NANOMETRICS INC Form 10-Q/A June 13, 2006 Table of Contents

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

	Washington, D. C. 20549	
	FORM 10-Q /A	
	Amendment No. 1	
(Mark One)		
x Quarterly report pursuant to Section For the quarterly period ended April 1, 2006	on 13 or 15(d) of the Securities E	xchange Act of 1934
	OR	
Transition report pursuant to Secti	ion 13 or 15(d) of the Securities F	Exchange Act of 1934
	Commission file number 0-13470	
NANOME	TRICS INCORPO	ORATED
(Exac	ct name of registrant as specified in its charto	er)
California (State or other jurisdiction of		94-2276314 (L.R. S. Employer

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Identification No.)

95035

incorporation or organization)

1550 Buckeye Drive, Milpitas, CA

(Address of principal executive offices) (Zip Code)

Registrant s telephone number, including area code: (408) 435-9600

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, or a non-accelerated filer. See definition of accelerated filer and large accelerated filer in Rule 12b-2 of the Exchange Act.

Large accelerated filer " Accelerated filer x Non-accelerated filer "

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 April 24, 2006, there were 13,085,332 shares of common stock, no par value, issued and outstanding.

EXPLANATORY PARAGRAPH

We are filing this Form 10-Q/A, Amendment No. 1 solely for the purpose of revising the portion of footnote No. 3 of the Notes to Condensed Consolidated Financial Statements in Item I of Part I that relates to our acquisition of Soluris Inc. We are revising the footnote to: a) clarify the disclosure related to our management s responsibility for estimating fair values of assets acquired and liabilities assumed in the Soluris merger; and b) revise the unaudited pro forma information as if Nanometrics had acquired Soluris at the beginning of the three months ended April 1, 2006. This Form 10-Q/A, Amendment No. 1 also includes the required certifications of our principal executive officer and principal financial officer. We have made no further changes to the originally filed Form 10-Q. All other information in this Form 10-Q/A, Amendment No. 1 is as of the date the Form 10-Q was originally filed and does not reflect any subsequent information or events.

NANOMETRICS INCORPORATED

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FOR QUARTER ENDED APRIL 1, 2006

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PART I FINANCIAL INFORMATION

ITEM 1. CONSOLIDATED FINANCIAL STATEMENTS

NANOMETRICS INCORPORATED

CONDENSED CONSOLIDATED BALANCE SHEETS

(Amounts in thousands except share amounts)

(Unaudited)

	April 1,	December 31,
	2006	2005
ASSETS		
Current Assets:		
Cash and cash equivalents	\$ 33,915	\$ 40,445
Short-term investments		4,949
Accounts receivable, net of allowances of \$657 and \$592, respectively	20,570	18,983
Inventories	27,494	25,656
Prepaid expenses and other	4,183	1,259
Total current assets	86,162	91,292
Property, plant and equipment, net	42,613	42,928
Goodwill	3,030	
Intangible assets	4,760	639
Other assets	1,483	1,441
Total assets	\$ 138,048	\$ 136,300
LIABILITIES AND SHAREHOLDERS EQUITY		
Current Liabilities:		
Revolving line of credit	\$ 510	\$ 1,186
Accounts payable	4,653	3,348
Accrued payroll and related expenses	2,086	1,540
Deferred revenue	3,818	3,448
Other current liabilities	3,920	3,869
Income taxes payable	748	770
Current portion of debt obligations	381	400
Total current liabilities	16,116	14,561
Deferred income taxes and other long-term liabilities	257	
Debt obligations	1,313	1,396
Total liabilities	17,686	15,957
Contingencies		
Shareholders Equity: Common stock, no par value; 50,000,000 shares authorized; 13,033,438 and 12,990,894, respectively,		
outstanding	107,592	107,294
Additional paid-in capital	853	107,294
Retained earnings	10,896	12,218
	10,070	12,210

Accumulated other comprehensive income	1,021	831
Total shareholders equity	120,362	120,343
Total liabilities and shareholders equity	\$ 138,048	\$ 136,300
See Notes to Unaudited Condensed Consolidated Financial Statements		

NANOMETRICS INCORPORATED

CONSOLIDATED STATEMENTS OF OPERATIONS

(Amounts in thousands except per share amounts)

(Unaudited)

	Three Months Ended April 1, April 2,	
	2006	2005
Net revenues:		
Products	\$ 15,972	\$ 21,010
Service	2,996	2,340
Total net revenues	18,968	23,350
Costs and expenses:		
Cost of products	7,909	9,732
Cost of service	2,534	2,573
Research and development	2,528	3,179
Selling	3,102	3,143
General and administrative	4,550	1,998
Total costs and expenses	20,623	20,625
•		
Income (loss) from operations	(1,655)	2,725
Other income (expense):	(1,055)	2,723
Interest income	332	130
Interest expense	(13)	(18)
Other, net	35	(270)
		(/
Total other income (expense), net	354	(158)
Total other meonic (expense), net	331	(130)
Income (loss) before income taxes	(1.201)	2,567
Provision for income taxes	(1,301)	83
Provision for income taxes	21	83
	* (4.000)	
Net income (loss)	\$ (1,322)	\$ 2,484
Net income (loss) per share:		
Basic	\$ (0.10)	\$ 0.20
Diluted	\$ (0.10)	\$ 0.18
Shares used in per share computation:		
Basic	13,018	12,575
		,
Diluted	13,018	13,455
Diaco	13,010	13,733

See Notes to Unaudited Condensed Consolidated Financial Statements.

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NANOMETRICS INCORPORATED

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

(Amounts in thousands)

(Unaudited)

	Three Mon April 1,	nths Ended April 2,
	2006	2005
Cash flows from operating activities:	2000	2005
Net income (loss)	\$ (1,322)	\$ 2,484
Reconciliation of net income (loss) to net cash used in operating activities:	, ()-	, , ,
Depreciation and amortization	572	626
Stock-based compensation	853	
Changes in assets and liabilities:		
Accounts receivable	(1,337)	(6,004)
Inventories, net	(630)	(34)
Prepaid expenses and other	(609)	57
Other assets	(17)	
Accounts payable, accrued and other current liabilities	333	402
Deferred revenue	(76)	1,717
Income taxes payable	(24)	(408)
		,
Net cash used in operating activities	(2,257)	(1,160)
Cash flows from investing activities:		
Purchase of Soluris net assets, net of cash received	(6,752)	
Purchase of short-term investments		(18,933)
Sales/maturities of short-term investments	4,949	18,000
Purchases of property, plant and equipment	(48)	(27)
Deferred acquisition costs related to the proposed mergers	(1,960)	(1,130)
Net cash used in investing activities	(3,811)	(2,090)
Cash flows from financing activities:		
Repayments of debt obligations	(793)	(446)
Sale of shares under employee stock option plan and purchase plan	298	131
Net cash used in financing activities	(495)	(315)
The cash asea in finaleng activities	(193)	(313)
Not decrease in each and each assistants	(6.562)	(2.565)
Net decrease in cash and cash equivalents Effect of exchange rate changes on cash and cash equivalents	(6,563)	(3,565) (88)
Cash and cash equivalents, beginning of period	40,445	15,949
Cash and cash equivalents, beginning of period	40,443	13,949
	¢ 22 015	¢ 12.200
Cash and cash equivalents, end of period	\$ 33,915	\$ 12,296
Supplemental disclosure of each flow information:		
Supplemental disclosure of cash flow information:	\$ 13	\$ 18
Cash paid for interest	Ф 13	φ 18
Cash paid (refunded) for income taxes	\$ (151)	\$ 476

See Notes to Unaudited Condensed Consolidated Financial Statements.

NANOMETRICS INCORPORATED

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

(Unaudited)

Note 1. Consolidated Financial Statements

In the opinion of management, the accompanying Unaudited Consolidated Interim 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 31, 2005 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 31, 2005, which were included in the Company s Annual Report on Form 10-K, which was filed with the SEC on March 24, 2006.

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.

Note 2. Recent Accounting Pronouncements

In February 2006, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standards (SFAS) No. 155, *Accounting for Certain Hybrid Instruments An Amendment of FASB Statements No. 133 and No. 144* (SFAS 155). SFAS 155 permits fair value remeasurement for any hybrid financial instrument that contains an embedded derivative that otherwise would require bifurcation. It also clarifies which interest-only strips and principal-only strips are not subject to the requirements of SFAS 133, and establishes a requirement to evaluate interests in securitized financial assets to identify interests that are freestanding derivatives or that are hybrid financial instruments that contain an embedded derivative requiring bifurcation. Furthermore, SFAS 155 clarifies that concentrations of credit risk in the form of subordination are not embedded derivatives and it amends SFAS 140 to eliminate the prohibition on a qualifying special purpose entity from holding a derivative financial instrument that pertains to a beneficial interest other than another derivative financial instrument. SFAS 155 is effective for all financial instruments acquired or issued after the beginning of the first fiscal year beginning after September 15, 2006. The Company s adoption of the provisions of SFAS 155 is not expected to impact its financial condition or results of operations.

In September 2005, the Emerging Issues Task Force (EITF) reached consensus on EITF Issue No. 04-13, Accounting for Purchases and Sales of Inventory with the Same Counterparty (Issue No. 04-13). In certain situations, a company may enter into nonmonetary transactions to sell inventory to another company in the same line of business from which it also purchases inventory. Under Issue No. 04-13, in general, an entity is required to treat sales and purchases of inventory between the entity and the same counterparty as one transaction for purposes of applying Accounting Principles Board (APB) Opinion No. 29, Accounting for Nonmonetary Transactions when such transactions are entered into in contemplation of each other. When such transactions are legally contingent on each other, they are considered to have been entered into in contemplation of each other. The EITF also agreed on other factors that should be considered in determining whether transactions have been entered into in contemplation of each other. Issue No. 04-13 will be effective for all new arrangements entered into in reporting periods beginning after March 15, 2006. The Company does not anticipate any impact on its consolidated results of operations and financial condition upon adoption of the provisions of Issue No. 04-13.

In May 2005, the FASB issued SFAS No. 154, *Accounting Changes and Error Corrections* (SFAS 154) which replaces APB 20 *Accounting Changes* and SFAS 3, *Reporting Accounting Changes in Interim Financial Statements An Amendment of APB Opinion*. 28. SFAS 154 provides guidance on the accounting for and reporting of accounting changes and error corrections. It establishes retrospective application, or the latest practicable date, as the required method for reporting a change in accounting principle and the reporting of a correction of an error. SFAS 154 is effective for accounting changes and corrections of errors made in fiscal years beginning after December 15, 2005 and is required to be adopted in the first fiscal quarter of 2006. The adoption of SFAS 154 did not have a material impact on the Company s financial position or consolidated results of operations and financial condition.

Note 3. Acquisitions

Accent Optical Technologies

On January 25, 2006, Nanometrics announced a definitive agreement to merge with Accent Optical Technologies, Inc. (Accent Optical), a supplier of process control and metrology systems to the global semiconductor manufacturing industry headquartered in Bend, Oregon. The Company believes the merger of Nanometrics and Accent Optical will create one of the largest independent metrology companies in the semiconductor industry and allow the combined company to expand its market position in each of its primary stand-alone metrology segments after the merger. The merger is expected to create a strong platform for the combined company to deliver metrology systems to both new and existing customers. Under the terms of the merger agreement, which was unanimously approved by the boards of directors of both companies, the Company will issue 4.9 million shares of its common stock for all outstanding Accent Optical capital stock and rights to acquire Accent Optical capital stock. Nanometrics will also issue an additional number of shares of its common stock equal to the quotient of the aggregate exercise price of all Accent Optical stock options that are assumed pursuant to the merger agreement, divided by the average closing price of Nanometrics common stock for the ten (10) trading days ending two (2) days prior to the closing date of the merger. As part of the merger agreement, Nanometrics agreed to provide Accent Optical with a working capital loan in the aggregate amount \$2.5 million. As of March 31, 2006, Nanometrics advanced \$750,000 to Accent Optical as part of this agreement. Subsequent to quarter-end, Nanometrics advanced an additional \$1,750,000. The total estimated purchase price of \$71.1 million is based on the average of Nanometrics closing stock price for the period beginning two trading days before and ending two trading days after the merger was announced in accordance with EITF 99-12, Determination of Measurement date for the Market Price of Acquirer Securities Issued in a Purchase Business Combination, and includes the 4.9 million shares of Nanometrics common stock valued at \$68.1 million, assumed vested stock options with a fair value of \$1.2 million and estimated direct transaction costs of \$1.7 million. Accent Optical stockholders will own approximately 27% of the outstanding shares of Nanometrics common stock immediately after the merger, and Nanometrics shareholders will own approximately 73% of the outstanding shares of Nanometrics common stock immediately after the merger. Completion of the transaction is subject to required approvals from Nanometrics and Accent Optical shareholders. The merger is expected to be completed near the end of the second quarter of fiscal year 2006.

The merger will be accounted for under the purchase method of accounting in accordance with SFAS No. 141, *Business Combinations*. Under the purchase method of accounting, the total estimated purchase price is allocated to the net tangible and identifiable intangible assets of Accent Optical acquired in connection with the merger, based on their respective estimated fair values. Pursuant to the terms of the merger agreement, either Nanometrics or Accent Optical may terminate the merger agreement upon the occurrence of certain specified circumstances or events. In connection with such termination, either Nanometrics or Accent Optical may be required to pay to the other party a termination fee of \$5.0 million, plus expenses. Unless otherwise indicated, references to Nanometrics in this filing relate to Nanometrics as a stand-alone entity and do not reflect the impact of the potential business combinations transaction with Accent Optical.

Soluris, Inc.

On March 15, 2006, Nanometrics announced it had acquired Soluris Inc., (Soluris) a privately held corporation focused on overlay and CD measurement technology and headquartered in Concord, Massachusetts. The acquisition of Soluris will enhance the Company s line of overlay products and provide access to various other new customers. Its flagship product, the IVS 155, is a tool for use in the 200mm and smaller semiconductor overlay and CD measurement market. Under the terms of the merger agreement relating to the acquisition, the total consideration to purchase all the outstanding stock of Soluris was \$6.6 million in an all-cash transaction. The Company also incurred \$0.3 million in transaction fees, including legal, valuation and accounting fees. The merger has been accounted for under the purchase method of accounting in accordance with SFAS No. 141, *Business Combinations*. Under the purchase method of accounting, the total estimated purchase price is allocated to the net tangible and identifiable intangible assets of Soluris acquired in connection with the merger, based on their respective estimated fair values. The results of operations of Soluris were included in the Company s condensed consolidated statements of operations from the date of the acquisition.

The preliminary allocation of the Soluris purchase price to the tangible and identifiable intangible assets acquired and liabilities assumed was based on management s estimates of fair value at the date of acquisition. When estimating fair values of assets acquired and liabilities assumed, management considered a number of factors, including valuations, appraisals and assumptions which are subject to change. The primary areas of the purchase price allocation that are not yet finalized relate to the completion of audited financial statements and income tax returns, and the impact of audit adjustments, if any, on management s estimates of fair values. We expect management s valuation process to be completed during the fourth quarter of fiscal 2006

The preliminary allocation of the Soluris purchase price is summarized below (in thousands):

Assets acquired:	
Cash	\$ 67
Accounts receivable	474
Inventories	1,175
Other assets	112
Total assets acquired	1,828
Liabilities assumed:	
Accounts payable	(562)
Accrued compensation	(450)
Deferred revenue	(443)
Other accrued liabilities	(504)
Total liabilities assumed	(1,959)
Net liabilities assumed	(131)
Deferred income tax liabilities Goodwill and other intangible assets:	(240)
Goodwill	3,030
Customer relationships	2,900
Patented technology	700
Trademark	600
Total goodwill and other intangible assets	7,230
Net assets acquired	\$ 6,859

The patented technology and customer relationships are being amortized over an estimated useful life of ten years. The amount allocated to the trademark has been determined to have an indefinite life. In accordance with SFAS No. 142, *Goodwill and other Intangible Assets*, the Company will not amortize the goodwill and trademark, but will evaluate them annually for impairment or whenever events or circumstances occur which indicate that they might be impaired.

If the Company had acquired Soluris at the beginning of the period presented, the Company s unaudited pro forma net revenues, net income (loss) and net income (loss) per share from continuing operations would have been as follows (in thousands, except per share amounts):

	Three Mon	ths Ended
	April 1,	April 2,
	2006	2005
Net revenues	\$ 20,083	\$ 26,446
Net income (loss)	(1,982)	2,413
Net income (loss) per share		
Basic	\$ (0.15)	\$ 0.19
Diluted	\$ (0.15)	\$ 0.18

Note 4. Stock-Based Compensation

On January 1, 2006, the Company adopted SFAS No. 123 (revised 2004), *Share-Based Payment*, (SFAS 123(R)), which requires the measurement and recognition of compensation expense for all share-based payment awards made to employees and directors including

employee stock options and employee stock purchases related to the Employee Stock Purchase Plan (collectively Employee Stock Purchases) based on estimated fair values. SFAS 123(R) supersedes APB Opinion No. 25, *Accounting for Stock Issued to Employees* (APB 25) for periods beginning in fiscal 2006. In March 2005, the SEC issued Staff Accounting Bulletin No. 107 (SAB 107) relating to SFAS 123(R). The Company has applied the provisions of SAB 107 in its adoption of SFAS 123(R).

The Company adopted SFAS 123(R) using the modified prospective transition method, which requires the application of the accounting standard as of January 1, 2006, the first day of the Company s fiscal year 2006. The Company s financial statements as of and for the three months ended April 1, 2006 reflect the impact of SFAS 123(R). In accordance with the modified prospective transition method, the Company s financial statements for prior periods have not been restated to reflect, and do not include, the impact of SFAS 123(R).

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SFAS 123(R) requires companies to estimate the fair value of share-based payment awards on the date of grant using an option-pricing model. The value of the portion of the award that is ultimately expected to vest is recognized as expense over the requisite service periods in the Company s consolidated statement of operations. Prior to the adoption of SFAS 123(R), the Company accounted for stock-based awards to employees and directors using the intrinsic value method in accordance with APB 25 as allowed under SFAS 123, *Accounting for Stock-Based Compensation* (SFAS 123). Under the intrinsic value method, no stock-based compensation expense had been recognized in the Company s consolidated statements of operations, because exercise price of the Company s stock options granted to employees and directors equaled the fair market value of the underlying stock at the date of grant.

Stock-based compensation expense recognized during the period is based on the value of the portion of share-based payment awards that is ultimately expected to vest during the period. Stock-based compensation expense recognized in the Company's consolidated statement of operations for the first quarter of fiscal 2006 included compensation expense for share-based payment awards granted prior to, but not yet vested as of December 31, 2005 based on the grant date fair value estimated in accordance with the pro forma provisions of SFAS 123 and compensation expense for the share-based payment awards granted subsequent to December 31, 2005 based on the grant date fair value estimated in accordance with the provisions of SFAS 123(R). As stock-based compensation expense recognized in the consolidated statement of operations for the first quarter of fiscal 2006 is based on awards ultimately expected to vest, it has been reduced for estimated forfeitures. SFAS 123(R) requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. The Company's proforma information, required under SFAS 123 for the periods prior to fiscal 2006, the Company estimated forfeitures at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differed from those estimates.

SFAS 123(R) requires the cash flows resulting from the tax benefits resulting from tax deductions in excess of the compensation cost recognized for those options to be classified as financing cash flows. There were no such tax benefits during the three months ended April 1, 2006. Prior to the adoption of Statement SFAS 123(R) those benefits would have been reported as operating cash flows had the Company received any tax benefits related to stock option exercises.

Valuation and Expense Information under SFAS 123(R)

The fair value of stock-based awards to employees is calculated using the Black-Scholes option pricing model, even though this model was developed to estimate the fair value of freely tradable, fully transferable options without vesting restrictions, which differ significantly from the Company s stock options. The Black-Scholes model requires subjective assumptions, including future stock price volatility and expected time to exercise, which greatly affect the calculated values. The expected term of options granted was calculated using the simplified method allowed by SAB 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. These factors could change in the future, which would affect the stock-based compensation expense in future periods.

The weighted-average fair value of stock-based compensation to employees is based on the single option valuation approach. Forfeitures are estimated and it is assumed no dividends will be declared. The estimated fair value of stock-based compensation awards to employees is amortized using the straight-line method over the vesting period of the options. The weighted-average fair value calculations are based on the following average assumptions:

Three Months Ended

	April 1, 2006
Stock Options:	
Expected life	4.3 years
Volatility	73.6%
Risk free interest rate	4.55%
Dividends	
Employee Stock Purchase Plan:	
Expected life	0.5 years
Volatility	37.5%
Risk free interest rate	1.7%
Dividends	

The weighted average fair values per share of the stock options awarded in the three months ended April 1, 2006 was \$14.00 based on the fair market value of the Company s common stock on the grant dates.

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The following table summarizes stock-based compensation expense for all share-based payment awards made to the Company s employees and directors pursuant to the Employee Stock Purchases under SFAS 123(R) for the three months ended April 1, 2006 which was allocated as follows (in thousands):

	Three Months Ended	
	Apri	1 1, 2006
Cost of products	\$	67
Cost of service		38
Research and development		260
Selling		147
General and administrative		341
Stock-based compensation expense included in costs and expenses		853
Total stock-based compensation expense related to employee stock options and employee stock purchases	\$	853

The table below reflects net income (loss) and basic and diluted net income (loss) per share for the three months ended April 1, 2006 compared with the pro forma information for the three months ended April 2, 2005 as follows (in thousands except per-share amounts):

	Three Mor April 1,	Three Months Ended April 1, April 2,	
	2006	2005	
Net income (loss) as reported for the prior period ⁽¹⁾	N/A	\$ 2,484	
Stock-based compensation expense related to employee stock options (2)	(853)	(955)	
Net income (loss), including the effect of stock-based compensation expense (3)	\$ (1,322)	\$ 1,529	
Net income (loss) per share as reported for the prior period Basic		\$ 0.20	
Diluted		\$ 0.18	
Net income (loss) per share, including the effect of stock-based compensation expense (3)			
Basic	\$ (0.10)	\$ 0.12	
Diluted	\$ (0.10)	\$ 0.11	
Shares used to compute income per share			
Basic	13,018	12,575	
Diluted	13,018	13,455	

⁽¹⁾ Net loss and net loss per share prior to fiscal 2006 did not include stock-based compensation expense for employee stock options under SFAS 123 because the Company did not adopt the recognition provisions of SFAS 123.

⁽²⁾ Stock-based compensation expense prior to fiscal 2006 is calculated based on the pro forma application of SFAS 123.

⁽³⁾ Net income and net income per share prior to fiscal 2006 represents pro forma information based on SFAS 123.

A summary of option activity under the Company s stock option plans during the three months ended April 1, 2006 is as follows:

Weighted Average

			Weighted	Remaining	A	ggregate
	Shares	Number of	Average	Contractual Term	Intri	insic Value
	Available	Shares	Exercise Price	(in Years)	(in T	housands)
Options						
Outstanding at December 31, 2005	1,979,761	2,570,758	\$ 10.01			
Exercised		(42,544)	6.99			
Granted	(263,200)	263,200	14.00			
Canceled	39,805	(59,805)	13.12			
Outstanding at April 1, 2006	1,756,366	2,731,609	\$ 10.38	4.85	\$	10,955
Exercisable at April 1, 2006		1,503,657	\$ 8.77	3.98	\$	8,758

The aggregate intrinsic value in the preceding table represents the total pretax intrinsic value, based on the Company s closing stock price of \$13.85 as of April 1, 2006, 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 months ended April 1, 2006 was \$0.3 million. The fair value of options vested was \$0.9 million for the three months ended April 1, 2006.

The following table summarizes significant ranges of outstanding and exercisable options as of April 1, 2006.

	(Options Outstanding Weighted Average	Weighted	Options Ex	ercisable Weighted
		Remaining	Average		Average
	Number	Contractual Life	Exercise	Number	Exercise
Range of Exercise Prices	Outstanding	(Years)	Price	Exercisable	Price
\$3.14 \$ 5.54	69,175	3.15	\$ 4.58	69,175	\$ 4.58
\$5.70 \$ 5.70	813,771	4.21	\$ 5.70	813,771	\$ 5.70
\$6.33 \$ 8.51	286,703	4.29	\$ 7.49	196,071	\$ 7.45
\$9.90 \$11.77	342,435	5.94	\$ 11.25	37,386	\$ 10.45
\$12.02 \$12.02	100,000	5.15	\$ 12.02	33,333	\$ 12.02
\$12.03 \$12.03	279,300	6.45	\$ 12.03	0	\$ 0.00
\$12.29 \$13.57	296,600	6.10	\$ 12.94	35,790	\$ 12.88
\$13.75 \$15.25	298,632	5.06	\$ 14.74	110,381	\$ 14.21
\$15.81 \$25.24	241,493	2.93	\$ 18.57	204,250	\$ 18.88
\$29.20 \$29.20	3,500	2.38	\$ 29.20	3,500	\$ 29.20
\$3.14 \$29.20	2,731,609	4.85	\$ 10.38	1,503,657	\$ 8.77

As of April 1, 2006, total unrecognized compensation costs related to unvested stock options was \$5.4 million, which is expected to be recognized as expense over a weighted average period of approximately 2.07 years.

Pro Forma Information Under SFAS 123 for Periods Prior to Fiscal 2006

Prior to fiscal 2006, the weighted-average fair value of stock-based compensation to employees was based on the single option valuation approach. Forfeitures were estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differed from those estimates. It was assumed no dividends would be declared. The estimated fair value of stock-based compensation awards to employees was amortized using the straight-line method over the vesting period of the options. The weighted-average fair value calculations were based on the following weighted-average assumptions:

Three	Months	Ended

	April 2, 2005
Stock Options:	_
Expected life	3.3 years
Volatility	80.0%
Risk free interest rate	3.38%
Dividends	
Employee Stock Purchase Plan:	
Expected life	0.5 years
Volatility	66.0%
Risk free interest rate	1.1%

Dividends **Note 5. Inventories**

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

	April 1,	Dec	ember 31,
	2006		2005
Raw materials and subassemblies	\$ 13,211	\$	14,175
Work in process	7,671		5,021
Finished goods	6,612		6,460
Total inventories	\$ 27,494	\$	25,656

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 the acquisition of Soluris. In accordance with SFAS No. 142, goodwill is reviewed annually or whenever events or circumstances occur which indicate that goodwill might be impaired. During the first quarter of 2006, the Company recorded goodwill of \$3.0 million as a result of the Company s acquisition of Soluris.

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. During the first quarter of 2006, the Company recorded a trademark of \$0.6 million with an indefinite life as a result of the Company s acquisition of Soluris.

Finite-lived intangible assets are recorded at cost, less accumulated amortization. Finite-lived intangible assets as of April 1, 2006 and December 31, 2005 consist of the following (in thousands):

	Gross		Net
	Carrying	Accumulated	Intangible
April 1, 2006	Amount	Amortization	Assets
Patented technology acquired in business combinations	\$ 700	\$ 3	\$ 697
Customer relationships	2,900	12	2,888
Patented technology	1,790	1,215	575
Other	250	250	
Total	\$ 5,640	\$ 1,480	\$ 4,160
	Gross		Net
	Carrying	Accumulated	Intangible
December 31, 2005	Amount	Amortization	Assets
Patented technology	\$ 1,790	\$ 1,151	\$ 639
Other	250	250	
Total	\$ 2,040	\$ 1,401	\$ 639

The amortization of finite-lived intangibles purchased in the Soluris acquisition is computed using the straight-line method over a period of ten years. Total amortization expense was \$0.1 million for each of the quarters ended April 1, 2006 and April 2, 2005.

The estimated future amortization expense as of April 1, 2006 is as follows (in thousands):

Fiscal Years	
2006 (remaining nine months)	\$ 462
2007	616
2008	488
2009	360
2010	360
2011 and after	1,874

Total amortization \$4,160

Note 7. Other Current Liabilities

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

	April 1,	December 31	
	2006		2005
Accrued warranty	\$ 1,540	\$	1,440
Accrued professional services	1,687		1,518
Other	693		911
Total other current liabilities	\$ 3.920	\$	3,869

Note 8. Shareholders 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, which include 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	
	April 1, 2006	April 2, 2005
Weighted average common shares outstanding-shares used in basic net income (loss) per share computation	13,018	12,575
Potentially dilutive common stock equivalents, using the treasury stock method		880
Shares used in diluted net income (loss) per share computation	13,018	13,455

For the quarter ended April 1, 2006, 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 antidilutive. Weighted average common share equivalents, consisting of stock options excluded from the calculation of diluted net loss per share were 1.2 million in the quarter ended April 1, 2006.

At April 2, 2005, diluted net income per share excludes common equivalent shares outstanding of 0.8 million, as their effect was anti-dilutive.

Note 9. Comprehensive Income (Loss)

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

	Three Months Ended	
	April 1, 2006	April 2, 2005
Net income (loss)	\$ (1,322)	\$ 2,484
Foreign currency translation adjustment, net of tax	190	(260)
Total comprehensive income (loss)	\$ (1,132)	\$ 2,224

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

Note 10. 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 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, 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 consolidated balance sheets with other current liabilities, were as follows (in thousands):

	Three Mon	ths Ended
	April 1, 2006	April 2, 2005
Balance as of beginning of period	\$ 1,440	\$ 1,055
Actual warranty costs	(235)	(327)
Provision for warranty	205	423
Balance as of end of period	\$ 1,410	\$ 1,151

Intellectual Property Indemnification Obligations- In addition to product warranties, the Company will, from time to time, in the normal course of business, 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 on the consolidated balance sheets as of April 1, 2006 and December 31, 2005.

Note 11. Income Taxes

Income tax provisions for interim periods are based on the Company s estimated annual income tax rate. In the first quarter of fiscal 2006, the Company s income tax provision is a result of foreign taxes. In the first quarter of fiscal 2005, the Company recorded an income tax provision of \$0.1 million on pre-tax income of \$2.6 million. The estimated annual tax rate differs from the combined United States federal and state statutory income tax rate of 40% primarily due to estimated utilization of the Company s net operating losses and various tax credits and reduction of the associated deferred tax valuation allowance.

Note 12. Contingencies

On March 9, 2005, Nova Measuring Instruments Ltd. (Nova) filed suit against us in the United States District Court for the Northern District of California. The complaint alleges that certain of the Company s products infringe a Nova patent and seeks a preliminary and permanent injunction against their sale and unspecified damages. The Company does not believe any of its products infringe any valid claim of the Nova patent and intends to vigorously and aggressively defend itself in the litigation. While the results of such litigation matters and claims cannot be predicted with certainty, the Company believes the final outcome of such matters will not have a material adverse impact on its financial position or results operations.

In August 2005, KLA-Tencor Corporation, (KLA), filed a complaint against us 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 KLAs 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. The Company does not believe that any of its products infringe the intellectual property of any third party and it intends to vigorously and

aggressively defend itself in the litigation. As part of such defense, the Company has filed a request for re-examination of the three allegedly infringed KLA patents with the U.S. Patent & Trademark Office (PTO). These requests for re-examination were recently 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.

Note 13. Geographic and Significant Customer Information

Nanometrics has operations in four primary geographic operating locations: the United States, Japan, South Korea and Taiwan. All such operating locations have similar economic characteristics, as defined in SFAS No. 131, *Disclosures About Segments of an Enterprise and Related Information*, and accordingly, Nanometrics 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 attributed to significant countries (in thousands):

		Months ded
	April 1,	April 2,
	2006	2005
Total net revenues:		
United States	\$ 12,188	\$ 5,411
Japan	4,386	5,167
South Korea	1,371	10,174
Taiwan	406	1,630
All other	617	968
Total net revenues*	\$ 18,968	\$ 23,350

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

	April 1, 2006	Dec	ember 31, 2005
Long-lived assets:			
United States	\$ 37,308	\$	37,622
Japan	2,343		2,391
South Korea	4,425		4,333
Taiwan	20		23
Total long-lived assets**	\$ 44,096	\$	44,369

^{**} Long-lived assets include tangible assets only.

As of April 1, 2006, three customers, Samsung, Ebara and Applied Materials, accounted for 20.5%, 19.3% and 14.1% of total accounts receivable, respectively. As of December 31, 2005, one customer accounted for 31.4% of total accounts receivable.

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

	Three Mont	Three Months Ended	
	April 1, 2006	April 2, 2005	
Applied Materials	31.4%	17.9%	
Samsung	23.5%	28.7%	
Ebara	11.7%		
Hynix		14.4%	

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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 exforward-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 31, 2005, which were included in our Annual Report on Form 10-K filed with the Securities Exchange Commission on March 24, 2006.

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, especially in Asia, 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 interconnect technology and optical critical dimension technology are expected to result in increased demand. Our strategy is to continue to innovate organically as well to evaluate strategic acquisitions in order to address business challenges and opportunities.

Our revenues are derived from product sales and customer service, which include sales of accessories and service for the installed base of our products. In the year ended December 31, 2005, we derived 86.5% of our total net revenues from product sales and 13.5% of our total net revenues from services.

Important Themes and Significant Trends

The semiconductor equipment industry is characterized by cyclical growth. Recently, the industry emerged from an exceptionally long, cyclical downturn. Changing trends in the semiconductor industry are increasing the need for metrology as a major component of manufacturing systems. These trends include:

Conversion to 300mm Wafer Size. Semiconductor manufacturers are converting to 300mm wafers to achieve better production efficiencies. Most facilities are incorporating this wafer size, and our newest products are well-positioned to serve these facilities. It is important that we are successful in product evaluations with these new 300mm facilities in order to continue to gain market share.

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.

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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 semiconductors 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 with 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 Annual Report on Form 10-K filed with the SEC on March 24, 2006.

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, revenue is recognized 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 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.

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 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, 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

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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, 2006, 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 SAB 107. The expected volatility is based on the historical volatility of our stock price.

Recent Accounting Pronouncements

In February 2006, the FASB issued SFAS No. 155, Accounting for Certain Hybrid Instruments An Amendment of FASB Statements No. 133 and No. 144 (SFAS No. 155). SFAS No. 155 permits fair value remeasurement for any hybrid financial instrument that contains an embedded derivative that otherwise would require bifurcation. It also clarifies which interest-only strips and principal-only strips are not subject to the requirements of FASB Statement No. 133, and establishes a requirement to evaluate interests in securitized financial assets to identify interests that are freestanding derivatives or that are hybrid financial instruments that contain an embedded derivative requiring bifurcation. Furthermore, SFAS No. 155 clarifies that concentrations of credit risk in the form of subordination are not embedded derivatives and it amends FASB Statement No. 140 to eliminate the prohibition on a qualifying special purpose entity from holding a derivative financial instrument that pertains to a beneficial interest other than another derivative financial instrument. SFAS No. 155 is effective for all financial instruments acquired or issued after the beginning of the first fiscal year beginning after September 15, 2006. Our adoption of the provisions of SFAS No. 155 is not expected to impact our financial condition or results of operations.

In September 2005, the Emerging Issues Task Force reached consensus on EITF Issue No. 04-13, *Accounting for Purchases and Sales of Inventory with the Same Counterparty* (Issue No. 04-13). In certain situations, a company may enter into nonmonetary transactions to sell inventory to another company in the same line of business from which it also purchases inventory. Under Issue No. 04-13, in general, an entity is required to treat sales and purchases of inventory between the entity and the same counterparty as one transaction for purposes of applying APB Opinion No. 29, *Accounting for Nonmonetary Transactions* when such transactions are entered into in contemplation of each other. When such transactions are legally contingent on each other, they are considered to have been entered into in contemplation of each other. The EITF also agreed on other factors that should be considered in determining whether transactions have been entered into in contemplation of each other. Issue No. 04-13 will be effective for all new arrangements entered into in reporting periods beginning after March 15, 2006. We do not anticipate any impact on our consolidated results of operations and financial condition upon adoption of the provisions of Issue No. 04-13.

In May 2005, the FASB issued SFAS No. 154, Accounting Changes and Error Corrections (SFAS 154) which replaces APB 20 Accounting Changes and SFAS No. 3, Reporting Accounting Changes in Interim Financial Statements An Amendment of APB Opinion. 28. SFAS 154 provides guidance on the accounting for and reporting of accounting changes and error corrections. It establishes retrospective application, or the latest practicable date, as the required method for reporting a change in accounting principle and the reporting of a correction of an error. SFAS 154 is effective for accounting changes and corrections of errors made in fiscal years beginning after December 15, 2005 and is required to be adopted in the first fiscal quarter of 2006. The adoption of SFAS 154 did not have a material impact on our financial position or consolidated results of operations.

Acquisitions

On March 15, 2006, we announced that we had acquired Soluris Inc., (Soluris) a privately held corporation focused on overlay and CD measurement technology and headquartered in Concord, Massachusetts. Its flagship product, the IVS 155, is a tool for use in the 200mm and smaller semiconductor overlay and CD measurement market. Under the terms of the

merger agreement relating to the acquisition, the total consideration to purchase all of the outstanding stock of Soluris was \$6.6 million in an all-cash transaction. We also incurred \$0.3 million in transaction fees, including legal, valuation and accounting fees. The merger has been accounted for under the purchase method of accounting in accordance with SFAS No. 141, *Business Combinations*. Under the purchase method of accounting, the total estimated purchase price is allocated to

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the net tangible and identifiable intangible assets of Soluris acquired in connection with the merger, based on their respective estimated fair values. The results of operations of Soluris were included in our condensed consolidated statement of operations from the date of the acquisition.

Results of Operations

Quarters ended April 1, 2006 and April 2, 2005

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

	Three Mor	Three Months Ended	
	April 1, 2006	April 2, 2005	Percentage Change
Automated systems	\$ 7,915	\$ 14,960	(47.1)%
Integrated systems	8,057	6,050	33.2%
Service	2,996	2,340	28.0%
Total net revenues	\$ 18,968	\$ 23,350	(18.8)%

Total net revenues for the three months ended April 1, 2006 were \$19.0 million, a decrease of \$4.4 million or 18.8% from the comparable period in 2005. Product sales were \$16.0 million for the first quarter of 2006, a decrease of \$5.0 million or 24.0% as compared with the same period in 2005. The decrease in automated system sales in the first quarter of 2006 of 47% reflects the exceptionally high demand for our products during the first quarter of 2005, especially for our 300mm semiconductor wafer process control equipment, primarily in the U.S. and Asia, particularly South Korea. Sales of our integrated systems increased 33% as our channel distributors continue to integrate our products with end customers demand. Service revenue of \$3.0 million increased \$0.7 million or 28% in the first quarter of 2006 compared to the same period in 2005 as we have focused our efforts to sign our customers to post-warranty services.

Gross margin on product sales in the first quarter of 2006 was 50%, down from 54% for the comparable quarter of 2005. The decrease in product margin reflects lower utilization of our manufacturing capacity due to lower production volumes in addition to higher charges of \$0.2 million for excess and obsolete inventories as compared to the first quarter of 2005. Gross margin on service revenue increased to 15% in the first quarter of 2006 primarily as a function of higher revenues while maintaining our costs relatively flat.

Research and development expenses for the first quarter of 2006 decreased \$0.7 million or 20% compared to the same period in 2005 reflecting our cost cutting initiatives undertaken in the fourth quarter of 2005 including the sale of our flat panel display business unit in Japan and its related research and development function of \$0.4 million and reductions in headcount related expenses in the United States of \$0.6 million. These reductions were partially offset by stock-based compensation charges of \$0.3 million related to our adoption of SFAS 123(R), Share-Based Payment , or SFAS 123(R). In the United States, our research and development efforts are focused on semiconductor metrology while our research and development efforts in South Korea are focused on the overlay metrology market.

Selling expenses were flat at \$3.1 million for each of the first quarters of fiscal 2006 and 2005 Although net revenues for the first quarter of 2006 decreased as compared to the comparable quarter of 2005, the decrease in associated selling expenses were offset by stock-based compensation charges of \$0.1 million related to our adoption of SFAS 123(R).

General and administrative expenses for the first quarter of 2006 increased to \$4.5 million from \$2.0 million for the comparable quarter of 2005 due to higher legal expenses of \$0.8 million associated with our patent infringement lawsuits with KLA Tencor Corporation and with Nova Measuring Instruments Ltd. In addition, we incurred higher charges for professional services of \$0.6 million associated with compliance with regulatory requirements under the Sarbanes Oxley Act, increased headcount related expenses of \$0.6 million as we have expanded and enhanced our finance function and stock-based compensation charges of \$0.3 million related to our adoption of SFAS 123(R).

Total other income for the first quarter of 2006 increased \$0.5 million from the comparable period in 2005 due primarily to higher interest income and lower foreign currency transaction losses. The higher interest income is due to higher average cash and investment balances and higher yields obtained on our investments.

The effective tax rate of 2% in the first quarter of 2006 was a result of foreign taxes. We have established significant valuation allowances for our deferred tax assets arising from our operating losses of the past two years. We will continue to assess the realizability of our deferred tax

assets particularly if we establish a pattern of profitability in future quarters.

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Liquidity and Capital Resources

At April 1, 2006, our cash and cash equivalents totaled \$33.9 million. At April 1, 2006, we had working capital of \$70.0 million compared to \$76.7 million at December 31, 2005. The current ratio at April 1, 2006 was 5.3 to 1.

Operating activities in the first quarter of 2006 used cash of \$2.2 million primarily from our net loss and higher accounts receivable resulting from increased sales, the timing of shipments and receipt of payments as compared to the first quarter of 2005. These uses of cash were offset to some extent by non-cash charges associated with stock-based compensation of \$0.9 million in addition to depreciation and amortization of \$0.6 million.

Investing activities used \$3.8 million due to cash outlays of \$6.8 million related to our acquisition of Soluris and capitalized acquisition costs of \$2.0 million associated with our proposed merger with Accent Optical Technologies, partially offset, by maturities of short-term investments in the amount of \$4.9 million.

Financing activities used \$0.5 million due to repayments of short-term and long-term debt in Japan of \$0.8 million. These amounts were partially offset by the sale of stock from the exercise of employee stock options of \$0.3 million.

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. However, we believe working capital including cash, cash equivalents and short-term investments will be sufficient to meet our needs through at least the next twelve months.

Contractual obligations

The following table summarizes our contractual cash obligations as of April 1, 2006, and the effect such obligations are expected to have on liquidity and cash flow in future periods (in thousands):

		Ren	naining							
		nine months of						More than		
	Total	fisc	cal 2006 1-3 Y		Years	4-5 Years		5 Years		
Debt obligations (1)	\$ 1,782	\$	319	\$	754	\$	709	\$		
Line of credit	510		510							
Operating leases	609		262		201		142		4	
Total	\$ 2,901	\$	1,091	\$	955	\$	851	\$	4	

⁽¹⁾ Our debt obligations primarily relate to the expansion of our Japanese facilities and include related interest. We have no off-balance sheet financing arrangements.

We maintain certain open inventory purchase commitments with our suppliers to ensure a smooth and continuous supply chain for key components. Our liability in these purchase commitments is generally restricted to a forecasted time-horizon as mutually agreed upon between the parties. This forecast time-horizon can vary among different suppliers. We estimate our open inventory purchase commitment as of April 1, 2005 was approximately \$8.5 million. Actual expenditures will vary based upon the volume of the transactions and length of contractual service provided. In addition, the amounts paid under these arrangements may be less in the event that the arrangements are renegotiated or cancelled. Certain agreements provide for potential cancellation penalties.

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 as Form 10-K for the year ended December 31, 2005. 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.

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ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

As of April 1, 2006 (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 2005 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 31, 2005, 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 31, 2005. As a result of such evaluation, management identified a material weakness in our internal control over financial reporting as of December 31, 2005 related to our Japan operations. Specifically, internal control weaknesses in Japan included the lack of:

sufficient sample size for testing before our year-end due to late remediation of controls,

review of Japanese language sales documentation by U.S. personnel,

evidence regarding tracking of inventory movements,

segregation of duties in cash disbursements, purchasing and inventory activities and posting of journal entries,

availability of supporting documentation for non-inventory purchases due to our office move and personnel turnover,

control over service/parts sales processing

These control weaknesses did not result in the recording of any year-end audit adjustments prior to the issuance of our consolidated financial statements.

During our most recent fiscal quarter, we have taken the following steps to remediate the material weakness described above:

implemented our fully integrated enterprise resource planning system, or ERP, at our Japan location to increase the efficiency of our business and financial processes, effective as of January 1, 2006,

added Japanese financial personnel with experience in US GAAP reporting requirements,

increased oversight and monitoring of accounting procedures and review of our Japanese operations,

increased segregation of duties for critical functions to include approval and processing of certain transactions by U.S. personnel. We expect all changes in internal controls to be fully implemented by the quarter ended September 30, 2006 and testing of our internal controls subsequent to this date will determine the controls are operating effectively at our Japanese location.

Other than as noted above, there were no changes in our internal control over financial reporting during the three months ended April 1, 2006 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

On March 9, 2005, Nova Measuring Instruments Ltd., or Nova, filed suit against us in the United States District Court for the Northern District of California. The complaint alleges that certain of our products infringe a Nova patent and seeks a preliminary and permanent injunction against their sale and unspecified damages. We do not believe any of our products infringe any valid claim of the Nova patent. We intend to vigorously and aggressively defend ourselves in the litigation.

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While the results of such litigation matters and claims cannot be predicted with certainty, we believe the final outcome of such matters will not have a material adverse impact on our financial position or results operations.

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, 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. 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 ourselves in the litigation. As part of such defense, we have filed a request for re-examination of the three allegedly infringed KLA-Tencor patents with the U.S. Patent & Trademark Office, or PTO. These requests for re-examination were recently accepted for review by the PTO. In March 2006, we filed a motion for and were granted a stay in the patent litigation case until such re-examination is completed.

On March 29, 2006, Nanometrics filed suit against Nova in the United States District Court for the Northern District of California. The Complaint alleges that certain of Nova s products infringe one of Nanometrics patents and seeks damages.

ITEM 1A. RISK FACTORS

You should carefully consider the risks described below together with all of the other information included in this Quarterly Report on Form 10-Q before making an investment decision. 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

Cyclicality in the semiconductor industry has led to substantial fluctuations in demand for our systems and may, from time to time, continue to do so.

Our operating results have varied significantly from period to period due to the cyclical nature of the semiconductor industry. 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 is cyclical and 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 cyclical nature of the semiconductor industry, and therefore, our business, to continue in the foreseeable future. Recently, the semiconductor industry emerged from a sustained downturn. Should this trend reverse and the downturn resume, our business and results of operations would suffer.

Because we derive a significant portion of our revenues from sales in Asia, our revenues and results of operations could be adversely affected by the instability of Asian economies.

Revenues from customers in Asian markets represented approximately 65.5%, 68.8% and 72.7% of our total net revenues in 2005, 2004 and 2003, respectively. Countries in the Asia Pacific region, including Japan, South Korea and Taiwan, each of which accounted for a significant portion of our business in that region, experienced general economic weaknesses in 2002 and 2003, which adversely affected our revenues at that time. We anticipate that we will continue to rely upon customers in Asia for a majority of our revenues and any future weaknesses or instabilities in the economies of countries in Asia may continue to have a material adverse effect on our results of operations and financial condition.

We depend on Applied Materials and other OEM suppliers for sales of our integrated metrology systems, and the loss of Applied Materials or any of our other 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 Applied Materials to sell semiconductor equipment products that include our metrology systems as components. If Applied Materials is unable to sell such products, or if Applied Materials chooses to focus its attention on products that do not integrate our systems, our business could suffer. If we were to lose Applied Materials as a customer for any reason, our ability to realize sales from integrated metrology systems would be significantly diminished, which would harm our business.

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 number of 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. In 2005, sales to Applied Materials accounted for 20.6% and sales to Samsung accounted for 15.9% of our total net revenues, respectively. In 2004, sales to Applied Materials accounted for 21.4% and sales to Samsung accounted for 14.7% of our total net revenues, respectively. In 2003, sales to Applied Materials accounted for 15.4% and sales to Hynix accounted for 12.0% of our total net revenues, respectively.

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.

If we are unable to successfully address the material weakness in our internal controls, our ability to report our financial results on a timely and accurate basis may be adversely affected. As a result, current and potential stockholders could lose confidence in our financial reporting which could have a material adverse effect on our business, operating results and stock price.

Section 404 of the Sarbanes-Oxley Act of 2002 requires us to evaluate the effectiveness of our internal controls over financial reporting as of the end of each year, and to include a management report assessing the effectiveness of our internal controls over financial reporting in all annual reports. Section 404 also requires our independent registered public accounting firm to attest to, and report on, management s assessment of our internal controls over financial reporting.

A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system s objectives will be met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, involving Nanometrics have been, or will be, detected. These inherent limitations include the realities that judgments in decision making can be faulty and that breakdowns can occur because of simple error or mistake. Controls can also be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the controls. The design of any system of controls is based in part on certain assumptions about the likelihood of future events, and we cannot assure you that any design will succeed in achieving its stated goals under all potential future conditions. Over time, controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with policies or procedures. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

For the year ended December 31, 2005, our management concluded that there was a material weakness regarding the internal controls of our Japanese operations. A material weakness means that there is more than a remote likelihood that a material misstatement to our annual or interim financial statements would not be detected or prevented. For example, on October 26, 2005, our Audit Committee, acting on a recommendation from management, determined that our audited financial statements for the fiscal year ended January 1, 2005, and our unaudited quarterly financial statements for the periods ended April 2, 2005 and July 2, 2005, should no longer be relied upon and should be restated to revise the accounting for certain post-sale warranty services and other issues. Our management has identified certain steps designed to address our material weakness, and has begun to execute remediation plans.

Any failure to implement in a timely manner and maintain the improvements in the controls over our financial reporting that we are currently putting in place, or difficulties encountered in the implementation of these improvements in our controls, could cause us to fail to meet our reporting obligations, to fail to produce reliable financial reports or to prevent fraud. Any failure to improve our internal controls to address this identified weakness could also cause investors to lose confidence in our reported financial information, which could have a negative impact on our business, operating results and stock price.

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.

If any of our systems fail to meet or exceed our internal quality specifications, we cannot 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.

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.

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, we announced on March 14, 2005 that we had received notice of a patent infringement lawsuit brought by Nova Measuring Instruments, Ltd., alleging infringement of United States Patent No. 6,752,689. In August 2005, we were served with a complaint by KLA-Tencor Corporation 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 their claim. 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 Nova Measuring Instruments, Ltd. 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;

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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.

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

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 six 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 and our tabletop metrology systems range in price from approximately \$50,000 to \$200,000 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 is sometimes 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.

If we are not successful in developing 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 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 adversely affect 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.

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, we recently announced our intent to merge with

Accent, a leading supplier of process control and

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metrology systems to the global semiconductor manufacturing industry. 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 financing, that result in dilution to our shareholders. If we are unable to integrate any acquired entities, products or technologies effectively, our business will suffer.

We must attract and retain key personnel with relevant industry knowledge to help support our future growth.

Our success depends to a significant degree upon the continued contributions of our key management, engineering, sales and marketing, customer support, finance and manufacturing personnel. We generally do not enter into employment contracts with any of our key personnel. The loss of any of these key personnel, who would be difficult to replace, could harm our business and operating results. To support our future growth, we will need to attract and retain additional qualified employees. Competition for such personnel in our industry is ongoing, and we may not be successful in attracting and retaining qualified employees.

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, through our subsidiary in South Korea. 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 2005, 2004 and 2003, 66.7%, 71.8% and 74.8%, 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 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.

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.

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

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

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 Critical Accounting Policies in Part I, Item 2 of this Form 10-Q. Such methods, estimates and judgments are, by their nature, subject to substantial risks, uncertainties and assumptions, and factors may arise over time that lead 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 lead 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;
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.

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

Sales to customers in foreign countries accounted for approximately 66.7%, 71.8% and 74.8% of our total net revenues in 2005, 2004 and 2003, respectively. We maintain facilities in Japan, Taiwan and South Korea. 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, Taiwan and with the acquisition of Soluris, France and Singapore, 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 adversely affect 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

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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.

Risks Relating to the Merger with Accent Optical Technologies, Inc.

Nanometrics and Accent Optical expect to incur significant costs in connection with the merger.

We estimate we will incur direct transaction costs of \$1.7 million in connection with the merger of which approximately \$1.1 million had been paid as of March 31, 2006. Certain of the transaction costs will be capitalized. We and Accent Optical believe that the combined company will also incur charges to operations, but cannot reasonably estimate those costs at this time, in the quarter in which the merger is completed to reflect the costs of integrating the two companies. There can be no assurance that the combined company will not incur additional material charges in subsequent quarters to reflect additional costs associated with the merger.

The stock price and business of Nanometrics may be adversely affected if the merger is not completed, and, under certain circumstances, we may be required to pay a termination fee.

If the merger is not completed, the trading price of our common stock may decline to the extent that the current market prices reflect an assumption that the merger will be completed. In addition, Nanometrics business and operations may be harmed to the extent that customers, suppliers and others believe that the companies cannot effectively compete in the marketplace alone, or that uncertainty exists surrounding the future direction of the product and service offerings and strategy of the companies on a stand alone basis.

Nanometrics and Accent Optical will be required to pay significant costs incurred in connection with the merger, including legal, accounting and a portion of the financial advisory fees, regardless of whether the merger is completed.

In that regard, we have agreed to make a working capital loan to Accent Optical in two disbursements of \$1.25 million each, the first on or after April 30, 2006 and the second on or after June 30, 2006. However, we and Accent Optical agreed to accelerate the date of the first disbursement and as of March 31, 2006, we had advanced \$750,000 to Accent Optical. Subsequent to quarter-end, we advanced to Accent Optical an additional \$1,750,000 under the working capital loan.

In the event the merger is not completed, the working capital loans may continue as a debt obligation of Accent Optical or may be converted to Accent Optical common stock if certain events occur. In the event that the merger does not occur, Nanometrics may not receive repayment of the monies in a timely manner, if at all.

If either Nanometrics or Accent Optical fails to obtain shareholder approval, it may be required to pay the other party a termination fee equal to \$5 million, plus any applicable costs, expenses and interest pursuant to the merger agreement.

Nanometrics and Accent Optical must continue to retain and motivate executives and key employees and recruit new employees, and failure to do so could seriously harm the combined company.

In order to be successful, each of Nanometrics and Accent Optical must continue to retain and motivate executives and other key employees and recruit new employees before the merger is completed. Employees of Nanometrics or Accent Optical may experience uncertainty about their future roles until or after strategies with regard to Nanometrics after the merger are announced or executed. These potential distractions related to the merger may adversely affect each company s ability to attract, motivate and retain executives and key employees and keep such executives and key employees focused on strategic corporate goals. Any failure by Nanometrics or Accent Optical to retain and motivate executives and key employees during the period prior to the completion of the merger could seriously harm their respective businesses or the business of the combined company after the closing of the merger.

The combined company will need to retain and motivate key executives and employees after the merger in order to be successful. Uncertainty during the integration period after closing will pose retention challenges for the combined company after the closing. Failure to address these challenges could result in undesirable attrition, which would likely harm the combined company s business.

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The announcement of the merger may cause customers, distributors, resellers and others to delay or defer decisions concerning purchases from Nanometrics and Accent Optical, which may harm their or the combined company s results of operations.

Because the merger is subject to several closing conditions, uncertainty exists regarding whether and when the merger will be completed. In addition, customers, distributors, resellers and others may be uncertain about the combined company s plans for each of Nanometrics and Accent Optical s products. This uncertainty may cause customers, distributors, resellers and others to delay or defer purchasing decisions, or elect to switch to other suppliers, which could negatively affect the businesses and results of operations of Nanometrics, Accent Optical or the combined company. Prospective customers might also be reluctant to purchase the combined company s products after the merger due to uncertainty about the direction of its products and its willingness to support and service existing products. Customers, distributors, resellers and others may also seek to change existing agreements with Nanometrics or Accent Optical as a result of the merger. These and other actions by customers, distributors, resellers and others could negatively affect the businesses and results of operations of Nanometrics and/or Accent Optical.

The merger may be completed even though Nanometrics or Accent Optical suffers a material adverse change.

In general, either party can refuse to complete the merger if the other party suffers from a material adverse change between January 25, 2006, the date of the signing of the merger agreement, and the closing of the merger. However, certain types of changes would not prevent the merger from going forward, even if the change would have a material adverse effect on Nanometrics or Accent Optical including:

changes in the market price or trading volume of Nanometrics common stock;

changes, circumstances or conditions affecting the economy as a whole or the industries in which Nanometrics and Accent Optical operate if those changes, circumstances or conditions do not disproportionately affect either or both parties;

changes in laws or GAAP;

any effects resulting primarily from the pendency of the merger;

any litigation by Accent Optical stockholders or Nanometrics shareholders relating to the merger; and

the impact of Nanometrics restatements of past financial statements as described in its Current Report on Form 8-K dated October 25, 2005, as amended.

Governmental authorities could seek to block or challenge the merger.

The merger is exempt from the pre-merger notification filing requirements of the Hart-Scott-Rodino Act. However, even after completion of the merger, government authorities could seek to block or challenge the merger, impose conditions or require asset divestitures as they deem necessary or desirable in the public interest. In addition, in some jurisdictions, a competitor, customer or other third party could initiate a private action under the antitrust laws challenging or seeking to enjoin the merger, before or after it is completed. Nanometrics and Accent Optical may not prevail in such action, and significant legal fees and costs may be incurred even if they are ultimately successful.

Challenges involved in integrating Accent Optical s finance organization may negatively impact Nanometrics efforts to evolve its financial and managerial control and reporting systems and processes, including with respect to its internal control over financial reporting.

The combined company s ability to successfully offer its products and implement its business plan in a rapidly evolving market will require an effective planning and management process. The combined company will need to continue to improve its financial and managerial control and its reporting systems and procedures in order to manage its business effectively in the future.

Accent Optical has not been required to prepare a report on the effectiveness of its internal controls over financial reporting because it is not subject to the registration requirements of the Securities Exchange Act of 1934, as amended.

The merger will require significant integration efforts by management. Additionally, unanticipated factors may hinder the effectiveness or delay the integration of Nanometrics and Accent Optical s control systems and as such, there can be no assurances regarding the combined company s ability to remediate deficiencies in its internal controls over financial reporting. Unless the combined company is able to evolve its current capabilities with respect to control systems and procedures, its ability to file reports with the SEC in a timely manner may be adversely affected.

Accent Optical will need to obtain consents to the assignment of certain agreements it has with third parties as a result of the merger and if it cannot obtain these consents, Accent Optical and/or Nanometrics may lose the benefits of these relationships.

Accent Optical is currently attempting to obtain third-party consents for some agreements requiring consent upon a change of control. If Accent Optical is unable to do so, it may be forced to renegotiate these agreements or enter into new agreements with these various third parties. The agreements requiring consent include certain sales representative and distributor agreements, customer agreements, real property leases and license agreements. There can be no assurance that Accent Optical will be able to renegotiate or to negotiate new agreements on favorable terms, or at all.

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

None

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

None

ITEM 5. OTHER INFORMATION

None

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ITEM 6. EXHIBITS

Exhibit Index

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

Exhibit No. 2	Description Plans of Acquisition, Reorganization, Arrangement, Liquidation or Succession
2.1(1)	Agreement and Plan of Merger, by and among Soluris Inc., Sequoia Acquisition Corp., the Registrant, the Stockholders party thereto, and with respect to certain portions only Alain Bojarski, as Representative of the Security Holders of Soluris Inc. and U.S. Bank National Association, as Escrow Agent, dated as of March 15, 2006
3.(i)	Articles of Incorporation
3.1.(2)	Amended and Restated Articles of Incorporation of the Registrant
3.(ii)	Bylaws
3.2 (a)(3)	Certificate of Amendment of Amended and Restated Bylaws of the Registrant
3.2.(b)(4)	Restated Bylaws of the Registrant
31	Rule 13a-14(a)/15d-14(a) Certifications
31.1	Certification of John D. Heaton, principal executive officer of the Registrant, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of Douglas J. McCutcheon, principal financial officer of the Registrant, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32	Section 1350 Certifications
32.1	Certification of John D. Heaton, principal executive officer of the Registrant, and Douglas J. McCutcheon, principal financial officer of the Registrant, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

⁽¹⁾ Incorporated by reference to the Registrant s Current Report on Form 8-K filed March 16, 2006

⁽²⁾ Incorporated by reference to the Registrant s Annual Report on Form 10-K filed on March 28, 2003

⁽³⁾ Incorporated by reference to Exhibit 3.10 of Registrant s Annual Report on Form 10-K filed on March 30, 2001

⁽⁴⁾ Incorporated by reference to the Registrant s Annual Report on Form 10-K filed on April 1, 1998

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/ Douglas J. McCutcheon Douglas J. McCutcheon Chief Financial Officer Dated: June 13, 2006

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