CYBEROPTICS CORP
Form 10-Q
August 07, 2017
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-Q

(Check One)

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

For the quarterly period ended June 30, 2017

o TRANSITION PURSUANT TO SECTION 13 OR 15(D)
OF THE SECURITIES EXCHANGE ACT

For the transition period from ______ to ______

COMMISSION FILE NO. (0-16577)

CYBEROPTICS CORPORATION
(Exact name of registrant as specified in its charter)

Minnesota (State or other jurisdiction of incorporation or organization)	41-1472057 (I.R.S. Employer Identification No.)
5900 Golden Hills Drive MINNEAPOLIS, MINNESOTA (Address of principal executive offices)	 55416 (Zip Code)

(763) 542-5000
(Registrant’s telephone number, including area code)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or 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 þ No o

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes þ No o

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of “large accelerated filer”, “accelerated filer”, "smaller reporting company", and "emerging growth company" in Rule 12b-2 of the Exchange Act.

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

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

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

Indicate the number of shares outstanding of each of the issuer’s classes of common stock, as of the latest practicable date. At July 31, 2017, there were 6,971,265 shares of the registrant’s Common Stock, no par value, issued and outstanding.

PART I. FINANCIAL INFORMATION

ITEM 1. CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

CONDENSED CONSOLIDATED BALANCE SHEETS

CYBEROPTICS CORPORATION

(Unaudited)

(In thousands, except share information)	**June 30, 2017**	**December 31,** 2016
ASSETS		
Cash and cash equivalents	$ 7,233	$ 10,640
Marketable securities	6,143	6,493
Accounts receivable, less allowance for doubtful accounts of $533 at June 30, 2017 and $547 at December 31, 2016	13,759	10,895
Inventories	16,186	11,531
Other current assets	1,644	1,535
Total current assets	44,965	41,094
Marketable securities, long-term	9,312	8,728
Equipment and leasehold improvements, net	2,339	2,438
Intangible assets, net	424	438
Goodwill	1,366	1,366
Other assets	200	193
Deferred tax assets	5,389	5,323
Total assets	$ 63,995	$ 59,580
LIABILITIES AND STOCKHOLDERS’ EQUITY		
Accounts payable	$ 9,580	$ 6,217
Advance customer payments	568	328
Accrued expenses	2,444	3,756
Total current liabilities	12,592	10,301
Other liabilities	175	250
Reserve for income taxes	131	131
Total liabilities	12,898	10,682
Commitments and contingencies		
Stockholders’ equity:		
Preferred stock, no par value, 5,000,000 shares authorized, none outstanding	—	—
	33,545	32,801

Common stock, no par value, 25,000,000 shares authorized, 6,952,861 shares issued and outstanding at June 30, 2017 and 6,901,887 shares issued and outstanding at December 31, 2016		
Accumulated other comprehensive loss	(1,628)	(1,940)
Retained earnings	19,180	18,037
Total stockholders' equity	51,097	48,898
Total liabilities and stockholders' equity	$ 63,995	$ 59,580

SEE THE ACCOMPANYING NOTES TO UNAUDITED INTERIM CONDENSED CONSOLIDATED FINANCIAL STATEMENTS.

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

CYBEROPTICS CORPORATION

(Unaudited)

(In thousands, except per share amounts)	**Three Months Ended June 30,** **2017**	**2016**	Six Months Ended June 30, 2017	2016
Revenues	$ 16,409	$ 18,631	$ 28,329	$ 37,745
Cost of revenues	8,676	10,486	15,198	21,656
Gross margin	7,733	8,145	13,131	16,089
Research and development expenses	1,995	2,110	3,945	4,140
Selling, general and administrative expenses	4,058	4,031	8,028	7,537
Amortization of intangibles	18	17	35	34
Income from operations	1,662	1,987	1,123	4,378
Interest income and other	(28)	98	(116)	13
Income before income taxes	1,634	2,085	1,007	4,391
Income tax provision	539	44	126	87
Net income	$ 1,095	$ 2,041	$ 881	$ 4,304
Net income per share – Basic	$ 0.16	$ 0.30	$ 0.13	$ 0.63
Net income per share – Diluted	$ 0.15	$ 0.29	$ 0.12	$ 0.62
Weighted average shares outstanding – Basic	6,944	6,803	6,928	6,790
Weighted average shares outstanding – Diluted	7,253	7,051	7,083	6,943

SEE THE ACCOMPANYING NOTES TO UNAUDITED INTERIM CONDENSED CONSOLIDATED FINANCIAL STATEMENTS.

CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

CYBEROPTICS CORPORATION

(Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
(In thousands)	**2017**	**2016**	2017	2016
Net Income	$ 1,095	$ 2,041	$ 881	$ 4,304
Other comprehensive income, before tax:				
Foreign currency translation adjustments	161	(76)	430	194
Unrealized gains on available-for-sale securities:				
Unrealized gains	11	15	31	68
Reclassification adjustments	—	—	—	—
Total unrealized gains on available-for-sale securities	11	15	31	68
Unrealized gains on foreign exchange forward contracts:				
Unrealized gains (losses)	—	(7)	—	53
Reclassification adjustments for losses included in net income	—	5	—	36
Total unrealized gains (losses) on foreign exchange forward contracts	—	(2)	—	89
Other comprehensive income (loss), before tax	172	(63)	461	351
Income tax provision related to items of other comprehensive income (loss)	(63)	—	(149)	—
Other comprehensive income (loss), net of tax	109	(63)	312	351
Total comprehensive income	$ 1,204	$ 1,978	$ 1,193	$ 4,655

SEE THE ACCOMPANYING NOTES TO UNAUDITED INTERIM CONDENSED CONSOLIDATED FINANCIAL STATEMENTS.

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

CYBEROPTICS CORPORATION

(Unaudited)

(In thousands)	Six Months Ended June 30, 2017	2016
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net income	$ 881	$ 4,304
Adjustments to reconcile net income to net cash provided by (used in) operating activities:		
Depreciation and amortization	1,086	1,014
Provision for doubtful accounts	—	40
Deferred taxes	95	11
Foreign currency transaction losses (gains)	198	(21)
Stock compensation costs	400	552
Changes in operating assets and liabilities:		
Accounts receivable	(2,864)	(3,399)
Inventories	(4,751)	663
Other assets	(56)	(575)
Accounts payable	3,215	523
Advance customer payments	240	706
Accrued expenses	(1,403)	1,427
Net cash provided by (used in) operating activities	(2,959)	5,245
CASH FLOWS FROM INVESTING ACTIVITIES:		
Proceeds from maturities of available-for-sale marketable securities	3,531	1,631
Proceeds from sales of available-for-sale marketable securities	—	1,402
Purchases of available-for-sale marketable securities	(3,746)	(2,069)
Additions to equipment and leasehold improvements	(523)	(656)
Additions to patents	(72)	(43)
Net cash provided by (used in) investing activities	(810)	265
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from exercise of stock options	321	258
Net cash provided by financing activities	321	258
Effects of exchange rate changes on cash and cash equivalents	41	40
Net increase (decrease) in cash and cash equivalents	(3,407)	5,808
Cash and cash equivalents – beginning of period	10,640	4,274
Cash and cash equivalents – end of period	$ 7,233	$ 10,082

SEE THE ACCOMPANYING NOTES TO UNAUDITED INTERIM CONDENSED CONSOLIDATED FINANCIAL STATEMENTS.

NOTES TO THE UNAUDITED INTERIM CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

CYBEROPTICS CORPORATION

1. INTERIM REPORTING:

The interim condensed consolidated financial statements presented herein as of June 30, 2017, and for the three and six month periods ended June 30, 2017 and 2016, are unaudited, but in the opinion of management, include all adjustments, consisting of normal recurring adjustments, necessary for a fair presentation of financial position, results of operations and cash flows for the periods presented.

The results of operations for the three and six month period ended June 30, 2017 do not necessarily indicate the results to be expected for the full year. The December 31, 2016 consolidated balance sheet data was derived from audited consolidated financial statements, but does not include all disclosures required by accounting principles generally accepted in the United States of America. The unaudited interim condensed consolidated financial statements should be read in conjunction with our consolidated financial statements and notes thereto contained in our Annual Report on Form 10-K for the year ended December 31, 2016.

2. MARKETABLE SECURITIES:

Our investments in marketable securities are classified as available-for-sale and consist of the following:

	June 30, 2017			
(In thousands)	Cost	Unrealized Gains	Unrealized Losses	Fair Value
Short-Term				
U.S. government and agency obligations	$ 5,235	$ —	$ (7)	$ 5,228
Corporate debt securities and certificates of deposit	916	—	(1)	915
Marketable securities – short-term	$ 6,151	$ —	$ (8)	$ 6,143
Long-Term				
U.S. government and agency obligations	$ 4,143	$ —	$ (12)	$ 4,131
Corporate debt securities and certificates of deposit	1,971	1	(9)	1,963
Asset backed securities	3,136	1	(5)	3,132
Equity security	42	44	—	86
Marketable securities – long-term	$ 9,292	$ 46	$ (26)	$ 9,312

December 31, 2016

(In thousands)	Cost	Unrealized Gains	Unrealized Losses	Fair Value
Short-Term				
U.S. government and agency obligations	$ 5,005	$ 4	$ (1)	$ 5,008
Corporate debt securities and certificates of deposit	1,476	1	(1)	1,476
Asset backed securities	9	—	—	9
Marketable securities – short-term	$ 6,490	$ 5	$ (2)	$ 6,493
Long-Term				
U.S. government and agency obligations	$ 4,815	$ 1	$ (12)	$ 4,804
Corporate debt securities and certificates of deposit	2,161	—	(17)	2,144
Asset backed securities	1,732	—	(5)	1,727
Equity security	42	11	—	53
Marketable securities – long-term	$ 8,750	$ 12	$ (34)	$ 8,728

Net pre-tax unrealized gains for marketable securities of $12,000 at June 30, 2017 and net pre-tax unrealized losses for marketable securities of $19,000 at December 31, 2016 were recorded as a component of accumulated other comprehensive loss in stockholders' equity. No marketable securities were sold in the six months ended June 30, 2017. We received proceeds from the sale of marketable securities in the three and six months ended June 30, 2016 of $625,000 and $1.4 million, respectively. No gain or loss was recognized on the sale of marketable securities in the three and six months ended June 30, 2016.

Our investments in marketable debt securities all have maturities of less than five years. At June 30, 2017, marketable debt securities valued at $2.5 million were in an unrealized gain position totaling $2,000, and marketable debt securities valued at $12.9 million were in an unrealized loss position totaling $34,000 (all of these securities had been in an unrealized loss position for less than 12 months). At December 31, 2016, marketable debt securities valued at $6.4 million were in an unrealized gain position totaling $6,000, and marketable debt securities valued at $8.8 million were in an unrealized loss position totaling $36,000 (all of these securities had been in an unrealized loss position for less than 12 months).

Investments in marketable securities classified as cash equivalents of $4.4 million at June 30, 2017 and $5.2 million at December 31, 2016 consist of the following:

	June 30, 2017			
(In thousands)	Cost	Unrealized Gains	Unrealized Losses	Recorded Basis
Money market and certificates of deposit	$ 4,402	$ —	$ —	$ 4,402
	$ 4,402	$ —	$ —	$ 4,402

	December 31, 2016			
(In thousands)	Cost	Unrealized Gains	Unrealized Losses	Recorded Basis
Money market and certificates of deposit	$ 5,195	$ —	$ —	$ 5,195
	$ 5,195	$ —	$ —	$ 5,195

Cash and marketable securities held by foreign subsidiaries totaled $307,000 at June 30, 2017 and $614,000 at December 31, 2016.

3. DERIVATIVES:

We may enter into foreign exchange forward contracts to hedge against the effect of exchange rate fluctuations on cash flows denominated in foreign currencies associated with our subsidiary in Singapore. These transactions are designated as cash flow hedges and are recorded in the accompanying consolidated balance sheet at fair value. The effective portion of the gain or loss on these derivatives is reported as a component of other comprehensive income (loss) and reclassified into earnings in the same period during which the hedged transaction affects earnings. Gains and losses on the derivatives representing either hedge ineffectiveness or hedge components excluded from the assessment of effectiveness are recognized in current earnings. The maximum length of time over which we hedge our exposure to the variability in future cash flows is 12 months.

There were no open cash flow hedges at December 31, 2016 or at any time during the six months ended June 30, 2017. In the three and six months ended June 30, 2016, hedge ineffectiveness and the amounts excluded from effectiveness testing recognized in earnings on cash flow hedges were not material.

Reclassifications of amounts from accumulated other comprehensive income (loss) into earnings for cash flow hedges include accumulated gains (losses) at the time earnings were impacted by the hedged transaction. The location in the consolidated statements of operations and consolidated statements of comprehensive income and amounts of gains and losses related to derivative instruments designated as cash flow hedges are as follows:

	Three Months Ended June 30, 2016	
(In thousands)	Pretax Loss Recognized in Other Comprehensive Income (Loss) on Effective Portion of Derivative	Pretax Loss Recognized in Earnings on Effective Portion of Derivative as a Result of Reclassification from Accumulated Other Comprehensive Loss
Cost of revenues	$ (4)	$ (2)
Research and development	(2)	(2)
Selling, general and administrative	(1)	(1)
Total	$ (7)	$ (5)

	Six Months Ended June 30, 2016	
(In thousands)	Pretax Gain Recognized in Other Comprehensive Income (Loss) on Effective Portion of Derivative	Pretax Loss Recognized in Earnings on Effective Portion of Derivative as a Result of Reclassification from Accumulated Other Comprehensive Loss
Cost of revenues	$ 32	$ (27)
Research and development	14	(6)
Selling, general and administrative	7	(3)
Total	$ 53	$ (36)

At June 30, 2017 and December 31, 2016, there were no amounts recorded in accumulated other comprehensive loss for cash flow hedging instruments. Additional information with respect to the impact of derivative instruments on other comprehensive income (loss) is included in Note 11.

4. FAIR VALUE MEASUREMENTS:

We determine the fair value of our assets and liabilities based on the exchange price that would be received for an asset or paid to transfer a liability (i.e., the exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value maximize the use of observable inputs and minimize the use of unobservable inputs. We use a fair value hierarchy with three levels of inputs, of which the first two are considered observable and the last is considered unobservable, to measure fair value. The fair value hierarchy gives the highest priority to quoted prices in active markets for identical assets or liabilities (Level 1). The next highest priority is based on quoted prices for similar assets or liabilities in active markets or quoted prices for identical or similar assets or liabilities in non-active markets or other observable inputs (Level 2). The lowest priority is given to unobservable inputs (Level 3). The following provides information regarding fair value measurements for our marketable securities as of June 30, 2017 and December 31, 2016 according to the three-level fair value hierarchy:

(In thousands)	Fair Value Measurements at June 30, 2017 Using Balance June 30, 2017	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Marketable securities:				
U.S. government and agency obligations	$ 9,359	$ —	$ 9,359	$ —
Corporate debt securities and certificates of deposit	2,878	—	2,878	—
Asset backed securities	3,132	—	3,132	—
Equity security	86	86	—	—
Total marketable securities	$ 15,455	$ 86	$ 15,369	$ —

(In thousands)	Fair Value Measurements at December 31, 2016 Using Balance December 31, 2016	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Marketable securities:				
U.S. government and agency obligations	$ 9,812	$ —	$ 9,812	$ —
Corporate debt securities and certificates of deposit	3,620	—	3,620	—
Asset backed securities	1,736	—	1,736	—
Equity security	53	53	—	—
Total marketable securities	$ 15,221	$ 53	$ 15,168	$ —

During the six months ended June 30, 2017 and the year ended December 31, 2016, there were no transfers within the three level hierarchy. A significant transfer is recognized when the inputs used to value a security have been changed sufficiently to merit a transfer between the disclosed levels of the valuation hierarchy.

The fair value for our U.S. government and agency obligations, corporate debt securities and certificates of deposit and asset backed securities are determined based on valuations provided by external investment managers which obtain them from a variety of industry standard data providers. The fair value for our equity security is based on a quoted market price obtained from an active market.

The carrying amounts of financial instruments such as cash equivalents, accounts receivable, other assets, accounts payable, advance customer payments, accrued expenses and other liabilities are approximately equal to their related fair values due to their short-term maturities. Non-financial assets such as equipment and leasehold improvements, goodwill and intangible assets are subject to non-recurring fair value measurements if they are deemed impaired. We had no re-measurements of non-financial assets to fair value in the six months ended June 30, 2017 or the six months ended June 30, 2016.

5. ACCOUNTING FOR STOCK-BASED COMPENSATION:

We have three stock-based compensation plans that are administered by the Compensation Committee of the Board of Directors. We have an Employee Stock Incentive Plan for officers, other employees, consultants and independent contractors under which we have granted options and restricted stock units to officers and other employees, an Employee Stock Purchase Plan under which shares of our common stock may be acquired by employees at discounted prices, and a Non-Employee Director Stock Plan that provides for automatic grants of shares of our common stock to non-employee directors. New shares of our common stock are issued upon stock option exercises, vesting of restricted stock units, issuances of shares to board members and issuances of shares under the Employee Stock Purchase Plan.

Employee Stock Incentive Plan

As of June 30, 2017, there were 427,739 shares of common stock reserved in the aggregate for issuance pursuant to future awards under our Employee Stock Incentive Plan and 531,424 shares of common stock reserved in the aggregate for issuance pursuant to outstanding awards under our Employee Stock Incentive Plan. Although our Compensation Committee has authority to issue options, restricted stock, restricted stock units, share grants and other share based benefits under our Employee Stock Incentive Plan, to date only restricted stock units and stock options have been granted under the plan. Options have been granted at an option price per share equal to the market value of our common stock on the date of grant, vest over a four-year period and expire seven years after the date of grant. Restricted stock units vest over a four year period and entitle the holders to one share of our common stock for each restricted stock unit. Reserved shares underlying outstanding awards, including options and restricted shares, that are forfeited are available under the Employee Stock Incentive Plan for future grant.

Non-Employee Director Stock Plan

As of June 30, 2017, there were 68,000 shares of common stock reserved in the aggregate for issuance pursuant to future awards under our Non-Employee Director Stock Plan and 16,000 shares of common stock reserved in the aggregate for issuance pursuant to outstanding stock option awards under our Non-Employee Director Stock Plan. Under the terms of the plan, each non-employee director will automatically be granted 2,000 shares of our common stock on the date of each annual meeting at which such director is elected to serve on the board. At our May 11, 2017 annual meeting, our shareholders, upon recommendation of the Board of Directors, approved amendments to the Non-Employee Director Stock Plan that eliminated annual stock option grants for non-employee directors and provide that share grants under the Non-Employee Director Stock Plan will vest in four equal quarterly installment during the year after the grant date provided the non-employee director is still serving as a director on the applicable vesting date.

Pursuant to the plan, on the date of our 2017 annual meeting, we issued a total of 8,000 shares of our common stock to our non-employee directors. The shares had an aggregate fair market value on the date of grant equal to $167,000 (grant date fair value of $20.90 per share). As of June 30, 2017, none of these shares were vested. The aggregate fair value of the outstanding unvested shares based on the closing share price of our common stock on June 30, 2017 was $165,000.

Pursuant to the plan, on the date of our 2016 annual meeting, we issued a total of 8,000 shares of our common stock and stock options to acquire 16,000 shares of our common stock to our non-employee directors. Both the shares and the options were fully vested on the date of grant. The shares had an aggregate fair market value on the date of grant equal to $136,000 (grant date fair value of $16.97 per share) and the options had an aggregate fair market value on the date of grant using the Black-Scholes model equal to $139,000 (grant date fair value of $8.71 per option to acquire one share of our common stock).

Stock Option Activity

The following is a summary of stock option activity in the six months ended June 30, 2017:

	Options Outstanding		Weighted Average Exercise Price Per Share	
Outstanding, December 31, 2016	547,625		$	9.39
Granted	—		—	
Exercised	(40,750	)	9.31	
Expired	—		—	
Forfeited	—		—	
Outstanding, June 30, 2017	506,875		$	9.40
Exercisable, June 30, 2017	246,313		$	8.27

The intrinsic value of an option is the amount by which the market price of the underlying stock exceeds the option's exercise price. For options outstanding at June 30, 2017, the weighted average remaining contractual term of all outstanding options was 4.4 years and their aggregate intrinsic value was $5.9 million. At June 30, 2017, the weighted average remaining contractual term of options that were exercisable was 3.9 years and their aggregate intrinsic value was $3.0 million. The aggregate intrinsic value of stock options exercised in the six months ended June 30, 2017 was $668,000. We received proceeds from stock option exercises of $321,000 in the six months ended June 30, 2017 and $258,000 in the six months ended June 30, 2016. The total fair value of options that vested in the six months ended June 30, 2017 was $117,000.

Restricted Stock Units

Restricted stock units are granted under our Employee Stock Incentive Plan. There were no restricted stock units granted in the six months ended June 30, 2017. The aggregate fair value of outstanding restricted stock units based on the closing share price of our common stock on June 30, 2017 was $837,000. The aggregate fair value of restricted stock units that vested, based on the closing share price of our common stock on the vesting date, in the six months ended June 30, 2017 was $170,000.

A summary of activity for non-vested restricted stock units in the six months ended June 30, 2017 is as follows:

Non-vested restricted stock units	Shares		Weighted Average Grant Date Fair Value	
Non-vested at December 31, 2016	45,549		$	11.93
Granted	—		—	
Vested	(5,000	)	6.97	
Forfeited	—		—	
Non-vested at June 30, 2017	40,549		$	12.54

Employee Stock Purchase Plan

We have an Employee Stock Purchase Plan available to eligible U.S. employees. Under terms of the plan, eligible employees may designate from 1% to 10% of their compensation to be withheld through payroll deductions, up to a maximum of $6,500 in each plan year, for the purchase of common stock at 85% of the lower of the market price on the first or last day of the offering period. There were no shares issued under this plan in either the six months ended June 30, 2017 or the six months ended June 30, 2016. As of June 30, 2017, 59,276 shares remain available for future issuance under the Employee Stock Purchase Plan.

Stock Based Compensation Information

All equity-based compensation awarded to our employees and non-employee directors, representing grants of shares, stock options and restricted stock units are recognized as an expense in our consolidated statement of operations based on the grant date fair value of the award. We utilize the straight-line method of expense recognition over the vesting period for our options subject to time-based vesting restrictions. The fair value of stock options granted has been determined using the Black-Scholes model. Prior to January 1, 2017, stock compensation expense for all equity based awards was recognized based on the number of awards that were expected to vest. On January 1, 2017, we adopted the provisions of Accounting Standards Update (ASU) No. 2016-09, *Improvements to Employee Share-Based Payment Accounting,* which permits accounting for the impact of stock option forfeitures on stock compensation expense when the forfeitures occur. In the six months ended June 30, 2017, the impact of the change in accounting for stock option forfeitures was inconsequential. We have classified equity-based compensation expenses within our statement of operations in the same manner as our cash based compensation costs.

Equity-based compensation expense in the three months ended June 30, 2017 totaled $212,000, and included $115,000 for stock options, $26,000 for our Employee Stock Purchase Plan, $48,000 for unvested restricted stock units and $23,000 for unvested restricted shares. Equity-based compensation expense in the six months ended June 30, 2017 totaled $400,000, and included $229,000 for stock options, $52,000 for our Employee Stock Purchase Plan, $96,000 for unvested restricted stock units and $23,000 for unvested restricted shares.

Equity based compensation expense in the three months ended June 30, 2016 totaled $409,000, and included $226,000 for stock options, $16,000 for our Employee Stock Purchase Plan, $31,000 for unvested restricted stock units and $136,000 for shares issued without restriction. Equity based compensation expense in the six months ended June 30, 2016 totaled $552,000, and included $321,000 for stock options, $32,000 for our Employee Stock Purchase Plan, $63,000 for unvested restricted stock units and $136,000 for shares issued without restriction.

At June 30, 2017, the total unrecognized compensation cost related to non-vested equity based compensation arrangements was $1.4 million, and the related weighted average period over which it is expected to be recognized is 1.51 years.

6. CHANGES IN STOCKHOLDERS' EQUITY:

A reconciliation of the changes in our stockholders' equity is as follows:

(In thousands)	**Common Stock**		**Accumulated Other Comprehensive Income (Loss)**	**Retained Earnings**	**Total Stockholders' Equity**
	Shares	**Amount**			
Balance, December 31, 2016	6,902	$ 32,801	$ (1,940)	$ 18,037	$ 48,898
Increase related to adoption of ASU 2016-09	—	23	—	262	285
Exercise of stock options, vesting of restricted stock units, net of shares exchanged as payment	51	321	—	—	321
Stock-based compensation	—	400	—	—	400
Other comprehensive income, net of tax	—	—	312	—	312
Net income	—	—	—	881	881
Balance, June 30, 2017	6,953	$33,545	$ (1,628)	$19,180	$ 51,097

See Note 14 for further discussion regarding the impact of our adoption of ASU No. 2016-09, *Improvements to Employee Share-Based Payment Accounting* on our consolidated financial statements.

7. OTHER FINANCIAL STATEMENT DATA:

The components of our inventories are as follows:

(In thousands)	June 30, 2017	December 31, 2016
Raw materials and purchased parts	$ 8,301	$ 6,475
Work in process	2,643	826
Finished goods	5,242	4,230
Total inventories	$ 16,186	$ 11,531

The components of our accrued expenses are as follows:

(In thousands)	June 30, 2017	December 31, 2016
Wages and benefits	$ 1,233	$ 2,673
Warranty liability	709	717
Other	502	366
	$ 2,444	$ 3,756

Warranty costs:

We provide for the estimated cost of product warranties, which cover products for periods ranging from one to three years, at the time revenue is recognized. While we engage in extensive product quality programs and processes, including actively monitoring and evaluating the quality of component suppliers, warranty obligations are affected by product failure rates, material usage and service delivery costs incurred in correcting a product failure. If actual product failure rates, material usage or service delivery costs differ from our estimates, revisions to the estimated warranty liability would be required and could be material. At the end of each reporting period, we revise our estimated warranty liability based on these factors. The current portion of our warranty liability is included as a component of accrued expenses. The long-term portion of our warranty liability is included as a component of other liabilities.

A reconciliation of the changes in our estimated warranty liability is as follows:

(In thousands)	Six Months Ended June 30, 2017	2016
Balance at beginning of period	$ 790	$ 645
Accrual for warranties	250	447
Warranty revision	(24)	(25)
Settlements made during the period	(260)	(295)
Balance at end of period	756	772
Current portion of estimated warranty liability	(709)	(685)
Long-term estimated warranty liability	$ 47	$ 87

Deferred warranty revenue:

The current portion of our deferred warranty revenue is included as a component of advance customer payments. The long-term portion of our deferred warranty revenue is included as a component of other liabilities. A reconciliation of the changes in our deferred warranty revenue is as follows:

(In thousands)	Six Months Ended June 30, 2017	2016
Balance at beginning of period	$ 346	$ 199
Revenue deferrals	204	203
Amortization of deferred revenue	(209)	(226)
Total deferred warranty revenue	341	176
Current portion of deferred warranty revenue	(300)	(171)
Long-term deferred warranty revenue	$ 41	$ 5

8. INTANGIBLE ASSETS:

Intangible assets consist of the following:

(In thousands)	June 30, 2017 Gross Carrying Amount	Accumulated Amortization	Net	December 31, 2016 Gross Carrying Amount	Accumulated Amortization	Net
Patents	$ 2,639	$ (2,402)	$ 237	$ 2,567	$ (2,351)	$ 216
Software	206	(98)	108	206	(82)	124
Marketing assets and customer relationships	101	(39)	62	101	(33)	68
Non-compete agreements	101	(84)	17	101	(71)	30

$ 3,047	$ (2,623)	$ 424	$ 2,975	$ (2,537)	$ 438

Amortization expense in the three and six months ended June 30, 2017 and 2016 is as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
(In thousands)	**2017**	**2016**	2017	2016
Patents	$ 26	**$** 26	$ 51	$ 52
Software	8	8	16	15
Marketing assets and customer relationships	3	3	6	6
Non-compete agreements	7	6	13	13
	$ 44	$ 43	$ 86	$ 86

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Amortization of patents has been classified as research and development expense in our statements of operations. Estimated aggregate amortization expense based on current intangibles for the next five years is expected to be as follows: $82,000 for the remainder of 2017; $130,000 in 2018; $97,000 in 2019; $75,000 in 2020; $20,000 in 2021; and $20,000 in 2022.

Intangible and other long lived assets are reviewed for impairment when events or changes in circumstances indicate that the carrying amount of the assets may not be recoverable. An impairment loss would be recognized when future undiscounted cash flows expected to result from use of the asset and eventual disposition are less than the carrying amount.

9. REVENUE CONCENTRATIONS, SIGNIFICANT CUSTOMERS AND GEOGRAPHIC AREAS:

Export sales as a percentage of total sales in the three and six months ended June 30, 2017 were 74% and 76%, respectively. Export sales as a percentage of total sales in the three and six months ended June 30, 2016 were 81% and 83%, respectively. Virtually all of our export sales are negotiated, invoiced and paid in U.S. dollars. Export sales by geographic area are summarized as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
(In thousands)	**2017**	**2016**	2017	2016
Americas	$ 397	$ 29	$ 817	$ 770
Europe	3,756	5,756	6,571	9,871
Asia	7,813	9,262	13,974	20,647
Other	105	19	144	34
Total export sales	$ 12,071	$ 15,066	$ 21,506	$ 31,322

In the six months ended June 30, 2017, sales to one significant customer accounted for 12% of our total revenue. As of June 30, 2017, accounts receivable from this customer were $1.4 million.

10. NET INCOME PER SHARE:

Net income per basic share is computed by dividing net income by the weighted average number of common shares outstanding during the period. Net income per diluted share is computed by dividing net income by the weighted average number of common and common equivalent shares outstanding during the period. Common equivalent shares consist of common shares to be issued upon exercise of stock options, the vesting of restricted shares and restricted stock units and from the purchase of shares under our Employee Stock Purchase Plan, as calculated using the treasury stock method. The components of net income per basic and diluted share are as follows:

(In thousands except per share amounts)	Net Income	Weighted Average Shares Outstanding	Per Share Amount
Three Months Ended June 30, 2017			
Basic	$ 1,095	6,944	$ 0.16
Dilutive effect of common equivalent shares	—	309	(0.01)
Dilutive	$ 1,095	7,253	$ 0.15

(In thousands except per share amounts)	Net Income	Weighted Average Shares Outstanding	Per Share Amount
Three Months Ended June 30, 2016			
Basic	$ 2,041	6,803	$ 0.30
Dilutive effect of common equivalent shares	—	248	(0.01)
Dilutive	$ 2,041	7,051	$ 0.29

(In thousands except per share amounts)	Net Income	Weighted Average Shares Outstanding	Per Share Amount
Six Months Ended June 30, 2017			
Basic	$ 881	6,928	$ 0.13
Dilutive effect of common equivalent shares	—	155	(0.01)
Dilutive	$ 881	7,083	$ 0.12

(In thousands except per share amounts)	Net Income	Weighted Average Shares Outstanding	Per Share Amount
Six Months Ended June 30, 2016			
Basic	$ 4,304	6,790	$ 0.63
Dilutive effect of common equivalent shares	—	153	(0.01)
Dilutive	$ 4,304	6,943	$ 0.62

Potentially dilutive shares excluded from the calculations of net income per diluted share due to their anti-dilutive effect were as follows: 47,700 shares in the three months ended June 30, 2017; 329,350 shares in the six months ended June 30, 2017; 16,000 shares in the three months ended June 30, 2016; and 197,500 shares in the six months ended June 30, 2016.

11. OTHER COMPREHENSIVE INCOME (LOSS):

Reclassification adjustments are made to avoid double counting for items included in comprehensive income that are also recorded as part of net income. Reclassifications to earnings related to cash flow hedging instruments are discussed in Note 3.

	Three Months Ended June 30, 2017			**Three Months Ended June 30, 2016**		
(In thousands)	**Before Tax**	**Tax Effect**	**Net of Tax Amount**	**Before Tax**	**Tax Effect**	**Net of Tax Amount**
Foreign currency translation adjustments	$ 161	$ (59)	$ 102	$ (76)	$ —	$ (76)
Net changes related to available-for-sale securities:						
Unrealized gains	11	(4)	7	15	—	15
Reclassification adjustments	—	—	—	—	—	—
Total net changes related to available-for-sale securities	11	(4)	7	15	—	15
Net changes related to foreign exchange forward contracts:						

$

Unrealized losses	—	—	—	(7)	—	(7)
Reclassification adjustments:						
Cost of revenues	—	—	—	2	—	2
Research and development expenses	—	—	—	2	—	2
Selling, general and administrative expenses	—	—	—	1	—	1
Total net change related to foreign exchange forward contracts	—	—	—	(2)	—	(2)
Other comprehensive income (loss)	$ 172	$ (63)	$ 109	$ (63)	$ —	$ (63)

(In thousands)	**Six Months Ended June 30, 2017**			**Six Months Ended June 30, 2016**		
	Before Tax	**Tax Effect**	**Net of Tax Amount**	**Before Tax**	**Tax Effect**	**Net of Tax Amount**
Foreign currency translation adjustments	$ 430	$ (138)	$ 292	$ 194	$ —	$ 194
Net changes related to available-for-sale securities:						
Unrealized gains	31	(11)	20	68	—	68
Reclassification adjustments	—	—	—	—	—	—
Total net changes related to available-for-sale securities	31	(11)	20	68	—	68
Net changes related to foreign exchange forward contracts:						
Unrealized gains	—	—	—	53	—	53
Reclassification adjustments:						
Cost of revenues	—	—	—	27	—	27
Research and development expenses	—	—	—	6	—	6
Selling, general and administrative expenses	—	—	—	3	—	3
Total net change related to foreign exchange forward contracts	—	—	—	89	—	89
Other comprehensive income (loss)	$ 461	$ (149)	$ 312	$ 351	$ —	$ 351

At June 30, 2017 and June 30, 2016, components of accumulated other comprehensive loss are as follows:

(In thousands)	Foreign Currency Translation Adjustments	Available-for-Sale Securities	Foreign Exchange Forward Contracts	Accumulated Other Comprehensive Loss
Balances at December 31, 2016	$ (1,928)	$ (12)	$ —	$ (1,940)
Other comprehensive income before reclassifications	292	20	—	312
Amounts reclassified from accumulated other comprehensive loss	—	—	—	—
Total change for the period	292	20	—	312
Balances at June 30, 2017	$ (1,636)	$ 8	$ —	$ (1,628)

(In thousands)	Foreign Currency Translation Adjustments	Available-for-Sale Securities	Foreign Exchange Forward Contracts	Accumulated Other Comprehensive Loss
Balances at December 31, 2015	$ (1,545)	$ (17)	$ (147)	$ (1,709)
Other comprehensive income before reclassifications	194	68	53	315
Amounts reclassified from accumulated other comprehensive loss	—	—	36	36
Total change for the period	194	68	89	351

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Balances at June 30, 2016	$ (1,351)	$ 51	$ (58)	$ (1,358)

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12. INCOME TAXES:

We recorded income tax expense of $539,000 in the three months ended June 30, 2017, compared to $44,000 in the three months ended June 30, 2016. We recorded income tax expense of $126,000 in the six months ended June 30, 2017, compared to $87,000 in the six months ended June 30, 2016. During the fourth quarter of 2016, we substantially reduced the valuation allowances recorded against our United States and Singapore based deferred tax assets, primarily due to significant improvement in our operating results and financial outlook. In the six months ended June 30, 2017, our income tax provision primarily reflects a 32.5% effective income tax rate and excess tax benefits from employee share-based payments. Effective January 1, 2017, we adopted Accounting Standards Update No. 2016-09, *Improvements to Employee Share-Based Payment Accounting,* which requires recognition of excess tax benefits or tax deficiencies from employee share-based payments in income tax expense or benefit as a discrete item in the reporting period in which they occur. In the three months ended June 30, 2017, the recognized excess tax benefit from employee share-based payments was inconsequential. In the six months ended June 30, 2017, we recognized a $208,000 excess tax benefit from employee share-based payments. Income tax expense in the three and six months ended June 30, 2016 included U.S. federal alternative minimum taxes, minimal state income tax expense and foreign income tax expense incurred by our subsidiaries in the United Kingdom and China.

We have significant deferred tax assets as a result of temporary differences between taxable income on our tax returns and U.S. GAAP income, research and development tax credit carry forwards and federal, state and foreign net operating loss carry forwards. A deferred tax asset generally represents future tax benefits to be received when temporary differences previously reported in our consolidated financial statements become deductible for income tax purposes, when net operating loss carry forwards are applied against future taxable income, or when tax credit carry forwards are utilized on our tax returns. We assess the realizability of our deferred tax assets and the need for a valuation allowance based on the guidance provided in current financial accounting standards.

Significant judgment is required in determining the realizability of our deferred tax assets. The assessment of whether valuation allowances are required considers, among other matters, the nature, frequency and severity of any current and cumulative losses, forecasts of future profitability, the duration of statutory carry forward periods, our experience with loss carry forwards not expiring unused and tax planning alternatives. In analyzing the need for valuation allowances, we first considered our history of cumulative operating results for income tax purposes over the past three years in each of the tax jurisdictions where we operate, our financial performance in recent quarters, statutory carry forward periods and tax planning alternatives. Finally, we considered both our near-term and long-term financial outlook. After considering all available evidence both positive and negative, we concluded that recognition of valuation allowances for substantially all of United States and Singapore based deferred tax assets was not required at June 30, 2017.

13. CONTINGENCIES:

We are periodically a defendant in miscellaneous claims and disputes in the ordinary course of business. While the outcome of these matters cannot be predicted with certainty, management presently believes the disposition of these matters will not have a material effect on our financial position, results of operations or cash flows.

In the normal course of business to facilitate sales of our products and services, we at times indemnify other parties, including customers, with respect to certain matters. In these instances, we have agreed to hold the other parties harmless against losses arising out of intellectual property infringement or other types of claims. These agreements may limit the time within which an indemnification claim can be made, and almost always limit the amount of the claim. It is not possible to determine the maximum potential liability under these indemnification agreements due to the limited history of prior indemnification claims and the unique facts and circumstances involved in each particular agreement. Historically, payments made, if any, under these agreements have not had a material impact on our operating results, financial position or cash flows.

14. ADOPTION OF ACCOUNTING STANDARDS UPDATE NO. 2016-09, *IMPROVEMENTS TO EMPLOYEE SHARE-BASED PAYMENT ACCOUNTING:*

On January 1, 2017, we adopted ASU No. 2016-09, Improvements to Employee Share-Based Payment Accounting (ASU No. 2016-09). The guidance impacted the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification in the consolidated statement of cash flows.

At January 1, 2017, we had excess tax benefits from employee share-based payments that were not recognized because current taxes payable had not been reduced. Under the new guidance, we are required to recognize the excess tax benefits regardless of whether or not they reduce income taxes payable in the current period. The new guidance also requires all excess tax benefits and tax deficiencies to be recognized as income tax expense or benefit in our statement of operations. Prior to our adoption of ASU No. 2016-09, stock compensation expense was based on the number of awards that were expected to vest in the future. Under the new guidance, we are allowed to account for the impact of stock option forfeitures on stock compensation expense when the forfeitures occur.

Recognition of the deferred tax assets for previously unrecognized excess tax benefits and the impact of additional stock compensation expense resulting from the change in the accounting for stock option forfeitures were required to be applied using a modified retrospective approach. At January 1, 2017, we recorded a $278,000 credit to retained earnings and a corresponding debit to deferred tax assets for previously unrecognized excess tax benefits. We also recorded a $23,000 credit to common stock, a $16,000 debit to retained earnings and a $7,000 debit to deferred tax assets for additional stock compensation expense related to the change in accounting for stock option forfeitures.

Our income tax provision in the six months ended June 30, 2017, includes a $208,000 excess tax benefit from employee share-based payments. The impact of the change in accounting for stock option forfeitures on stock compensation expense in the six months ended June 30, 2017 was inconsequential.

ASU 2016-09 includes an amendment specifying that excess tax benefits are to be classified as an operating activity in the statement of cash flows on either a prospective or retrospective basis. This amendment had no impact on our consolidated statements of cash flows for any period presented because excess tax benefits have not been used to reduce current tax payments.

ASU 2016-09 also includes an amendment specifying that payments for employee taxes related to stock option exercises, when an employer withholds shares for tax withholding purposes, are to be classified as a financing activity in the consolidated statements of cash flows on a retrospective basis. This amendment had no impact on our consolidated statements of cash flows for any period presented because no shares were withheld for payment of employee taxes.

15. RECENT ACCOUNTING DEVELOPMENTS:

In January 2017, the Financial Accounting Standards Board (FASB) issued guidance on simplifying the test for goodwill impairment (ASU No. 2017-04, *Simplifying the Test for Goodwill Impairment)*. Under the new standard, goodwill impairment would be measured as the amount by which a reporting unit's carrying value exceeds its fair value, not to exceed the carrying value of goodwill. The new guidance eliminates the requirement to determine goodwill impairment by calculating the implied fair value of goodwill by hypothetically assigning the fair value of a reporting unit to all of its assets and liabilities as if that reporting unit had been acquired in a business combination. The new guidance is to be applied prospectively to impairment tests beginning January 1, 2020, with early adoption permitted. We intend to apply this guidance to applicable impairment tests after the adoption date.

In May 2014, the FASB issued guidance on the recognition of revenue from contracts with customers (ASU No. 2014-09, Revenue from Contracts with Customers). Revenue recognition will depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The guidance also requires disclosures regarding the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers. The guidance permits two methods of adoption: retrospectively to each prior reporting period presented or retrospectively with the cumulative effect of initially applying the guidance recognized on the date of adoption. The FASB has delayed the effective date of the standard by one year to January 1, 2018, with early adoption permitted as of the original effective date of January 1, 2017. We have performed a review of the requirements of the new guidance and have identified which of our revenue streams will be within the scope of ASU 2014-09. We have applied the five-step model of the new standard to a selection of contracts within each of our revenue streams and have compared the results to our current accounting practices. Based on this analysis, we do not currently expect a material impact on our consolidated financial statements. We are continuing to evaluate the impact of the new guidance on our consolidated financial statements, and anticipate we will expand our consolidated financial statement disclosures in order to comply with the new ASU. We now anticipate that we will adopt the new standard retrospectively, with recognition of a cumulative effect adjustment on the date of adoption.

In February 2016, the FASB issued new lease accounting guidance (ASU No. 2016-02, Leases). Under the new guidance, at the commencement date, lessees will be required (a) to recognize a lease liability, which is a lessee's obligation to make lease payments arising from a lease, measured on a discounted basis, and (b) to record a right-of-use asset, which is an asset that represents the lessee’s right to use, or control the use of, a specified asset for the lease term. The new guidance is not applicable for leases with a term of 12 months or less. Lessor accounting is largely unchanged. U.S. public companies are required to apply the amendments in ASU 2016-02 for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. Early application is permitted. Lessees (for capital and operating leases) and lessors (for sales-type, direct financing, and operating leases) must apply a modified retrospective transition approach for leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements. The modified retrospective approach would not require any transition accounting for leases that expired before the earliest comparative period presented. Lessees and lessors may not apply a full retrospective transition approach. We are currently evaluating the impact of the new guidance on our consolidated financial statements.

In July 2015, the FASB issued guidance that simplified the measurement of inventory (ASU No. 2015-11, Simplifying the Measurement of Inventory). The guidance requires an entity to measure inventory at the lower of cost or net realizable value, which consists of estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. The new guidance eliminated unnecessary complexity that existed under previous "lower of cost or market" guidance. The updated guidance was applied prospectively beginning January 1, 2017. Our implementation of this standard did not have a material impact on our consolidated financial statements.

ITEM 2 - MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

CRITICAL ACCOUNTING POLICIES AND ESTIMATES:

The preparation of the financial information contained in this Form 10-Q requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. On an on-going basis, we evaluate these estimates, including those estimates related to revenue recognition, bad debts, warranty obligations, inventory valuation, intangible assets and income taxes. We base these estimates on historical experience and on various other assumptions that we believe are 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. Our actual results may differ from these estimates under different assumptions or conditions. These critical accounting policies are discussed in more detail in the Management’s Discussion and Analysis of Financial Condition and Results of Operations contained in our Annual Report on Form 10-K for the year ended December 31, 2016.

FORWARD LOOKING STATEMENTS:

The following management’s discussion and analysis contains a number of estimates and predictions that are forward looking rather than based on historical fact. Among other matters, we discuss (i) our level of anticipated revenues, gross margins, and expenses; (ii) the timing of orders and shipments of our existing products, particularly the SQ3000, our 3D automated optical inspection (AOI) system; (iii) the timing of initial revenue and margin improvements from new products that we have under development, that have been recently introduced or that we anticipate introducing in the future; (iv) the amount of anticipated revenue and potential revenue opportunity from recently introduced new products or potential new products we may launch in the future; (v) our beliefs regarding trends in the general economy and its impact on markets for our products and (vi) the impact of currency fluctuations on our operations. Although we have made these statements based on our experience and best estimate of future events, there may be events or factors that we have not anticipated, and the accuracy of our statements and estimates are subject to a number of risks, including those identified in our Annual Report on Form 10-K for the year ended December 31, 2016.

RESULTS OF OPERATIONS

General

Our products are sold primarily into the electronics assembly, DRAM and flash memory, and semiconductor fabrication capital equipment markets. We sell products in these markets both to original equipment manufacturers (OEMs) of production equipment and to end-user customers that assemble circuit boards and semiconductor wafers and devices. Our wholly owned subsidiary, Laser Design, Inc. (LDI), sells 3D scanners and provides scanning services to the global 3D scanner and services metrology markets.

Our recent and planned product introductions are designed to strengthen our competitive position in our current markets and expand into adjacent markets. We believe 3D inspection represents a high-growth segment of both the electronic assembly market and the semiconductor market. For this reason, we are working to strategically reposition our company as a developer, manufacturer and global leader of high-precision 3D sensors. A key element in our strategic re-positioning is the development of new high precision 3D sensors based on our proprietary Multi-Reflection Suppression (MRS) technology. MRS technology inhibits reflections that can result in measurement inaccuracies, which is particularly critical for inspecting shiny objects.

We believe that MRS is a break-through optical technology for high-end inspection applications, with the potential to expand our markets in the future. In the existing markets for our surface mount technology (SMT), semiconductor inspection and general purpose 3D scanning products, we are seeing a growing number of opportunities because of our 3D MRS technology platform, and we are introducing new products based on MRS technology that we believe present a significant opportunity for increased revenues.

We have entered into a mutually exclusive agreement to supply KLA-Tencor with high-precision 3D sensor subsystems for its back-end semiconductor packaging inspection systems. We also have entered into an agreement to supply Nordson-YESTECH with high precision 3D sensor subsystems for the SMT market. The sensor subsystems are based on the MRS technology that we have been developing for the past several years. We intend to expand sales of products based on MRS technology into both the SMT market and adjacent markets that require high precision 3D optical inspection. Previously, we disclosed that we have been working with a major new customer for MRS sensors on a general purpose metrology application related to the inspection of finished goods. Although we continue to work with this customer, we do not know whether or not any new orders from this customer will be forthcoming. For this reason, we have not factored any orders from this customer into our third quarter or full year 2017 forecasts.

We have significantly advanced our MRS-enabled 3D sensor technology as part of a research and development initiative aimed at applying our MRS technology to mid-end and front-end semiconductor inspection. As previously reported, features of 50 microns, including devices with mirror-like finishes, are being measured consistently in our research lab, and further progress has been made toward measuring sub-50 micron features. Our MRS technology is now able to inspect cracks and other defects down to 30 microns in wafer dies. This mid-end inspection capability is currently being demonstrated to semiconductor manufacturers, and we believe that significant orders for products based on this technology are possible in 2018. We anticipate that MRS sensor technology will be applicable to front-end semiconductor inspection within the next several years. If this initiative proves to be commercially viable, the available market for our MRS-enabled sensors and products for mid-end and front-end semiconductor inspection could be significant.

Our 3D MRS technology has also been deployed in our 3D AOI system, the SQ3000, which is designed to expand our presence in markets requiring high precision inspection. In these markets, identifying defects has become highly challenging and critical due to smaller electronics packaging and increasing component density on circuit boards. We believe the combination of our MRS technology and sophisticated 3D fusing algorithms allows the SQ3000 to provide microscopic image quality at production speeds. We are particularly encouraged by our growing pipeline of sales opportunities for large projects involving multiple SQ3000 systems. These sales opportunities are being driven by the competitive advantages offered by our 3D MRS technology platform, which is enabling us to capitalize upon the growing demand for high-precision inspection. For this reason, we believe we can continue to expand our share of the rapidly growing worldwide 3D AOI market, and believe that the future sales potential of the SQ3000 is significant.

We have incorporated our MRS technology into a new 3D scanning system, CyberGage®360, which we believe will serve a wide range of inspection applications in the general purpose 3D metrology market. We believe that the unique performance characteristics of our MRS technology, which inhibit reflections and enable very accurate measurements at fast speeds, combined with ease of use, will give CyberGage360 a competitive advantage in the marketplace for 3D scanning systems. The sales cycle for the CyberGage360 remains lengthy as many potential customers are taking longer than originally anticipated to evaluate the potential impact of this disruptive new inspection technology on their product workflows. Consistent with our forecasts, only one CyberGage360 was sold in the second quarter of 2017. However, sales activity is picking up as an order for two systems was received in July 2017, and we anticipate receiving several more orders as the third quarter of 2017 progresses. Later in 2017, a second CyberGage360 system will be introduced that offers greater resolution within a smaller working envelope. The current version of CyberGage360 will continue to be marketed for larger parts. Based upon positive feedback from customer demonstrations and evaluations, we believe CyberGage360 will become an important contributor to our long-term sales growth. Although we are optimistic about future sales of CyberGage360, there can be no assurance that CyberGage360 will achieve widespread market acceptance.

We have continued to invest in our WaferSense/ReticleSense products. In response to ongoing input from semiconductor manufacturers, we are developing additional product offerings for new applications in semiconductor fabs and flat panel display manufacturing. Strong future sales growth is anticipated for the WaferSense/ReticleSense product line.

As stated previously, our quarterly results will continue to fluctuate on a sequential and year-over-year basis, reflecting the pace of new orders and customer acceptances for our 3D products. We ended the second quarter of 2017 with a backlog of $7.3 million, down from $14.7 million at June 30, 2016 and $10.9 million at March 31, 2017. For the third quarter of 2017, we are forecasting revenue of $13.0 million to $15.0 million. Our revenue forecast has been impacted by delayed receipt of pending orders, primarily for SQ3000 systems, totaling approximately $3.0 million. Although it is possible that revenue from these orders could be recognized in the third quarter, given implementation schedules and the time required to obtain customer acceptances, revenue from these pending orders will most likely be recognized in the fourth quarter of 2017. Our ability to post improved year-over-year sales growth is dependent upon timely receipt of customer orders and acceptances for SQ3000 systems. Despite this near-term sales timing issue, we remain very optimistic about CyberOptics future, given the growing acceptance of our suite of MRS-enabled and WaferSense/ReticleSense products, the outlook for mid-end semiconductor inspection, and for gradually growing CyberGage sales.

We believe that we have the resources required to attain our growth objectives, given our available cash and marketable securities balances totaling $22.7 million at June 30, 2017.

Revenues

Our revenues decreased by 12% to $16.4 million in the three months ended June 30, 2017, from $18.6 million in the three months ended June 30, 2016. Revenues decreased by 25% to $28.3 million in the six months ended June 30, 2017, from $37.7 million in the six months ended June 30, 2016. The following table sets forth revenues by product line for the three and six months ended June 30, 2017 and 2016:

	Three Months Ended June 30,		**Six Months Ended June 30,**	
(In thousands)	**2017**	**2016**	**2017**	**2016**
SMT and High Precision 3D Sensors	$5,635	$6,396	$9,539	$12,604
Semiconductor Sensors	3,153	3,147	5,470	5,264
SMT Inspection Systems	5,848	5,238	10,537	13,990
3D Scanners and Services	1,773	3,850	2,783	5,887
Total	$16,409	$18,631	$28,329	$37,745

Revenue from sales of SMT and high precision 3D sensors decreased by $761,000 or 12% to $5.6 million in the three months ended June 30, 2017, from $6.4 million in the three months ended June 30, 2016. Revenue from sales of this product line decreased by $3.1 million or 24% to $9.5 million in the six months ended June 30, 2017, from $12.6 million in the six months ended June 30, 2016. The revenue decreases resulted from reduced sales of legacy 2D LaserAlign sensors, offset in part by higher sales of 3D MRS-enabled sensors. Sales of 2D LaserAlign sensors in the three and six months ended June 30, 2016 were driven by one longstanding OEM customer who experienced a significant increase in sales of its products that incorporate our sensors during those periods. Sales of SMT and high precision 3D sensors are dependent on the success of our OEM partners selling products that incorporate our sensors. Quarterly sales of SMT and high precision 3D MRS enabled sensors are prone to significant fluctuations, both sequentially and on a year-over-year basis.

Sales to KLA-Tencor are expected to continue to increase as our MRS enabled sensors are now becoming standard on KLA-Tencor's back-end semiconductor inspection systems that utilize 3D optical inspection. Nordson-YESTECH introduced its 3D MRS-equipped AOI system at the IPC APEX Expo trade show in March 2016 to a very favorable reception. As a result, we believe that sales of sensors under our supply agreement with Nordson-YESTECH should be a positive contributor to our future sales growth.

Revenue from sales of semiconductor sensors, principally our WaferSense® and ReticleSense® product line totaled $3.2 million in the three months ended June 30, 2017, approximately the same as the three months ended June 30, 2016. Revenue from sales of semiconductor sensors increased by $206,000 or 4% to $5.5 million in the six months ended June 30, 2017, from $5.3 million in the six months ended June 30, 2016. The sales increases were due to increased customer awareness and improved account penetration at major semiconductor manufacturers and capital equipment suppliers. We anticipate that the benefits from growing market awareness and new product introductions will lead to additional WaferSense® and ReticleSense® sales in future periods.

Revenue from sales of SMT inspection systems increased by $610,000 or 12% to $5.8 million in the three months ended June 30, 2017, from $5.2 million in the three months ended June 30, 2016. Revenue from sales of SMT inspection systems decreased by $3.5 million or 25% to $10.5 million in the six months ended June 30, 2017, from $14.0 million in the six months ended June 30, 2016. The revenue increase in the three months ended June 30, 2017 was due to higher sales of SQ3000 3D AOI systems. The steadily growing acceptance of the SQ3000 is being generated by the competitive advantages of our 3D MRS technology platform, which is enabling us to capitalize upon strong worldwide demand for high-precision inspection. The revenue decrease in the six months ended June 30, 2017 resulted from the lack of sales of MX600 memory module inspection systems. There were no sales of the MX600 in the six months ended June 30, 2017, compared to MX600 sales of $2.9 million in the six months ended June 30, 2016.

We believe a growing number of companies are transitioning from 2D AOI to 3D AOI systems to meet the increasingly demanding inspection requirements of the electronics and industrial markets. We believe sales of our new 3D MRS enabled AOI products will represent an increasing percentage of our total AOI and solder paste inspection (SPI) product sales in the future. We expect that the competitive advantages of our unique 3D MRS technology will provide us with an opportunity to capture significant market share in the 3D AOI systems market.

Revenue from sales of 3D scanners and services decreased by $2.1 million or 54% to $1.8 million in the three months ended June 30, 2017, from $3.9 million in the three months ended June 30, 2016. Revenue from sales of 3D scanners and services decreased by $3.1 million or 53% to $2.8 million in the six months ended June 30, 2017, from $5.9 million in the six months ended June 30, 2016. The revenue decreases were due to reduced sales of computed tomography or X-ray scanning (CT) systems. In the three and six months ended June 30, 2016, approximately $2.5 million of X-ray scanning systems were sold as a result of a single large order from one customer. We believe our future revenue growth from sales of 3D scanners and services will be determined in large part by market acceptance of our new CyberGage®360 3D scanning system.

Export revenue totaled $12.1 million or 74% of total revenue in the three months ended June 30, 2017, compared to $15.1 million or 81% of total revenue in the three months ended June 30, 2016. Export revenue totaled $21.5 million or 76% of total revenue in the six months ended June 30, 2017, compared to $31.3 million or 83% of total revenue in the six months ended June 30, 2016. Most of the large transactions that drove our strong revenue in the three and six months ended June 30, 2016 were export sales. As result, export revenue as a percentage of total revenue was lower in the three and six months ended June 30, 2017, when compared to the three and six months ended June 30, 2016.

Cost of Revenues and Gross Margin

Cost of revenues decreased by $1.8 million or 17% to $8.7 million in the three months ended June 30, 2017, from $10.5 million in the three months ended June 30, 2016. Cost of revenues decreased by $6.5 million or 30% to $15.2 million in the six months ended June 30, 2017, from $21.7 million in the six months ended June 30, 2016.
The decrease in cost of revenues was mainly due to the corresponding revenue decreases in the three and six months ended June 30, 2017. Our sales mix was also more favorable in the three and six months ended June 30, 2017, with higher margin products constituting a greater portion of our total revenue. Items included in cost of revenues that fluctuate with the level of sales include raw materials, direct labor and factory overhead costs.

Total gross margin as a percentage of revenue was 47% in the three months ended June 30, 2017, compared to 44% in the three months ended June 30, 2016. Total gross margin as a percentage of revenue was 46% in the six months ended June 30, 2017, compared to 43% in the six months ended June 30, 2016. The improvement in gross margin percentage was mainly due to a change in product mix. Sales of our new 3D MRS sensors, SQ3000 3D AOI products and WaferSense/ReticleSense products, which have higher gross margins than some of our older products, constituted a larger portion of our total revenue in the three and six months ended June 30, 2017, when compared to the three and six months ended June 30, 2016. The X-ray scanning systems sold in larger quantities in the three and six months ended June 30, 2016 also generated a lower gross margin percentage than some of our other products.

Our markets are highly price competitive, particularly the electronic assembly market, resulting in continual pressure on our gross margins. We compensate for pricing pressure by introducing new products with more features and improved performance and through manufacturing cost reduction programs. Sales of many products that we have recently introduced or are about to introduce, including our CyberGage®360 3D scanning system, SQ3000 3D AOI products, 3D MRS sensors and WaferSense/ReticleSense sensor products have, or are expected to have, more favorable gross margins than many of our existing products.

We anticipate that our total gross margin percentage in the third quarter of 2017 will be comparable to the second quarter of 2017.

Operating Expenses

Research and development expenses were $2.0 million or 12% of revenue in the three months ended June 30, 2017, compared to $2.1 million or 11% of revenue in the three months ended June 30, 2016. Research and development expenses were $3.9 million or 14% of revenue in the six months ended June 30, 2017, compared to $4.1 million or 11% of revenue in the six months ended June 30, 2016. The reduction in research and development expenses was due to lower bonus accruals and lower expenditures for engineering proto-types. Current research and development expenditures are primarily focused on continued development of our MRS technology and related products, including 3D sensor subsystems, enhancements to the SQ3000 3D AOI system and the CyberGage®360 3D scanning system. In addition, research and development remains underway to determine the applicability of our MRS sensor technology to mid-end and front-end semiconductor inspection.

Selling, general and administrative expenses were $4.1 million or 25% of revenue in the three months ended June 30, 2017, compared to $4.0 million or 22% of revenue in the three months ended June 30, 2016. Selling, general and administrative expenses were $8.0 million or 28% of revenue in the six months ended June 30, 2017, compared to $7.5 million or 20% of revenue in the six months ended June 30, 2016. The increase in selling, general and administrative expenses was due to additional investment in marketing programs, and for additional sales and marketing personnel to support anticipated future sales growth. These cost increases were offset in part by lower incentive compensation expenses due to reduced levels of revenue and profitability. Stock compensation expense was also lower in the three and six months ended June 30, 2017, compared to the three and six months ended June 30, 2016.

We anticipate that total operating expenses in the third quarter of 2017 will be comparable to the second quarter of 2017.

Interest Income and Other

Interest income and other includes interest earned on investments and gains and losses associated with foreign currency transactions, including intercompany financing transactions associated with our subsidiaries in the United Kingdom, Singapore and China. Because we maintain our investments in instruments designed to avoid risk of loss of principal, we have generated very little interest income in the current interest rate environment. We recognized losses from foreign currency transactions, primarily intercompany financing transactions, of $50,000 in the three months ended June 30, 2017compared to a gain of $97,000 in the three months ended June 30, 2016. We recognized losses from foreign currency transactions, primarily intercompany financing transactions, of $155,000 in the six months ended June 30, 2017 compared to a gain of $3,000 in the six months ended June 30, 2016.

Income Taxes

We recorded income tax expense of $539,000 in the three months ended June 30, 2017, compared to $44,000 in the three months ended June 30, 2016. We recorded income tax expense of $126,000 in the six months ended June 30, 2017, compared to $87,000 in the six months ended June 30, 2016. During the fourth quarter of 2016, we substantially reduced the valuation allowances recorded against our United States and Singapore based deferred tax assets, primarily due to significant improvement in our operating results and financial outlook. In the six months ended June 30, 2017, our income tax provision primarily reflects a 32.5% effective income tax rate and excess tax benefits from employee share-based payments. Effective January 1, 2017, we adopted Accounting Standards Update No. 2016-09, *Improvements to Employee Share-Based Payment Accounting,* which requires recognition of excess tax benefits or tax deficiencies from employee share-based payments in income tax expense or benefit as a discrete item in the reporting period in which they occur. In the three months ended June 30, 2017, the recognized excess tax benefit from employee share-based payments was inconsequential. In the six months ended June 30, 2017, we recognized a $208,000 excess tax benefit from employee-share based payments. Income tax expense in the three and six months ended June 30, 2016, included U.S. federal alternative minimum taxes, minimal state income tax expense and foreign income tax expense incurred by our subs