBIT INDEX

Exhibit No. 3(i)	Description Certificate of Incorporation
3.1(1)	Certificate of Incorporation of the Registrant
3(ii)	Bylaws
3.2(2)	Bylaws of the Registrant
10	Material Contracts
	All Other Material Contracts
10.1(3)	Extension to the Loan and Security Agreement dated April 30, 2014
31	Rule 13a-14(a)/15d-14(a) Certifications
31.1(3)	Certification of Timothy J. Stultz, principal executive officer of the Registrant, pursuant to rule 13a-14(a) or rule 15a-14(a) of the Securities Exchange Act of 1934, as amended, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2(3)	Certification of Ronald W. Kisling, principal financial officer of the Registrant, pursuant to rule 13a-14(a) or rule 15a-14(a) of the Securities Exchange Act of 1934, as amended, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32	Section 1350 Certifications Certification of Timothy J. Stultz, principal executive officer of the Registrant, and Ronald W. Kisling,
32.1(3)	principal financial officer of the Registrant, pursuant to rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, and U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101(4)	The following financial statements, formatted in XBRL: (i) Condensed Consolidated Balance Sheets at March 29, 2014, and December 28, 2013, (ii) Condensed Consolidated Statements of Operations for the three months ended March 29, 2014 and March 30, 2013, (iii) Condensed Consolidated Statements of Cash Flows for the three months March 29, 2014 and March 30, 2013, and (v) Notes to Unaudited Condensed Consolidated Financial Statements, tagged as blocks of text. The information is Exhibit 101 is "furnished" and not "filed", as provided in Rule 402 of Regulation S-T.
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document

101.LAB XBRL Taxonomy Extension Label Linkbase Document

101.PRE XBRL Taxonomy Extension Presentation Linkbase Document

Incorporated by reference to Exhibit 3.1 filed with the Registrant's Current Report on Form 8-K (SEC File No. 000-13470) filed with the Securities and Exchange Commission ("SEC") on October 5, 2006.

⁽²⁾ Incorporated by reference to Exhibit 3.1 filed with the Registrant's Current Report on Form 8-K (SEC File No. 000-13470) filed with the SEC on April 12, 2012.

⁽³⁾ Filed herewith.

⁽⁴⁾ Furnished herewith.