NANOMETRICS INC
Form 10-Q
May 08, 2008
Table of Contents

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, 2008

OR

¨ **Transition report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**
For the transition period from _____ to _____

Commission file number 0-13470

NANOMETRICS INCORPORATED

(Exact name of registrant as specified in its charter)

Delaware	**94-2276314**
(State or other jurisdiction of incorporation or organization)	**(I. R. S. Employer Identification 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 x 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 definitions of large accelerated filer , accelerated filer , and smaller reporting company in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ¨ Accelerated filer x Non-accelerated filer ¨ Smaller reporting company ¨

(Do not check if a smaller reporting company)

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

As of May 2, 2008, there were 18,662,906 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, 2008

		Page
PART I.	FINANCIAL INFORMATION	3
Item 1.	Financial Statements (Unaudited)	3
	Condensed Consolidated Balance Sheets at March 29, 2008 and December 29, 2007	3
	Condensed Consolidated Statements of Operations for the Three- Month Periods Ended March 29, 2008 and March 31, 2007	4
	Condensed Consolidated Statements of Cash Flows for the Three-Month Periods Ended March 29, 2008 and March 31, 2007	5
	Notes to Condensed Consolidated Financial Statements	6
Item 2.	Management s Discussion and Analysis of Financial Condition and Results of Operations	13
Item 3.	Quantitative and Qualitative Disclosures About Market Risk	19
Item 4.	Controls and Procedures	19
PART II.	OTHER INFORMATION	19
Item 1.	Legal Proceedings	19
Item 1A.	Risk Factors	20
Item 2.	Unregistered Sales of Equity Securities and Use of Proceeds	27
Item 5.	Other Information	28
Item 6.	Exhibits	28
Exhibit Index		28
Signatures		29

Table of Contents

PART I FINANCIAL INFORMATION

ITEM 1. CONSOLIDATED FINANCIAL STATEMENTS

NANOMETRICS INCORPORATED

CONDENSED CONSOLIDATED BALANCE SHEETS

(Amounts in thousands except share amounts)

(Unaudited)

	March 29, 2008	December 29, 2007
ASSETS		
Current assets:		
Cash and cash equivalents	$ 18,723	$ 14,919
Accounts receivable, net of allowances of $340 and $323, respectively	29,854	34,855
Inventories	31,658	33,343
Inventories- delivered systems	236	785
Prepaid expenses and other	3,336	2,598
Total current assets	83,807	86,500
Property, plant and equipment, net	44,140	44,419
Goodwill and indefinite lived intangible asset	52,132	52,532
Intangible assets, net	20,935	21,820
Other assets	1,670	1,805
Total assets	$ 202,684	$ 207,076
LIABILITIES AND STOCKHOLDERS EQUITY		
Current liabilities:		
Revolving line of credit	$	$
Accounts payable	9,173	13,931
Accrued payroll and related expenses	4,687	4,514
Deferred revenue	1,384	2,501
Other current liabilities	7,775	7,243
Income taxes payable	1,228	1,101
Current portion of debt obligations	150	148
Total current liabilities	24,397	29,438
Deferred income taxes	382	382
Debt obligations and other long-term liabilities	1,251	1,412
Total liabilities	26,030	31,232
Commitments and Contingencies		
Stockholders Equity:		
Preferred stock, $0.001 par value; 3,000,000 shares authorized; none issued and outstanding		
Common stock, $0.001 par value, 47,000,000 shares authorized; 18,577,850 and 18,620,682 respectively, issued and outstanding	19	19
Additional paid-in capital	187,856	187,180
Accumulated deficit	(14,641)	(13,917)

Accumulated other comprehensive income		3,420		2,562
Total stockholders equity		176,654		175,844
Total liabilities and stockholders equity	$	202,684	$	207,076

See Notes to Unaudited Condensed Consolidated Financial Statements

Table of Contents

NANOMETRICS INCORPORATED

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

(Amounts in thousands except per share amounts)

(Unaudited)

	Three-Months Ended	
	March 29, 2008	March 31, 2007
Net revenues:		
Products	$ 27,929	$ 32,526
Service	6,799	4,589
Total net revenues	34,728	37,115
Costs of net revenues:		
Cost of products	13,662	17,483
Cost of service	5,238	5,829
Total costs of net revenues	18,900	23,312
Gross profit	15,828	13,803
Operating expenses:		
Research and development	4,255	4,586
Selling	4,839	5,365
General and administrative	5,524	6,993
Amortization of intangible assets	1,285	1,549
Restructuring charge	870	
Total operating expenses	16,773	18,493
Loss from operations	(945)	(4,690)
Other income (expense)		
Interest income	98	23
Interest expense	(77)	(39)
Other, net	454	119
Total other income (expense), net	475	103
Loss before provision for income taxes	(470)	(4,587)
Provision for income taxes	254	24
Net loss	$ (724)	$ (4,611)
Net loss per share:		
Basic	$ (0.04)	$ (0.26)
Diluted	$ (0.04)	$ (0.26)
Shares used in per share calculation:		

Basic	18,590	17,658
Diluted	18,590	17,658

See Notes to Unaudited Condensed Consolidated Financial Statements.

Table of Contents

NANOMETRICS INCORPORATED

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

(Amounts in thousands)

(Unaudited)

	Three-Months Ended	
	March 29, 2008	March 31, 2007
Cash flows from operating activities:		
Net loss	$ (724)	$ (4,611)
Reconciliation of net loss to net cash provided by operating activities:		
Depreciation and amortization	2,282	2,298
Stock-based compensation	918	1,234
Changes in assets and liabilities:		
Accounts receivable	5,889	(3,319)
Inventories, net	2,956	5,128
Inventories, delivered systems	549	(791)
Prepaid expenses and other	(600)	(103)
Other assets	118	240
Accounts payable, accrued and other liabilities	(5,017)	1,551
Deferred revenue	(835)	339
Income taxes payable	126	(5)
Net cash provided by operating activities	5,662	1,961
Cash flows from investing activities:		
Purchase of property, plant and equipment	(1,535)	(252)
Net cash used in investing activities	(1,535)	(252)
Cash flows from financing activities:		
Repayments of debt obligations	(38)	(137)
Proceeds from sale of shares under employee stock option plans and purchase plan	39	57
Repurchase of common stock	(281)	
Net cash used in financing activities	(280)	(80)
Effect of exchange rate changes on cash and cash equivalents	(43)	(382)
Net increase in cash and cash equivalents	3,804	1,247
Cash and cash equivalents, beginning of period	14,919	7,955
Cash and cash equivalents, end of period	$ 18,723	$ 9,202
Supplemental disclosure of cash flow information:		
Cash for interest	$ 82	$ 23
Cash paid for income taxes	$ 18	$ 78

See Notes to Unaudited Condensed Consolidated Financial Statements.

Table of Contents

NANOMETRICS INCORPORATED

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

(Unaudited)

Note 1. Consolidated Financial Statements

In the opinion of management, the accompanying Unaudited Condensed Consolidated Financial Statements (financial statements) of Nanometrics Incorporated and its wholly-owned subsidiaries (collectively, Nanometrics or the Company) have been prepared on a consistent basis with the December 29, 2007 audited consolidated financial statements and include all adjustments, consisting of only normal recurring adjustments, necessary to fairly present the information set forth therein. The financial statements have been prepared in accordance with the regulations of the United States Securities and Exchange Commission (SEC), 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 year ended December 29, 2007, which were included in the Company s Annual Report on Form 10-K, which was filed with the SEC on March 15, 2008 and amended on April 25, 2008.

Fiscal Period Nanometrics 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 The Company reclassified the amortization of intangible assets previously included in cost of products and selling expenses to a separate line on the Company s consolidated statement of operations. Amounts reclassified were $1.5 million for the three-month period ended March 31, 2007.

Fair Value Measurements. In September 2006, the Financial Accounting Standard Board (FASB) issued Statement No. 157, *Fair Value Measurements* (SFAS 157). This statement does not require any new fair value measurements but clarifies the fair value definition, establishes a fair value hierarchy that prioritizes the information used to develop assumptions for measuring fair value, and expands disclosures about fair value measurements. SFAS 157 clarifies that the fair value is the exchange price in an orderly transaction between market participants to sell the asset or transfer the liability in the market. The fair value hierarchy gives the highest priority to quoted prices in active markets for identical assets or liabilities (Level 1 input), then to quoted prices (in non-active markets or in active markets for similar assets or liabilities), inputs other than quoted prices that are observable for the asset or liability, and inputs that are not directly observable, but that are corroborated by observable market data for the asset or liability (Level 2 input), then the lowest priority to unobservable inputs, for example, the Company s own data about the assumptions that market participants would use in pricing an asset or liability (Level 3 input). It emphasizes that fair value is a market-based measurement, not an entity-specific measurement and a fair value measurement should therefore be based on the assumptions that market participants would use in pricing the asset or liability. SFAS 157 is effective for financial statements issued for fiscal years beginning after November 15, 2007 and interim periods within those fiscal years. In February 2008, the FASB issued FASB Staff Position (FSP) No. FAS 157-1 to exclude SFAS 13, *Accounting for Leases*, and its related interpretive accounting pronouncements that address leasing transactions. Also in February 2008, the FASB issued FASB Staff Position No. FAS 157-2 to defer the effective date of SFAS 157 for one year for nonfinancial assets and nonfinancial liabilities, except for items that are recognized or disclosed at fair value in the financial statements on a recurring basis at least annually, which are deferred until fiscal years beginning after November 15, 2008 and interim periods within those fiscal years.

The Company adopted SFAS 157 at the beginning of its fiscal year 2008 on December 30, 2007.

In order to determine the implications of adopting SFAS 157, the Company reviewed all the assets and liabilities recorded on its balance sheet. Based on the results of its review, the Company determined that a majority of its assets and liabilities are either not required to be measured at fair value in its financial statements, are outside the scope of SFAS 157, or are subject to the deferred implementation FSP No 157-2. The Company does have a money maker fund of $8.9 million, which is included in cash and cash equivalents of $18.7 million. The fair value of this money maker fund is a Level 1 input.

Note 2. Recent Accounting Pronouncements

In March 2008, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standards (SFAS) No. 161 *Disclosures about Derivative Instruments and Hedging Activities an amendment of FASB Statement No. 133* (SFAS 161). The new standard requires additional disclosures regarding a company s derivative instruments and hedging activities by requiring disclosure of the fair values of

derivative instruments and their gains and losses in a tabular format. It also requires disclosure of derivative features that are credit risk related as well as cross-referencing within the notes to the financial statements to enable financial statement users to locate important information about derivative instruments, financial performance, and cash flows. The standard is effective for our fiscal year and interim periods within such year, beginning January 1, 2009, with early application encouraged. The Company is evaluating the impact of the adoption of the provisions of SFAS 161.

In December 2007, the FASB issued SFAS No. 141R, *Business Combinations* (SFAS 141R). SFAS 141R amends SFAS 141 and provides revised guidance for recognizing and measuring identifiable assets and goodwill acquired, liabilities assumed, and any non-controlling interest in the acquiree. It also provides disclosure requirements to enable users of the financial statements to evaluate the nature and financial effects of the business combination. It is effective for fiscal years beginning on or after December 15, 2008 and will be applied prospectively.

In December 2007, the FASB issued SFAS No. 160, *Non-controlling interests in Consolidated Financial Statements an amendment of ARB No. 51* (SFAS 160). SFAS 160 requires that ownership interests in subsidiaries held by parties other than the parent, and the amount of consolidated net income, be clearly identified, labeled, and presented in the consolidated financial statements. It also requires once a subsidiary is deconsolidated, any retained non-controlling equity investment in the former subsidiary be initially measured at fair value. Sufficient disclosures are required to clearly identify and distinguish between the interests of the parent and the interests of the non-controlling owners. It is effective for fiscal years beginning on or after December 15, 2008 and requires retroactive adoption of the presentation and disclosure requirements for existing minority interests. All other requirements shall be applied prospectively. The Company is currently evaluating the impact of adopting SFAS 160 on its consolidated financial statements.

In September 2006, the FASB finalized SFAS No. 157, *Fair Value Measurements* (SFAS 157). This Statement defines fair value, establishes a framework for measuring fair value, and expands disclosures about fair value measurements; however, it does not require any new fair value measurements. In February 2008, the FASB issued Final FASB Staff Position, or FSP No. FAS 157-2. The FSP, which was effective upon issuance, delays the effective date of SFAS 157 for nonfinancial assets and nonfinancial liabilities, except for items that are recognized or disclosed at fair value at least once a year, to fiscal years beginning after November 15, 2008. The FSP also covers interim periods within the fiscal years for items within its scope. The delay is intended to allow the FASB and its constituents the time to consider the various implementation issues associated with SFAS 157. The Company adopted SFAS No. 157 at the beginning of the fiscal year 2008 on December 30, 2007.

Table of Contents

Note 3. Accounts Receivable

The Company maintains arrangements under which eligible accounts and notes receivable are sold without recourse to unrelated third-party financial institutions. These receivables were not included in the consolidated balance sheet as the criteria for sale treatment established by SFAS No. 140, *Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities*, had been met. Under SFAS No. 140, after a transfer of financial assets, an entity stops recognizing the financial assets when the control has been surrendered. The agreement met the criteria of a true sale of these assets since the acquiring party retained the title to these receivables and had assumed the risk that the receivables will be collectible. The Company pays administrative fees as well as interest at rates ranging from 1.625% to 2.50% based on the anticipated length of time between the date the sale is consummated and the expected collection date of the receivables sold. During the three-month period ended March 29, 2008 and March 31, 2007, the Company sold $6.7 million and $4.0 million, respectively, of receivables under the terms of the agreement. There were no material gains or losses on the sale of such receivables. There were no amounts due from the financial institution at March 29, 2008 and December 29, 2007.

Note 4. Inventories

Inventories are stated at the lower of cost (first-in, first-out) or market and consist of the following (in thousands):

	March 29, 2008	December 29, 2007
Raw materials and sub-assemblies	$ 17,988	$ 19,685
Work in process	6,305	7,134
Finished Goods	7,365	6,524
Total inventories	$ 31,658	$ 33,343

We reflect the cost of systems that were invoiced upon shipment but deferred for revenue recognition purposes separate from our inventory held for sale as Inventories delivered systems.

During the first quarter of 2008, the Company determined that certain demonstration/evaluation equipment would no longer be marketed to be sold. Accordingly, equipment totaling $0.1 million was transferred from inventory to property, plant and equipment.

Note 5. Property, Plant and Equipment

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

	March 29, 2008	December 29, 2007
Land	$ 15,593	$ 15,597
Building and improvements	18,626	18,188
Machinery and equipment	18,576	18,753
Furniture and fixtures	2,206	2,185
	55,001	54,723
Accumulated depreciation and amortization	(10,861)	(10,304)
Total property, plant and equipment, net	$ 44,140	$ 44,419

Note 6. Goodwill and Intangible Assets

Goodwill represents the excess of the purchase price paid over the fair value of tangible and identifiable intangible net assets acquired in a business combination. In accordance with SFAS No. 142, *Goodwill and Other intangible Assets* , goodwill is reviewed annually or whenever events or circumstances occur which indicate that goodwill might be impaired.

Intangible assets with an indefinite life are evaluated annually for impairment or whenever events or circumstances occur which indicate that those assets might be impaired. On March 15, 2006, as a result of the Company s acquisition of Soluris, Inc. (Soluris), the Company acquired a trademark with a value of $0.4 million with an indefinite life. The Company determined the trademark no longer had an indefinite life. Accordingly, a remaining life of five years was assigned and amortization of the finite-lived intangible asset began in the three month period ended March 29, 2008.

Table of Contents

Finite-lived intangible assets are recorded at cost, less accumulated amortization. Finite-lived intangible assets as of March 29, 2008 and December 29, 2007 consist of the following (in thousands):

	Gross Carrying Amount	Accumulated Amortization	Net Intangible Assets
March 29, 2008			
Developed technology acquired in business combinations	$ 9,800	$ 2,366	$ 7,434
Customer relationships	15,700	5,376	10,324
Brand names	3,600	871	2,729
Patented technology	1,790	1,722	68
Trade Mark	400	20	380
Backlog	3,131	3,131	
Non-compete agreement	50	50	
Other	250	250	
Total	$ 34,721	$ 13,786	$ 20,935
December 29, 2007			
Developed technology acquired in business combinations	$ 9,800	$ 2,037	$ 7,763
Customer relationships	15,700	4,638	11,062
Brand names	3,600	749	2,851
Patented technology	1,790	1,646	144
Backlog	3,131	3,131	
Non-compete agreement	50	50	
Other	250	250	
Total	$ 34,321	$ 12,501	$ 21,820

The amortization of finite-lived intangibles is computed using the straight-line method except for customer relationships which is computed using an accelerated method. Estimated lives of finite-lived intangibles range from five to ten years, except for the non-compete agreement and backlog which were amortized over one year. Total amortization expense for the three-month periods ended March 29, 2008 and March 31, 2007 was $1.3 million and $1.5 million respectively.

The estimated future amortization expense as of March 29, 2008 is as follows (in thousands):

Fiscal Years	
2008 (remaining nine months)	$ 3,692
2009	4,337
2010	3,755
2011	3,281
2012	2,538
2013 and thereafter	3,332
Total amortization	$ 20,935

Note 7. Other Current Liabilities

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

	March 29, 2008	December 29, 2007
Accrued warranty	$ 3,842	$ 4,545
Accrued professional services	939	529
Other	2,994	2,169
Total other current liabilities	$ 7,775	$ 7,243

Table of Contents

Note 8. Stockholders Equity

Net Income (Loss) Per Share Basic net income (loss) per share is computed by dividing net income (loss) by the weighted average number of common shares outstanding during the period. Diluted net income per share gives effect to all potentially dilutive common shares outstanding during the period, including contingently issuable shares and certain stock options, calculated using the treasury stock method. A reconciliation of the share denominator of the basic and diluted net income (loss) per share computations is as follows (in thousands):

	Three-Months Ended	
	March 29, 2008	March 31, 2007
Weighted average common shares outstanding used in basic net loss per share computation	18,590	17,658
Potential dilutive common stock equivalents, using treasury stock method		
Shares used in diluted net loss per share computation	18,590	17,658

For the three-month periods ended March 29, 2008 and March 31, 2007, the Company had securities outstanding which could potentially dilute basic earnings per share in the future, which were excluded from the computation of diluted net loss per share in the periods presented as their impact would have been anti-dilutive. Weighted average common share equivalents, consisting of stock options excluded from the calculation of diluted net loss per share were 2.8 million and 2.8 million in the three-month periods ended March 29, 2008 and March 31, 2007, respectively.

During the third fiscal quarter of 2007 the Company s Board of Directors authorized a stock repurchase program pursuant to which the Company may repurchase up to $4.0 million of shares of its common stock. The Company repurchased 43,650 common shares at an average price of $6.45 per share during the first fiscal quarter of 2008. At March 29, 2008, $2.9 million remained available for the future purchase of shares of common stock.

Note 9. Stock-Based Compensation

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 under SFAS No. 123 (revised 2004), *Share-Based Payment* , (SFAS 123(R)) is as follows (in thousands):

	Three-Months Ended	
	March 29, 2008	March 31, 2007
Cost of products	$ 37	$ 76
Cost of service	54	78
Research and development	137	221
Selling	156	279
General and administrative	534	580
Total stock-based compensation expense related to employee stock options and employee stock purchases	$ 918	$ 1,234

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 term of options granted was calculated using the simplified method allowed by Staff Accounting Bulletin 107. 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 Nanometrics 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, 2008	March 31, 2007
Stock Options		
Expected life	4.4 years	4.5 years
Volatility	56%	66.5%
Risk free interest rate	2.92%	4.72%
Dividends		
Employee Stock Purchase Plan		
Expected life	0.5 years	0.5 years
Volatility	35.0%	46.5%
Risk free interest rate	2.52%	5.10%
Dividends		

Table of Contents

The weighted average fair value per share of the stock options awarded in the three months ended March 29, 2008 was $2.90, 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 quarter ended March 29, 2008 is as follows:

	Shares Available	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value (in Thousands)
Options					
Outstanding at December 29, 2007	1,607,911	3,120,467	$ 9.94	4.6	$ 4,381
Shares added through 2005 Option Plan	558,620				
Exercised		(818)	4.95		
Granted	(108,866)	108,866	6.18		
RSU Allocation	(10,000)				
Cancelled	237,415	(237,476)	9.44		
Outstanding at March 29, 2008	2,285,080	2,991,039	$ 9.85	4.78	$ 599
Exercisable at March 29, 2008		1,444,307	$ 11.30	3.47	$ 313

During the first quarter of 2008, the Company granted 10,000 Restricted Stock Units (RSUs) with vesting periods of three years. As of March 29, 2008, there were 100,000 RSUs granted and outstanding.

The aggregate intrinsic value in the preceding table represents the total pretax intrinsic value, based on the Company s closing stock price of $6.66 as of March 29, 2008, 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 period ended March 29, 2008 was immaterial and for the three-month period ended March 31, 2007 was $0.3 million. The fair value of options vested for the three-month period ended March 29, 2008 was $1.7 million and for the three-month period ended March 31, 2007 was $1.6 million.

Note 10. Comprehensive Income (Loss)

The Company s comprehensive income (loss) was as follows (in thousands):

	Three-Months Ended	
	March 29, 2008	March 31, 2007
Net loss	$ (724)	$ (4,611)
Foreign currency translation adjustments, net of tax	858	(51)
Total comprehensive income (loss)	$ 134	$ (4,662)

Substantially all of the accumulated other comprehensive income reflected as a separate component of stockholders equity consists of accumulated foreign currency translation adjustment for all periods presented.

Note 11. Warranties

Product Warranty The Company sells the majority of its products with a 12-month repair or replacement warranty from the date of acceptance which generally represents the date of shipment. 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

Table of Contents

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 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 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 the amounts in accordance with changes in these factors. Components of the warranty accrual, which was included in the accompanying condensed consolidated balance sheets with other current liabilities, were as follows (in thousands):

	Three-Months Ended	
	March 29, 2008	March 31, 2007
Balance as of beginning of period	$ 4,545	$ 4,349
Actual warranty cost	(1,759)	(502)
Provision for warranty	1,056	736
Balance as of end of period	$ 3,842	$ 4,583

Intellectual Property Indemnification Obligations In addition to product warranties, the Company will, from time to time, in the normal course of business, agree to indemnify certain customers with whom it enters into contractual relationships. The Company has agreed to hold these customers harmless against third party claims that Nanometrics products, when used for their intended purpose(s), infringe the intellectual property rights of such third parties or other claims made against the customer. 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 minimal. Accordingly, no liabilities have been recorded for these obligations in the accompanying unaudited condensed consolidated balance sheets as of March 29, 2008 and December 29, 2007.

Note 12. Restructuring Charge

During the first fiscal quarter of 2008, the Company reduced its global work force by approximately 30 employees. This reduction affects employees in each of the Company s locations worldwide and is aimed at reducing it s operating expenses (in thousands).

	Severance and Other Benefits	Other Charges	Total
Restructuring charges	$ 786	$ 84	$ 870
Cash paid during the quarter	(786)	(84)	(870)
Reserve balance at March 29, 2008	$	$	$

Note 13. Income Taxes

The income taxes provision of $0.3 million for the three-month period ended March 29, 2008 was the result of foreign taxes of $0.2 million offset by $0.1 million of tax benefit in a certain foreign jurisdiction where sufficient deferred tax liabilities exist to allow for benefiting the operating loss. In addition, the Company recorded a charge of $0.2 million during the current quarter related to a potential tax exposure in a foreign jurisdiction. The provision for income taxes for the first quarter of 2007 was the result of foreign taxes of $0.2 million offset by $0.2 million of tax benefit in a certain foreign jurisdiction where sufficient deferred tax liabilities exist to allow for benefiting the operating loss. In the future, the Company will continue to review its expectations for future taxable income to determine the amount of valuation allowance necessary to reserve against deferred tax assets.

Table of Contents

Note 14. Contingencies

In August 2005, KLA-Tencor Corporation (KLA) filed a complaint against the Company in the United States District Court for the Northern District of California. The complaint alleges that certain of the Company s products infringe two of KLA s patents. On January 30, 2006, KLA added a third patent to their claim. The complaint seeks a preliminary and permanent injunction against the sale of these products as well as the recovery of monetary damages and attorneys fees. As part of its defense, the Company has filed a request for re-examination of two of the allegedly infringed KLA patents with the U.S. Patent & Trademark Office (PTO). These requests for re-examination were accepted for review by the PTO. In March 2006, the Company filed a motion for and was granted a stay in the patent litigation case until such re-examination is completed. The PTO issued Office Actions for two of the re-examination proceedings on March 26, 2006, and an Office Action in the third re-examination proceeding on February 5, 2008. In the various Office Actions, the PTO rejected numerous claims of the three asserted KLA patents.

Note 15. Geographic and Significant Customer Information

The Company s operating divisions consist of geographically based entities in the United States, Europe, Japan, South Korea, China and Taiwan. All such operating divisions have similar economic characteristics, as defined in SFAS No. 131, *Disclosures About Segments of an Enterprise and Related Information*, and accordingly, the Company operates in one reportable segment: the sale, design, manufacture, marketing and support of thin film, optical critical dimension and overlay dimension metrology systems. The following table summarizes total net revenues and long-lived assets (excluding intangible assets) attributed to significant countries (in thousands):

	Three-Months Ended	
	March 29, 2008	**March 31, 2007**
Total net revenues:		
United States	$ 11,837	$ 16,360
Japan	8,863	5,587
South Korea	5,401	3,765
Taiwan	1,159	2,164
China	4,445	1,819
Europe	1,097	7,302
All other	1,926	118
Total net revenues*	$ 34,728	$ 37,115

* Net revenues are attributed to countries based on the deployment and service locations of systems.

	March 29, 2008	**December 29, 2007**
Long lived assets		
United States	$ 37,057	$ 37,767
Japan	1,251	1,165
South Korea	5,137	5,589
Taiwan	163	158
Europe	2,202	1,545
Total long lived assets**	$ 45,810	$ 46,224

** Long-lived assets include tangible assets only.

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

	Three-Months Ended	
	March 29, 2008	December 29, 2007
Hynix Semiconductor, Inc.	17.6%	***
Xinxin Semiconductor, Inc.	10.2%	***
Samsung Electronics Co. Ltd.	***	14.1%

*** The customer accounted for less than 10% of receivable during the period.

Table of Contents

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

	Three-Months Ended	
	March 29, 2008	March 31, 2007
Samsung Electronics Co. Ltd.	20.6%	37.0%
Hynix Semiconductor, Inc.	***	13.4%

*** The customer accounted for less than 10% of revenue during the period.

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 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, including, without limitation, statements regarding our expectations, beliefs, intentions or strategies regarding our business in future periods. We may identify these statements by the use of words such as anticipate, believe, continue, could, estimate, expect, intend, may, might, plan, potential, predict, project, should, will, would and other similar ex 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 risk factors, including those set forth in Part II Item 1A Risk Factors and elsewhere in this document. In evaluating our business, current and prospective investors should carefully consider these factors in addition to the other information set forth in this document. We believe that it is important to communicate our expectations to our investors. However, there may be events in the future that we are not able to predict accurately or over which we have no control. You should be aware that the occurrence of the events described in such risk factors and elsewhere in this report 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 the audited consolidated financial statements and notes thereto for the year ended December 29, 2007, which were included in our 2007 Annual Report on Form 10-K filed with the Securities Exchange Commission on March 13, 2008 and amended on April 25, 2008.

Overview

We are an innovator in the field of metrology systems for the semiconductor industry. Our systems are designed to precisely monitor film thickness and critical dimensions that are necessary to control the manufacturing process and provide increased production yields and performance.

Capital expenditures by manufacturers of semiconductors and their suppliers are critical to our success. The demand by these manufacturers and suppliers is driven by the expected market demand for new products and new applications. The increasing complexity of the 300mm manufacturing processes for semiconductors is an important factor in the demand for our innovative metrology systems. The incorporation of smaller features sizes, copper interconnects technology and optical critical dimension technology is expected to result in increased demand. Our strategy is to continue to innovate organically and to evaluate strategic acquisitions in order to address business challenges and opportunities.

Our revenues are primarily derived from product sales, which include sales of accessories, but are also derived from customer service for the installed base of our products. In the year ended December 29, 2007, we derived 86.2% of our total net revenues from product sales and 13.8% of our total net revenues from services.

Table of Contents

Important Themes and Significant Trends

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

Incorporation of Optical Critical Dimension Metrology in the Patterning Process. Our customers use photolithographic processes to create patterns on wafers. Critical dimensions must be carefully controlled during this process. Our proprietary optical critical dimension systems can provide the critical process control of these circuit dimensions that is necessary for successful manufacturing of these state of the art devices.

Copper Interconnect Technology. The need for ever increasing device circuit speed coupled with lower power consumption has pushed semiconductor device manufacturers to begin the replacement of the subtractive aluminum interconnect process with copper damascene technology. This new copper processing technology has driven the need for new metrology techniques such as non-destructive laser profiling and the use of optical critical dimension (OCD) technology for control of the copper process.

Incorporation of 65nm and 45nm Feature Sizes. In an effort to reduce costs and increase device performance, semiconductor manufacturers are decreasing both the die size and feature size. Monitoring the increased tolerance requirements on smaller features sizes requires increased use of metrology systems. Our thin film and critical dimension metrology systems are well suited and are being adopted for these next generation processes.

Reduced Number of Customers. Because of the escalating cost of 300mm manufacturing facilities, fewer semiconductor manufacturers can afford the significant investment in these next generation facilities. Therefore, fewer opportunities for semiconductor equipment companies exist. Given that the available number of potential customers is decreasing, previous customer relationships, product positioning and critical mass take on greater importance.

Adoption of New Types of Thin Film Materials. Manufacturers are adopting new processes and technologies that increase the importance and utilization of thin film metrology systems. To achieve greater semiconductor device speed, manufacturers are utilizing copper and new, low dielectric constant (low k) insulating materials. Our advanced metrology solutions are required in the manufacturing process to characterize these materials.

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 standalone metrology systems throughout the fab to ensure that manufacturing processes scale rapidly, are accurate and can be repeated on a consistent basis.

Critical Accounting Policies

The preparation of our financial statements conforms to accounting principles generally accepted in the United States of America, which requires management to make estimates and judgments in applying our accounting policies 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 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. We believe that the application of the following accounting policies requires significant judgments and estimates on the part of management. For a summary of all of our accounting policies, including those discussed below, see Note 1 to The Consolidated Financial Statements included in our 2007 Annual Report on Form 10-K filed with the SEC on March 13, 2008.

Revenue Recognition We recognize revenue when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the sales price is fixed or determinable, and collectibility is reasonably assured. Product revenue includes hardware and also software that is incidental to the products. For product sales to existing customers, revenue recognition generally occurs at the time of shipment, as our terms are FOB shipping point, if we have met defined customer acceptance experience levels with both the customer and the specific type of equipment. All other product revenue is recognized upon customer acceptance including deemed acceptances. In Japan, where risk of loss and title transfers to the customer upon customer technical acceptance, our policy is to recognize revenue upon customer technical acceptance.

All of our products are assembled prior to shipment to our customers. We often perform limited installation for our customers; however such installation is inconsequential and perfunctory as it may also be performed by third parties. Revenue related to spare parts sales is recognized generally upon shipment and is included as part of service revenue. Service

Table of Contents

revenue also includes service contracts and non-warranty, billable repairs of systems. Whereas service revenue related to service contracts is recognized ratably over the period under contract, service revenue related to billable repairs of systems is recognized as services are performed. On occasion, customers request a warranty period longer than our standard 12 month warranty. In those instances where extended warranty services are separately quoted to the customer, we follow the guidance of Financial Accounting Standards Board Technical Bulletin 90-1, *Accounting for Separately Priced Extended Warranty and Product Maintenance Contracts,* associated revenue is deferred and recognized to income ratably over the term of the contract. Unearned maintenance and service contract revenue is included in deferred revenue. Furthermore, generally we do not provide our customers with any return rights. Service contracts may be purchased by the customer when the warranty period expires.

In limited situations we have multiple deliverables in our customer arrangements. Those situations arise with the sale of repair services and parts together. Revenues on such sales are recognized when both the services and parts have been delivered. We also provide technical support to our customers as part of our warranty program. Upon recognition of product revenue, a liability is recorded for anticipated warranty costs.

Allowance for Doubtful Accounts We maintain allowances for estimated losses resulting from the inability of our customers to make required payments. Credit limits are established through a process of reviewing the financial history and stability of our customers. Where appropriate and available, we obtain credit rating reports and financial statements of customers when determining or modifying their credit limits. We regularly evaluate the collectibility of our trade receivable balances based on a combination of factors such as the length of time the receivables are past due, customary payment practices in the respective geographies and our historical collection experience with customers. We believe that our allowance for doubtful accounts reflects our risk associated with smaller rather than larger customers and that our reported allowances are adequate. If however, the financial conditions of customers were to deteriorate, resulting in their inability to make payments, we would assess the necessity to record additional allowances which would result in additional general and administrative expenses being recorded for the period in which such determination was made.

Inventories We are exposed to a number of economic and industry factors that could result in portions of our inventory becoming either obsolete or in excess of anticipated usage, or saleable only for amounts that are less than their carrying amounts. These factors include, but are not limited to, technological changes in our market, our ability to meet changing customer requirements, competitive pressures in products and prices, and the availability of key components from our suppliers. We have established inventory reserves when conditions exist that suggest that our inventory may be in excess of anticipated demand or is obsolete based upon our assumptions about future demand for our products and market conditions. We regularly evaluate our ability to realize the value of our inventory based on a combination of factors including the following: historical usage rates, forecasted sales of usage, product end-of-life dates, estimated current and future market values and new product introductions. For demonstration inventory, we also consider the age of the inventory and potential cost to refurbish the inventory prior to sale. When recorded, our reserves are intended to reduce the carrying value of our inventory to its net realizable value. If actual demand for our products deteriorates, or market conditions are less favorable than those that we project, additional reserves may be required. Inventories are stated at the lower of cost, using the first-in, first-out method, or market value.

Inventories delivered systems We reflect the cost of systems that were invoiced upon shipment but deferred for revenue recognition purposes separate from our inventory held for sale as Inventories delivered systems .

Product Warranties We sell the majority of our products with a twelve-month repair or replacement warranty from the date of acceptance which generally represents the date of shipment. We provide 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 reported 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, labor and replacement costs incurred in correcting a product failure. If actual product failure rates, material usage, labor or replacement costs differ from our estimates, revisions to the estimated warranty obligations would be required. For new product introductions where limited or no historical information exists, we may use warranty information from other previous product introductions to guide us in estimating our 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. We periodically assess the adequacy of our recorded warranty reserve and adjust the amounts in accordance with changes in these factors.

Goodwill and Intangible Assets Goodwill is initially recorded when the purchase price paid for an acquisition exceeds the estimated fair value of the net identified tangible and intangible assets acquired. Under Statement of Financial Accounting Standards (SFAS) No. 142, *Goodwill and Other Intangible Assets* (SFAS 142), intangible assets with finite lives are amortized over their useful lives while goodwill and indefinite lived assets are not amortized but tested annually for impairment. Our impairment review process, which is completed as of the last day of November of each year or whenever

15

Table of Contents

events or circumstances occur which indicate that an impairment has occurred, compares the fair value of our reportable segment (which we have determined to be our reporting unit) to its carrying value, including the goodwill related to the segment. To determine the fair value, our review process uses the income method and is based on a discounted future cash flow approach that uses estimates including the following for each segment: revenue, based on assumed market growth rates and our assumed market share; estimated costs; and appropriate discount rates based on the particular business s weighted average cost of capital. Our estimates of market segment growth, our market segment share and costs are based on historical data, various internal estimates and certain external sources, and are based on assumptions that are consistent with the plans and estimates we are using to manage the underlying businesses. Our business consists of both established and emerging technologies and our forecasts for emerging technologies are based upon internal estimates and external sources rather than historical information. If future forecasts are revised, they may indicate or require future impairment charges. We also considered our market capitalization on the dates of our impairment tests under SFAS 144, in determining the fair value of the respective businesses.

Our fair value estimates, are based on the extensive use of management s estimates and assumptions, and the result of these processes can have a significant impact on our future operating results.

Income Tax Assets and Liabilities We account for income taxes based on SFAS 109, *Accounting for Income Taxes* , whereby deferred tax assets and liabilities must be recognized using enacted tax rates for the effect of temporary differences between the book and tax accounting for assets and liabilities. Also, deferred tax assets must be reduced by a valuation allowance if it is more likely than not that a portion of the deferred tax asset will not be realized in the future. We evaluate the deferred tax assets on a quarterly basis to determine whether or not a valuation allowance is appropriate. Factors used in this determination include future expected income and the underlying asset or liability which generated the temporary tax difference. Our income tax provision is primarily impacted by federal statutory rates, state and foreign income taxes and changes in our valuation allowance.

Stock-Based Compensation Upon adoption of SFAS 123(R) on January 1, 2007, we began estimating the value of employee stock options on the date of grant using the Black-Scholes model. Prior to the adoption of SFAS 123(R), the value of each employee stock option was estimated on the date of grant using the Black-Scholes model for the purpose of the pro forma financial disclosure in accordance with SFAS 123. The determination of fair value of share-based payment awards on the date of grant using an option-pricing model is affected by our stock price as well as assumptions regarding a number of highly complex and subjective variables. These variables include, but are not limited to the expected stock price volatility over the term of the awards, and actual and projected employee stock option exercise behaviors. The expected term of options granted is calculated based on the simplified method allowed by Staff Accounting Bulletin 107. The expected volatility is based on the historical volatility of our stock price.

Restructuring Charge During the three-month period ended March 29, 2008, we implemented a restructuring program based on our business strategy and recorded a significant accrual in connection with the restructuring program. In connection with the plan we have recorded estimated expenses for severance and other costs. In accordance with SFAS 146, *Accounting for Costs Associated with Exit or Disposal Activities* , generally costs associated with restructuring activities have been recognized when they are incurred rather than the date of a commitment to an exit or disposal plan. In addition post-employment benefits accrued for workforce reductions related to restructuring activities are accounted for under SFAS 112, *Employer s Accounting Post-Employment Benefits* . A liability for post-employment benefits is recorded when payment is probable, the amount is reasonably estimable, and the obligation relates to rights that have vested or accumulated. Given the significance and complexity of restructuring activities, and the timing of the execution of such activities, the restructuring process involves periodic reassessments of the estimates made at the time the original decisions were made, including evaluating market conditions for expected disposals of assets and vacancy of space. Although we believe that these estimates accurately reflect the costs of the restructuring programs, actual results may vary or differ, thereby requiring us to record additional provisions or reverse a portion of such provisions.

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 on results of operations and financial condition.

Table of Contents

Results of Operations

Periods ended March 29, 2008 and March 31, 2007

Total net revenues. Our net revenues were comprised of the following categories (in thousands):

	Three-Months Ended		
	March 29, 2008	March 31, 2007	Percentage Change
Automated systems	$ 23,038	$ 29,000	(20.6%)
Integrated systems	4,891	3,526	38.7%
Total product revenue	27,929	32,526	(14.1%)
Service	6,799	4,589	48.2%
Total net revenues	$ 34,728	$ 37,115	(6.4%)

For the three-month period ended March 29, 2008 net revenues from automated systems decreased by $6.0 million or 21%. Net revenues from our integrated systems increased $1.4 million, or 39%, over the comparable period of 2007. However, during the first quarter of 2007 we deferred $3.8 million of revenue related to integrated systems which had been shipped to the customer but had not yet fully met revenue recognition criteria. Had the deferred revenue been recognized in the first quarter of 2007, integrated systems revenue for the current period of 2008 would reflect a $2.4 million decrease in revenue from the comparable quarter of 2007. The overall decrease in product revenue of 14.1% is reflective of the current general economic environment in the semiconductor equipment manufacturing sector.

Service revenue increased by $2.2 million, or 48%, during the three-month period ended March 29, 2008 over the comparable period of 2007 due to a significant increase of in-the-field tool upgrades and an increased focus on billable service and spare parts.

Gross margins. Our gross margin breakdown was as follows (in percent):

	Three-Months Ended	
	March 29, 2008	March 31, 2007
Products	51.1%	46.2%
Services	23.0%	(27.0%)

The product gross margin for the three-month period ended March 29, 2008 increased from the comparable period of 2007 due to lower excess and obsolete charges of $0.8 million, reduced costs associated with our product reliability and reduced manufacturing costs as we completed the integration of our 2007 acquisitions of Accent Optical Technologies, Inc and Soluris including the closure of a facility in Concord Massachusetts and out-sourcing the manufacturing of several of our products to contract manufactures.

The gross margin for our services line of business increased to 23% in the first quarter of 2008 as compared to a negative gross margin of 27% for the comparable period of 2007. The increase in gross margin reflects a higher level of in-the-field tool upgrades which provide favorable margins, increased efforts on billable service and spare parts sales and our focus on controlling expenses including personnel, personnel related expenses and material costs as compared to 2007.

Operating expenses. Our operating expenses were comprised of the following (in thousands):

	Three-Months Ended		
	March 29, 2008	March 31, 2007	Change

Research and development	$ 4,255	$ 4,586	$ (331)	(7.2)%
Selling	4,839	5,365	(526)	(9.8)%
General and administrative	5,524	6,993	(1,469)	(21.0)%
Amortization of intangible assets	1,285	1,549	(264)	(17.0)%
Restructuring charge	870		870	100.0%
Total operating expenses	$ 16,773	$ 18,493	$ (1,720)	(9.3)%

Research and development. Research and development expenses decreased by $0.3 million, or 7.2% for the three-month period ended March 29, 2008 over the comparable period in 2007 due to reduced headcount and related development expenses of $0.5 million, partially offset by higher depreciation charges of $0.2 million.

Table of Contents

Selling. Selling expenses decreased $0.5 million, or 9.8% for the three-month period ended March 29, 2008 over the comparable period of 2007 due primarily from reduction of personnel and personnel related expenses**.**

General and administrative. General and administrative expenses decreased by $1.5 million, or 21%, for the three-month period ended March 29, 2008 over the comparable period in 2007. The decrease was primarily due to lower legal expenses of $1.2 million as we settled the patent litigation with Nova Measuring Instruments Ltd (Nova) in April 2007 and to termination charges of $0.5 million of certain senior executives incurred in first quarter of 2007.

Amortization of intangible assets. Amortization of intangible assets for the three-month period ended March 29, 2008 decreased $0.3 million due primarily to the amortization charges incurred in the comparable period of 2007 related to the backlog intangible asset acquired with the Accent acquisition, which was fully amortized by the second quarter of 2007.

Restructuring charge. During the first fiscal quarter of 2008, we reduced our global work force by approximately 30 employees. This reduction affects employees in each of our major locations worldwide and is aimed at reducing our overall operating expenses. Our restructuring charges were comprised of the following (in thousands):

	Severance and Other Benefits	Other Charges	Total
Restructuring charges	$ 786	$ 84	$ 870
Cash paid during the quarter	(786)	(84)	(870)
Reserve balance at March 29, 2008	$	$	$

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

	Three-Months Ended			
	March 29, 2008	March 31, 2007	Change	
Interest income	$ 98	$ 23	$ 75	326.1%
Interest expense	(77)	(39)	(38)	(97.4)%
Other income (loss)	454	119	335	281.5%
Total other income (expense)	$ 475	$ 103	$ 372	361.2%

The higher interest expense is related to our debt obligations in the United Kingdom and the selling of receivables without recourse in Japan. We incurred foreign exchange gains due to exchange rate fluctuations associated with extensive inter-company balances between our various global entities.

Provision for income taxes. The income taxes provision of $0.3 million for the three-month period ended March 29, 2008 was the result of foreign taxes of $0.2 million offset by $0.1 million of tax benefit in a certain foreign jurisdiction where sufficient deferred tax liabilities exist to allow for benefiting the operating loss. In addition, we recorded a charge of $0.2 million during the current quarter related to a potential tax exposure in a foreign jurisdiction. The provision for income taxes for the first fiscal quarter of 2007 was the result of foreign taxes of $0.2 million offset by $0.2 million of tax benefit in a certain foreign jurisdiction where sufficient deferred tax liabilities exist to allow for benefiting the operating loss. In the future, we will continue to review our expectations for future taxable income to determine the amount of valuation allowance necessary to reserve against deferred tax assets.

Liquidity and Capital Resources

At March 29, 2008, our cash and cash equivalents totaled $18.7 million compared to $14.9 million as of December 29, 2007. At March 29, 2008, we had working capital of $59.4 million compared to $57.1 million at December 29, 2007. The current ratio at March 29, 2008 was 3.4 to 1.

Operating activities provided cash of $5.7 million for the three-month period ended March 29, 2008 resulting from certain non-cash charges including $2.3 million associated with amortization and depreciation and $0.9 million in stock-based compensation and increases in net working capital of $3.2 million partially offset by our net loss of $0.7 million. Operating activities provided cash of $2.0 million in the first quarter of 2007. Cash provided by operations resulted from an increase in net working capital assets and certain non-cash charges of $2.3 million associated with amortization and depreciation, $1.2 million in stock based compensation offset by our net loss of $4.6 million and increases in our accounts receivable due to higher revenue levels.

Table of Contents

Investing activities for the first quarter of 2008 and 2007 used cash of $1.5 million and $0.3 million, respectively, for capital equipment acquisitions.

For the three-month period ended March 29, 2008, financing activities used cash of $0.3 million primarily for the repurchase of our common stock. For the fiscal quarter ended March 31, 2007, financing activities used $0.1 million, primarily for the repayment of long-term debt in Japan.

In February 2007, we entered into a two-year agreement for a revolving line of credit facility in a maximum principal amount of $15 million. The instrument governing the facility includes certain financial covenants regarding net tangible worth. All borrowings under this credit line bear interest, at our election, at a per annum rate equal to the bank s prime rate or at the Libor rate plus 2.25%. 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. Although we have no current plans to request any advances under this credit facility, we may use the proceeds of any future borrowing for general corporate purposes or for future acquisitions or expansion of our business.

We have evaluated and will continue to evaluate the acquisition 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. For example, recently our Board of Directors authorized a stock repurchase program of up to $4 million. However, we believe working capital including cash and cash equivalents and funds available to us under our line of credit; will be sufficient to meet our needs through at least the next twelve months. However, we may require additional cash to fund acquisitions or investment opportunities or other events that may arise in the future. In these instances, we may seek to raise such additional funds through public or private equity or debt financings or from other sources. We may not be able to obtain adequate or favorable financing at that time. Any financing we obtain may dilute ownership interests and any debt financing could contain covenants that impose limitations on the conduct of our business.

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 29, 2007. 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

As of March 29, 2008 (the Evaluation Date), an evaluation was carried out under the supervision and with the participation of our management, including the Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934 (the Exchange Act). There are inherent limitations to the effectiveness of any system of disclosure controls and procedures. Accordingly, even effective disclosure controls and procedures can only provide reasonable, not absolute, assurance of achieving their control objectives. However, because our remediation of the material weakness identified in the fourth quarter of fiscal 2007 and described below is not yet complete, our Chief Executive Officer and Chief Financial Officer have concluded that, as of the Evaluation Date, our disclosure controls and procedures were not effective as of the end of the period covered by this report.

Changes in Internal Controls

As disclosed in our Annual Report on Form 10-K for the fiscal year ended December 29, 2007, under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting as of December 29, 2007. As a result of such evaluation, management identified a material weakness in our internal control over financial reporting as of December 29, 2007 related to our controls over international income tax accounting. Specifically, the Company s process and procedures surrounding its accounting for international taxes were not effective as of December 29, 2007 in both design and operation, as the existing process and procedures failed to adequately and timely manage the international tax accounting process.

During our most recent fiscal quarter, we have taken the following steps to remediate the material weakness described above which we believe are necessary to address the issues associated with our material weakness over international income tax accounting, including implementing changes that are both organizational and process-focused to improve the design and operation of the controls. Such planned changes include:

Initiation of a global transfer pricing study,

Increased oversight and monitoring of accounting procedures and review of our international tax accounting and,

Rationalizing and simplifying the tax structures of our foreign entities.

We expect the above mentioned changes in internal controls to be fully implemented by the quarter ended September 27, 2008, and testing of our internal controls subsequent to this date we believe will determine that the enhanced controls are operating effectively.

Other than as noted above, there were no changes in our internal control over financial reporting during the three-month period ended March 29, 2008 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

In August 2005, KLA-Tencor Corporation, or KLA, filed a complaint against us in the United States District Court for the Northern District of California. The complaint alleges that certain of our products infringe two of KLA s patents. On January 30, 2007, KLA added a third patent to their claim. The complaint seeks a preliminary and permanent injunction against the sale of these products as well as the recovery of monetary damages and attorneys fees. We do not believe that any of our products infringe the intellectual property of any third party and we intend to vigorously and aggressively defend

Table of Contents

ourselves in the litigation. As part of such defense, we have filed a request for re-examination of the three allegedly infringed KLA patents with the U.S. Patent & Trademark Office, or PTO. These requests for re-examination were accepted for review by the PTO. In March 2007, we filed a motion for and were granted a stay in the patent litigation case until such re-examination is completed. The PTO issued Office Actions for two of the re-examination proceedings on March 26, 2006 and an Office Action in the third re-examination proceedings on February 5, 2008. In the various Office Actions, the PTO rejected numerous claims of the three asserted KLA patents.

ITEM 1A. RISK FACTORS

A restated description of the risk factors associated with our business is set forth below. This description includes any material changes to and supersedes the description of the risk factors included in our Annual Report on Form 10-K for the fiscal year ended December 29, 2007. The risks and uncertainties described below are not the only ones that we face. If any of the following risks actually occurs, our business, financial condition or operating results could be harmed. In such case, the trading price of our common stock could decline, and you could lose all or part of your investment.

Risks Related to Our Business

Customer demand for our products is inelastic and has led to fluctuations in revenue from period to period and is expected to continue to do so.

Our operating results have varied significantly from period to period due to the inelastic nature of our products. The majority of our business depends upon the capital expenditures of semiconductor device and equipment manufacturers. These manufacturers capital expenditures, in turn, depend upon the current and anticipated market demand for semiconductors and products using semiconductors. The semiconductor industry has historically experienced periodic downturns. These downturns have often resulted in substantial decreases in the demand for semiconductor manufacturing equipment, including metrology systems. We have found that the resulting decrease in capital expenditures has typically been more pronounced than the downturn in semiconductor device industry revenues. We expect the inelastic nature of demand for our products, and therefore, our business, to continue in the foreseeable future.

We depend on OEM suppliers for sales of our integrated metrology systems, and the loss of our OEM suppliers as a customer could harm our business.

We believe that sales of integrated metrology systems will continue to be an important source of our revenues. Sales of our integrated metrology systems depend upon the ability of OEMs to sell semiconductor equipment products that include our metrology systems as components. If our OEMs are unable to sell such products, or if they choose to focus their attention on products that do not integrate our systems, our business could suffer. If we were to lose our OEMs as a customer for any reason, our ability to realize sales from integrated metrology systems would be significantly diminished, which would harm our business.

Efforts to restructure our operations and align our resources with market opportunities could disrupt our business and affect our results of operations.

Since 2007, we have taken steps, including reductions in force, facility closures, and internal reorganizations to reduce the size and cost of our operations and to better match our resources with our market opportunities. We may take similar steps in the future to improve efficiency and match our resources with market opportunities. Any such changes could be disruptive to our business and may result in the recording of accounting charges. These include inventory and technology-related write-offs, workforce reduction costs and charges relating to consolidation of excess facilities. If we are required to take a substantial charge related to any future restructuring activities, our results of operations would be adversely affected in the period in which we take such a charge.

If any of our systems fail to meet or exceed our internal quality specifications, we do not ship them until such time as they have met such specifications. If we experience significant delays or are unable to ship our products to our customers as a result of our internal processes, or for any other reason, our business and reputation may suffer.

Our products are complex and require technical expertise to design and manufacture properly. Various problems occasionally arise during the manufacturing process that may cause delays and/or impair product quality. We must actively monitor our manufacturing processes to ensure that our products meet our internal quality specifications. Any significant delays stemming from the failure of our products to meet or exceed our internal quality specifications, or for any other reasons, would delay our shipments. Shipment delays could harm our business and reputation in the industry.

20

Table of Contents

If we deliver systems with defects, our credibility will be harmed, revenue from, and market acceptance of, our systems will decrease and we could expend significant capital and resources as a result of such defects.

Notwithstanding our internal quality specifications, our systems have sometimes contained errors, defects and bugs when introduced. If we deliver systems with errors, defects or bugs, our credibility and the market acceptance and sales of our systems would be harmed. Further, if our systems contain errors, defects or bugs, we may be required to expend significant capital and resources to alleviate such problems. Defects could also lead to product liability as a result of product liability lawsuits against us or against our customers. We have agreed to indemnify our customers in some circumstances against liability arising from defects in our systems. In the event of a successful product liability claim, we could be obligated to pay damages significantly in excess of our product liability insurance limits.

Our largest customers account for a substantial portion of our revenue, and our revenue would materially decline if one or more of these customers were to purchase significantly fewer of our systems or if they delayed or cancelled a large order.

Historically, a significant portion of our revenues in each quarter and each year has been derived from sales to a relatively few customers, and we expect this trend to continue. There are only a limited number of large companies operating in the semiconductor industry. Accordingly, we expect that we will continue to depend on a small number of large customers for a significant portion of our revenues for the foreseeable future. If any of our key customers were to purchase significantly fewer systems, or if a large order were delayed or cancelled, our revenues could significantly decline.

The success of our product development efforts depends on our ability to anticipate market trends and the price, performance and functionality requirements of semiconductor device manufacturers. In order to anticipate these trends and ensure that critical development projects proceed in a coordinated manner, we must continue to collaborate closely with our customers. Our relationships with our customers provide us with access to valuable information regarding industry trends, which enables us to better plan our product development activities. If our current relationships with our large customers are impaired, or if we are unable to develop similar collaborative relationships with important customers in the future, our long-term ability to produce commercially successful systems could be adversely affected.

We have had significant management changes since the end of fiscal year 2006 and these changes may impact our ability to execute our business strategy in the near term. In general, our success depends to a significant extent on the performance of our senior management and on our ability to identify, hire and retain key management personnel.

In August 2007, our Chief Executive Officer joined the Company. In November 2007, our Chief Financial Officer joined the Company. While we are confident in the officers abilities to manage the Company, our business may be affected. Furthermore, we must be able to identify, hire and retain key personnel. Although we have employment agreements with certain key members of our senior management team, including Messrs. Stultz, Schaefer and Crawford, these individuals or other key employees may still leave us. We do not have key person life insurance on any of our executives. In addition, to support our future growth, we will need to attract and retain additional qualified employees. Competition for such personnel in our industry is intense, and we may not be successful in attracting and retaining qualified employees. If we fail to attract, motivate and retain qualified senior management personnel, our business could be harmed and our ability to implement our strategy could be compromised.

Failure to achieve and maintain effective internal controls in accordance with section 404 of The Sarbanes-Oxley Act of 2002 could have a material effect on our business.

As a publicly traded company, we are subject to rules adopted by the SEC pursuant to Section 404 of the Sarbanes-Oxley Act of 2002. Section 404 requires us to include an internal control report from management in this Annual Report on Form 10-K. The internal control report must include the following: (1) a statement of management s responsibility for establishing and maintaining adequate internal control over financial reporting, (2) a statement identifying the framework used by management to conduct the required evaluation of the effectiveness of our internal control over financial reporting, (3) management s assessment of the effectiveness of our internal control over financial reporting as of the end of each fiscal year, including a statement as to whether or not internal control over financial reporting is effective, and (4) a statement that our independent registered public accounting firm has issued an attestation report on management s internal control over financial reporting. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the Company s annual or interim financial statements will not be prevented or detected on a timely basis. Our assessment as of December 29, 2007 identified a material weakness in our internal controls over financial reporting, which also adversely impacted our disclosure controls and procedures. A material weakness results in a reasonable possibility that a material misstatement of the Company s annual or interim financial statements will not be prevented or detected on a timely basis. Since discovery of the material weakness, we have performed extensive additional work to obtain reasonable assurance regarding the reliability of our financial statements. Even with this additional work, however, there is a risk of errors not being prevented or detected. For additional information refer to Item 4. Controls and Procedures in this Quarterly Report on Form 10-Q.

21

Table of Contents

Because of the material weakness referenced in the preceding paragraph, management has concluded that, as of December 29, 2007, our internal controls over financial reporting were not effective based on those criteria. This failure and any failure in the future to achieve and maintain effective internal controls over financial reporting and otherwise comply with the requirements of Section 404 could have a material adverse effect on our business. Such noncompliance could result in perceptions of our business among customers, suppliers, lenders, investors, securities analysts and others being adversely affected. We may not be able to complete our remediation plans designed to address the identified material weakness in our internal controls over financial reporting and continue to attract additional qualified accountants, and auditing and compliance professionals to assist in completing such plans and maintaining compliance programs.

Our current and potential competitors have significantly greater resources than we do, and increased competition could impair sales of our products.

We operate in the highly competitive semiconductor industry and face competition from a number of companies, many of which have greater financial, engineering, manufacturing, marketing and customer support resources than we do. As a result, our competitors may be able to respond more quickly to new or emerging technologies or market developments by devoting greater resources to the development, promotion and sale of products, which could impair sales of our products. Moreover, there has been merger and acquisition activity among our competitors and potential competitors. These transactions by our competitors and potential competitors may provide them with a competitive advantage over us by enabling them to rapidly expand their product offerings and service capabilities to meet a broader range of customer needs. Many of our customers and potential customers in the semiconductor industry are large companies that require global support and service for their metrology systems. Some of our larger or more geographically diverse competitors might be better equipped to provide this global support.

Successful infringement claims by third parties could result in substantial damages, lost product sales and the loss of important intellectual property rights by us.

Our commercial success depends, in part, on our ability to avoid infringing or misappropriating patents or other proprietary rights owned by third parties. From time to time we may receive communications from third parties asserting that our metrology systems may contain design features which are claimed to infringe on their proprietary rights. For example, in August 2005, we were served with a complaint by KLA alleging that certain of our products infringe two of KLA s patents, Patent No. 6,483,580 and Patent No. 6,590,656. In January 2006, KLA added Patent No. 6,611,330 to its claim. For additional information, refer to Item 3. Legal Proceedings. There can be no assurance that Nanometrics new or current products do not infringe any valid intellectual property rights. Even if our products do not infringe, we may be required to expend significant sums of money to defend against infringement claims, as in the KLA lawsuit described above, or to actively protect our intellectual property rights through litigation.

We obtain some of the components and subassemblies included in our systems from a single source or a limited group of suppliers, and the partial or complete loss of one of these suppliers could cause production delays and significant loss of revenue.

We rely on outside vendors to manufacture many components and subassemblies. Certain components, subassemblies and services necessary for the manufacture of our systems are obtained from a sole supplier or limited group of suppliers. We do not maintain any long-term supply agreements with any of our suppliers. We have entered into arrangements with J.A.Woollam Company for the purchase of the spectroscopic ellipsometer component incorporated in our advanced measurement systems. Our reliance on a sole or a limited group of suppliers involves several risks, including the following:

- we may be unable to obtain an adequate supply of required components;
- we have reduced control over pricing and the timely delivery of components and subassemblies; and
- our suppliers may be unable to develop technologically advanced products to support our growth and development of new systems.

Some of our suppliers have relatively limited financial and other resources. Because the manufacturing of certain of these components and subassemblies involves extremely complex processes and requires long lead times, we may experience delays or shortages caused by our suppliers. If we were forced to seek alternative sources of supply or to manufacture such components or subassemblies internally, we could be forced to redesign our systems, which could cause production delays and prevent us from shipping our systems to customers on a timely basis. Any inability to obtain adequate deliveries from our suppliers, or any other circumstance that would restrict our ability to ship our products, could damage relationships with current and prospective customers, harm our business and result in significant loss of revenue.

22

Table of Contents

Variations in the amount of time it takes for us to sell our systems may cause fluctuations in our operating results, which could cause our stock price to decline.

Variations in the length of our sales cycles could cause our revenues to fluctuate widely from period to period. Our customers generally take long periods of time to evaluate our metrology systems. We expend significant resources educating and providing information to our prospective customers regarding the uses and benefits of our systems. The length of time that it takes for us to complete a sale depends upon many factors, including:

- the efforts of our sales force and our independent sales representatives;
- the complexity of the customer s metrology needs;
- the internal technical capabilities and sophistication of the customer;
- the customer s budgetary constraints; and
- the quality and sophistication of the customer s current processing equipment.

Because of the number of factors influencing the sales process, the period between our initial contact with a customer and the time at which we recognize revenue from that customer, if at all, varies widely. Our sales cycles, including the time it takes for us to build a product to customer specifications after receiving an order, typically range from three to nine months. Occasionally our sales cycles can be much longer, particularly with customers in Asia who may require longer evaluation periods. During the sales cycles, we commit substantial resources to our sales efforts in advance of receiving any revenue, and we may never receive any revenue from a customer despite our sales efforts.

If we do complete a sale, customers often purchase only one of our systems and then evaluate its performance for a lengthy period of time before purchasing additional systems. The purchases are generally made through purchase orders rather than through long-term contracts. The number of additional products that a customer purchases, if any, depends on many factors, including a customer s capacity requirements. The period between a customer s initial purchase and any subsequent purchases is unpredictable and can vary from three months to a year or longer. Variations in the length of this period could cause fluctuations in our operating results, which could adversely affect our stock price.

Relatively small fluctuations in our system sales volume may cause our operating results to vary significantly each quarter.

During any quarter, a significant portion of our revenue is derived from the sale of a relatively small number of systems. Our automated metrology systems range in price from approximately $200,000 to over $1,000,000 per system, our integrated metrology systems range in price from approximately $80,000 to $400,000 per system. Accordingly, a small change in the number or mix of systems that we sell could cause significant changes in our operating results.

We depend on orders that are received and shipped in the same quarter, and therefore our results of operations may be subject to significant variability from quarter to quarter.

Our net sales in any given quarter depend upon a combination of orders received in that quarter for shipment in that quarter and shipments from backlog. Our backlog at the beginning of each quarter does not include all systems sales needed to achieve expected revenues for that quarter. Consequently, we are dependent on obtaining orders for systems to be shipped in the same quarter that the order is received. Moreover, customers may reschedule shipments, and production difficulties could delay shipments. Accordingly, we have limited visibility into future product shipments, and our results of operations may be subject to significant variability from quarter to quarter.

Because of the high cost of switching equipment vendors in our markets, it may be difficult for us to attract customers from our competitors even if our metrology systems are superior to theirs.

We believe that once a semiconductor customer has selected one vendor s metrology system, the customer generally relies upon that system and, to the extent possible, subsequent generations of the same vendor s system, for the life of the application. Once a vendor s metrology system has been installed, a customer must often make substantial technical modifications and may experience downtime in order to switch to another vendor s metrology system. Accordingly, unless our systems offer performance or cost advantages that outweigh a customer s expense of switching to our systems, it will be difficult for us to achieve significant sales from that customer once it has selected another vendor s system for an application.

Table of Contents

If we fail to develop new and enhanced metrology systems we will likely lose market share to our competitors.

We operate in an industry that is subject to technological changes, changes in customer demands and the introduction of new, higher performance systems with short product life cycles. To be competitive, we must continually design, develop and introduce in a timely manner new metrology systems that meet the performance and price demands of semiconductor manufacturers and suppliers. We must also continue to refine our current systems so that they remain competitive. We may experience difficulties or delays in our development efforts with respect to new systems, and we may not ultimately be successful in developing them. Any significant delay in releasing new systems could adversely affect our reputation, give a competitor a first-to-market advantage or cause a competitor to achieve greater market share.

Lack of market acceptance for our new products may affect our ability to generate revenue and may harm our business.

We have recently introduced several products to the market including the Nano CD suite, Nano Station, IVS 185, VerteX Rapid Photoluminescence Mapping System for Compound Semiconductors**,** Atlas-M and Orion. We have invested substantial time and resources into the development of these products. However, we cannot accurately predict the future level of acceptance of our new products by our customers. As a result, we may not be able to generate anticipated revenue from sales of these products. While we anticipate that our new products will become an increasingly larger component of our business, their failure to gain acceptance with our customers could materially harm our business. Additionally, if our new products do gain market acceptance, our ability to sell our existing products may be impeded. As a result, there can be no assurance that the introduction of these products will be commercially successful or that these products will result in significant additional revenues or improved operating margins in future periods.

Our intellectual property may be infringed upon by third parties despite our efforts to protect it, which could threaten our future success and competitive position and harm our operating results.

Our future success and competitive position depend in part upon our ability to obtain and maintain proprietary technology for our principal product families, and we rely, in part, on patent, trade secret and trademark law to protect that technology. If we fail to adequately protect our intellectual property, it will be easier for our competitors to sell competing products. We own or may license patents relating to our metrology systems, and have filed applications for additional patents. Any of our pending patent applications may be rejected, and we may not in the future be able to develop additional proprietary technology that is patentable. In addition, the patents we own, have been issued, or may license may not provide us with competitive advantages and may be challenged by third parties. Third parties may also design around these patents.

In addition to patent protection, we rely upon trade secret protection for our confidential and proprietary information and technology. We routinely enter into confidentiality agreements with our employees. However, in the event that these agreements may be breached, we may not have adequate remedies. Our confidential and proprietary information and technology might also be independently developed by or become otherwise known to third parties. We may be required to initiate litigation in order to enforce any patents issued to or licensed by us, or to determine the scope or validity of a third party s patent or other proprietary rights. Any such litigation, regardless of outcome, could be expensive and time consuming, and could subject us to significant liabilities or require us to re-engineer our product or obtain expensive licenses from third parties, any of which would adversely affect our business and operating results. In March 2006, we filed a complaint against Nova for infringing our Patent Nos. Re 34,783. In October 2006, we filed a new complaint against Nova for infringement of Patent No. 5,867,276 and 7,115,858. In April 2007, we and Nova agreed to dismiss, without prejudice, all pending patent litigation and have entered into a covenant not to sue one another for any patent for a period of one year.

If we choose to acquire new and complementary businesses, products or technologies instead of developing them ourselves, we may be unable to complete these acquisitions or may not be able to successfully integrate an acquired business in a cost-effective and non-disruptive manner.

Our success depends on our ability to continually enhance and broaden our product offerings in response to changing technologies, customer demands and competitive pressures. To achieve this, from time to time we have acquired complementary businesses, products, or technologies instead of developing them ourselves and may choose to do so in the future. For example, in July 2006, we consummated our merger with Accent Optical, a leading supplier of process control and metrology systems to the global semiconductor manufacturing industry. At the outset, we do not know if we will be able to complete any acquisitions, or whether we will be able to successfully integrate any acquired business, operate them profitably or retain their key employees. Integrating any business, product or technology that we acquire could be expensive and time consuming, disrupt our ongoing business and distract our management. In addition, in order to finance any acquisitions, we may be required to raise additional funds through public or private equity or debt financings. In that event, we could be forced to obtain financing on terms that are not favorable to us and, in the case of an equity or convertible debt financing which may result in dilution to our stockholders. If we are unable to integrate any acquired entities, products or technologies effectively, our business will suffer.

24

Table of Contents

We manufacture all of our systems at a limited number of facilities, and any prolonged disruption in the operations of those facilities could reduce our revenues.

We produce all of our systems in our manufacturing facilities located in Milpitas, California and to a lesser extent, we also manufacture through our subsidiary in South Korea and contract manufacturers in Japan and China. In addition, we perform limited subassembly for certain products at our York England facility. Our manufacturing processes are highly complex and require sophisticated, costly equipment and specially designed facilities. As a result, any prolonged disruption in the operations of our manufacturing facilities, such as those resulting from a severe fire or earthquake, could seriously harm our ability to satisfy our customer order deadlines.

Our efforts to protect our intellectual property may be less effective in some foreign countries where intellectual property rights are not as well protected as in the United States.

In 2007, 2006 and 2005, 68.2%, 65.0% and 66.8%, respectively, of our total net revenues were derived from sales to customers in foreign countries, including certain countries in Asia, such as Japan, South Korea, China and Taiwan. The laws of some foreign countries do not protect our proprietary rights to as great an extent as do the laws of the United States, and many U.S. companies have encountered substantial problems in protecting their proprietary rights against infringement in such countries. If we fail to adequately protect our intellectual property in these countries, it would be easier for our competitors to sell competing products.

Our results of operations could vary as a result of the methods, estimates and judgments we use in applying our accounting policies.

The methods, estimates and judgments we use in applying our accounting policies have a significant impact on our results of operations, see Significant Accounting Policies in Part II, Item 8, Note I of our Annual Report on Form 10-K for the fiscal year ended December 29, 2007. Such methods, estimates and judgments are, by their nature, subject to substantial risks, uncertainties and assumptions, and factors may arise over time that leads us to change our methods, estimates and judgments. Changes in those methods, estimates and judgments could significantly affect our results of operations. In particular, the calculation of share-based compensation expense under SFAS No. 123(R) requires us to use valuation methodologies (which were not developed for use in valuing employee stock options) and a number of assumptions, estimates and conclusions regarding matters such as expected forfeitures, expected volatility of our share price, the expected dividend rate with respect to our common stock and the exercise behavior of our employees. Furthermore, there are no means, under applicable accounting principles, to compare and adjust our expense if and when we learn of additional information that may affect the estimates that we previously made, with the exception of changes in expected forfeitures of share-based awards. Factors may arise over time that leads us to change our estimates and assumptions with respect to future share-based compensation arrangements, resulting in variability in our share-based compensation expense over time. Changes in forecasted share-based compensation expense could impact our gross margin percentage; research and development expenses; marketing, general and administrative expenses; and our tax rate.

Our quarterly operating results have varied in the past and probably will continue to vary significantly in the future, which will cause volatility in our stock price.

Our quarterly operating results have varied significantly in the past and are likely to vary in the future, which volatility could cause our stock price to decline. Some of the factors that may influence our operating results and subject our stock to extreme price and volume fluctuations include:

- changes in customer demand for our systems;
- economic conditions in the semiconductor industries;
- the timing, cancellation or delay of customer orders and shipments;
- market acceptance of our products and our customers products;

our ability to recover the higher costs associated with meeting our customers increasing service demands;

competitive pressures on product prices and changes in pricing by our customers or suppliers;

the timing of new product announcements and product releases by us or our competitors and our ability to design, introduce and manufacture new products on a timely and cost-effective basis;

the timing of acquisitions of businesses, products or technologies;

the levels of our fixed expenses, including research and development costs associated with product development, relative to our revenue levels; and

fluctuations in foreign currency exchange rates, particularly the Japanese yen and the Great British Pound.

Table of Contents

If our operating results in any period fall below the expectations of securities analysts and investors, the market price of our common stock would likely decline.

We incur increased costs as a result of changes in laws and regulations affecting public companies.

Compliance with changes in laws and regulations affecting public companies, including the provisions of the Sarbanes-Oxley Act of 2002, has resulted in and, we expect, will continue to result in substantial accounting, legal and administrative costs. In particular, Section 404 of the Sarbanes-Oxley Act of 2002 and the rules of the SEC and the Public Company Accounting Oversight Board impose requirements with respect to the evaluation of the effectiveness of our internal controls. The cost of complying with these requirements is substantial.

We are highly dependent on international sales and operations, which exposes us to foreign political and economic risks.

We maintain facilities in Japan, Taiwan, United Kingdom, South Korea, China and the European Union. We anticipate that international sales will continue to account for a significant portion of our revenues. International sales and operations carry inherent risks such as: regulatory limitations imposed by foreign governments, obstacles to the protection of our intellectual property, political, military and terrorism risks, disruptions or delays in shipments caused by customs brokers or other government agencies, unexpected changes in regulatory requirements, tariffs, customs, duties and other trade barriers, difficulties in staffing and managing foreign operations, and potentially adverse tax consequences resulting from changes in tax laws. If any of these risks materialize and we are unable to manage them, our international sales and operations would suffer.

We are exposed to fluctuations in the exchange rates of foreign currency.

As a global concern, we face exposure to adverse movements in foreign currency exchange rates. With our operations in Japan, South Korea, United Kingdom, Taiwan, the European Union and China, a significant percentage of our cash flows are exposed to foreign currency risk. These exposures may change over time as business practices evolve and could have a material adverse impact on our financial results and cash flow.

We are subject to various environmental laws and regulations that could impose substantial costs upon us and may harm our business, operating results and financial condition.

Some of our operations use substances regulated under various federal, state, local, and international laws governing the environment, including those relating to the storage, use, discharge, disposal, labeling, and human exposure to hazardous and toxic materials. We could incur costs, fines and civil or criminal sanctions, third-party property damage or personal injury claims, or could be required to incur substantial investigation or remediation costs, if we were to violate or become liable under environmental laws. Liability under environmental laws can be joint and several and without regard to comparative fault. Compliance with current or future environmental laws and regulations could restrict our ability to expand our facilities or require us to acquire additional expensive equipment, modify our manufacturing processes, or incur other significant expenses. There can be no assurance that violations of environmental laws or regulations will not occur in the future as a result of the inability to obtain permits, human error, equipment failure or other causes.

Anti-takeover provisions in our charter documents and Delaware law could discourage, delay or prevent a change in control of our company and may affect the trading price of our common stock.

In September 2006, we changed our state of incorporation from California to Delaware. The anti-takeover provisions of the Delaware General Corporation Law may discourage, delay or prevent a change in control by prohibiting us from engaging in a business combination with an interested stockholder for a period of three years after the person becomes an interested stockholder, even if a change of control would be beneficial to our existing stockholders. In addition, our certificate of incorporation and bylaws may discourage, delay or prevent a change in our management or control over us that stockholders may consider favorable. Our certificate of incorporation and bylaws:

- authorize the issuance of blank check preferred stock that could be issued by our board of directors to thwart a takeover attempt;
- establish a classified board of directors, as a result of which the successors to the directors whose terms have expired will be elected to serve from the time of election and qualification until the third annual meeting following their election;

limit who may call special meetings of stockholders; and

prohibit stockholder action by written consent, requiring all actions to be taken at a meeting of the stockholders.

Table of Contents

Significant amounts of goodwill and intangible assets after the completion of the acquisitions of Accent and Soluris transactions could make our reported results more volatile.

Goodwill is tested for impairment annually or when an event occurs indicating the potential for impairment. The evaluation is prepared based on our current and projected performance for the identified reporting units. The fair value of our reporting units is determined using a combination of the cash flow and market comparable approaches. If we conclude at any time that the carrying value of our goodwill and other intangible assets for any of our reporting units exceeds its implied fair value, we will be required to recognize an impairment, which could materially reduce operating income and net income in the period in which such impairment is recognized.

In the application of these methodologies, we were required to make estimates of future operating trends and judgments on discount rates and other variables. Actual future results and other assumed variables could differ from these estimates, including changes in the economy, the business environment in which we operate, and/or our own relative performance. Any differences in actual results compared to our estimates could result in further future impairments. Accordingly, our future earnings may be subject to significant volatility, particularly on a period-to-period basis.

Any future acquisitions we make, or attempt to make, could disrupt our business and harm our financial condition if we are not able to timely and successfully close the acquisition or successfully integrate acquired businesses and technologies.

We have made and may continue to make acquisitions of business and technologies to enhance our business. Acquisitions involve numerous risks, including problems combining the purchased operations and key employees, technologies or products, unanticipated costs, diversion of management s attention from our core business, adverse effects on existing business relationships with suppliers and customers, risks associated with entering markets in which we have no or limited prior experience and potential loss of key employees. The integration of businesses that we have acquired or that we may acquire in the future into our business has been and will continue to be a complex, time consuming and expensive process. Failure to operate as a combined organization utilizing common information and communication systems, operating procedures, financial controls and human resources practices could adversely impact the success of any business combination.

Continuing economic and political instability could affect our business and results of operations.

The ongoing threat of terrorism targeted at the United States or other regions where we conduct business increases the uncertainty in our markets and the economy in general. This uncertainty is likely to result in economic stagnation, which would harm our business. In addition, increased international political instability may hinder our ability to do business by increasing our costs of operations. For example, our transportation costs, insurance costs and sales efforts may become more expensive as a result of geopolitical tension. These tensions may also negatively affect our suppliers and customers. If this international economic and political instability continues or increases, our business and results of operations could be harmed.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

We repurchased the following shares of our common stock during the first fiscal quarter of 2008:

Period	Total Number of Shares Purchased
February 27, 2008	10,000
February 28, 2008	13,650
February 29, 2008	20,000
Total for the quarter ended March 29, 2008	43,650
Repurchased shares at the beginning of the year	91,455
Total shares repurchased under the plan	135,105

On July 26, 2007, our Board of Directors approved the repurchase of up to $4.0 million of our common stock. Share 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 will depend on a variety of

Table of Contents

factors including price, corporate and regulatory requirements and other market conditions. The stock repurchase program may be limited or terminated at any time without prior notice. As of March 29, 2008, $3.0 million remained available for the future purchase of shares of our common stock.

ITEM 5. OTHER INFORMATION

We plan to hold our 2008 Annual Meeting of Stockholders (the 2008 Annual Meeting) at 1:00 p.m., local time, on Thursday, June 26, 2008, at the Company s principal offices located at 1550 Buckeye Drive, Milpitas, California 95035. Stockholders of record as of the close of business on May 14, 2008 are entitled to notice and to vote at the 2008 Annual Meeting.

The 2008 Annual Meeting date constitutes a change of more than 30 days from the anniversary of our 2007 Annual Meeting of Stockholders. As a result, pursuant to the Securities Exchange Act of 1934, as amended, we have set a new deadline for the receipt of stockholder proposals submitted for inclusion in our proxy materials for the 2008 Annual Meeting. Taking into consideration the time and process for addressing any deficiencies in proposals that may be submitted, we have determined that the new deadline for delivering stockholder proposals to us will be the close of business on May 18, 2008. Such proposals should be submitted in writing by notice delivered or mailed by first-class United States mail, postage prepaid, to Nanometrics Incorporated, 1550 Buckeye Drive, Milpitas, California 95035, Attention: Office of the Secretary. We recommend that such proposals be sent by certified mail, return receipt requested. Such proposals also will need to comply with the rules of the Securities and Exchange Commission regarding the inclusion of stockholder proposals in our proxy materials and may be omitted if not in compliance with applicable requirements.

In accordance with the requirements for advance notice set forth in our bylaws, in order for a stockholder proposal to be submitted or a director nomination to be considered timely, such proposal or nomination must be received by our corporate secretary at Nanometrics Incorporated, 1550 Buckeye Drive, Milpitas, California 95035 by the close of business on May 18, 2008.

ITEM 6. EXHIBITS

Exhibit Index

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

Exhibit No.	Description
3.(i)	**Certificate of Incorporation**
3.1(1)	Certificate of Incorporation of the Registrant
3.(ii)	**Bylaws**
3.2(1)	Bylaws of the Registrant
10	**Material Contracts**
	Management Contracts, Compensatory Plans, Contracts or Arrangements
10.1(2)	Employment Agreement with Gary C. Schaefer, Chief Financial Officer and Vice President Finance and Administration
31	**Rule 13a-14(a)/15d-14(a) Certifications**
31.1	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	Certification of Gary C. Schaefer, 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**
32.1	Certification of Timothy J. Stultz, principal executive officer of the Registrant, and Gary C. Schaefer, 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

(1) Incorporated by reference to exhibits filed with the Registrant s Current Report on Form 8-K filed October 5, 2007.

(2) Incorporated by reference to Exhibit 10.14 filed with the Registrant s Annual Report on Form 10-K filed March 13, 2008.

Table of Contents

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/ Gary C. Schaefer
Gary C. Schaefer
Chief Financial Officer

Dated: May 8, 2008