CABOT MICROELECTRONICS CORP
Form 10-Q
August 06, 2018
UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

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

For the quarterly period ended

June 30, 2018
or

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

For the transition period from ________ to ________

Commission File Number 000-30205

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

DELAWARE	36-4324765
(State of Incorporation)	(I.R.S. Employer Identification No.)

870 NORTH COMMONS DRIVE	60504
AURORA, ILLINOIS	(Zip Code)
(Address of principal executive offices)	

Registrant's telephone number, including area code: (630) 375-6631

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 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 (Section 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 X NO

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 definitions of "large accelerated filer," "accelerated filer," smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

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 Exchange Act).

YES NOX

As of July 31, 2018, the Company had 25,551,252 shares of Common Stock, par value $0.001 per share, outstanding.

CABOT MICROELECTRONICS CORPORATION

INDEX

INDEX
PART I. FINANCIAL INFORMATION
ITEM 1.

CABOT MICROELECTRONICS CORPORATION
CONSOLIDATED STATEMENTS OF INCOME
(Unaudited and in thousands, except per share amounts)

	Three Months Ended June 30,		Nine Months Ended June 30,	
	2018	2017	2018	2017
Revenue	$150,437	$127,957	$433,394	$370,395
Cost of goods sold	69,737	65,414	203,635	186,316
Gross profit	80,700	62,543	229,759	184,079
Operating expenses:				
Research, development and technical	13,059	14,333	38,578	41,819
Selling and marketing	6,207	7,346	18,833	22,166
General and administrative	19,504	13,953	56,218	41,148
Total operating expenses	38,770	35,632	113,629	105,133
Operating income	41,930	26,911	116,130	78,946
Interest expense	513	1,117	2,803	3,402
Other income (expense), net	1,627	(115)	3,361	1,115
Income before income taxes	43,044	25,679	116,688	76,659
Provision for income taxes	7,873	5,740	54,863	16,209
Net income	$35,171	$19,939	$61,825	$60,450
Basic earnings per share (in dollars per share)	$1.37	$0.79	$2.42	$2.42
Weighted average basic shares outstanding (in shares)	25,612	25,228	25,479	24,941
Diluted earnings per share (in dollars per share)	$1.34	$0.77	$2.35	$2.37
Weighted average diluted shares outstanding (in shares)	26,319	25,721	26,222	25,450
Dividends per share (in dollars per share)	$0.40	$0.20	$1.00	$0.58

The accompanying notes are an integral part of these Consolidated Financial Statements.

INDEX

CABOT MICROELECTRONICS CORPORATION
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(Unaudited and in thousands)

	Three Months Ended June 30,		Nine Months Ended June 30,	
	2018	2017	2018	2017
Net income	$35,171	$19,939	$61,825	$60,450
Other comprehensive income (loss), net of tax:				
Foreign currency translation adjustments	(8,829)	(2,635)	2,276	(6,326)
Net unrealized gain (loss) on available-for-sale securities	(48)	-	(48)	-
Net unrealized gain (loss) on cash flow hedges	(210)	1	(63)	819
Other comprehensive income (loss), net of tax	(9,087)	(2,634)	2,165	(5,507)
Comprehensive income	$26,084	$17,305	$63,990	$54,943

The accompanying notes are an integral part of these Consolidated Financial Statements.

INDEX
CABOT MICROELECTRONICS CORPORATION
CONSOLIDATED BALANCE SHEETS
(Unaudited and in thousands, except share amounts)

	June 30, 2018	September 30, 2017
ASSETS		
Current assets:		
Cash and cash equivalents	$186,124	$397,890
Available-for-sale securities	124,455	-
Accounts receivable, less allowance for doubtful accounts of $1,817 at June 30, 2018, and $1,747 at September 30, 2017	74,017	64,793
Inventories	77,302	71,873
Prepaid expenses and other current assets	29,008	16,426
Total current assets	490,906	550,982
Property, plant and equipment, net	108,569	106,361
Goodwill	101,059	101,932
Other intangible assets, net	36,982	42,710
Deferred income taxes	13,067	21,598
Other long-term assets	8,899	10,517
Total assets	$759,482	$834,100
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$18,290	$17,624
Current portion of long-term debt	-	10,938
Accrued expenses, income taxes payable and other current liabilities	72,009	62,651
Total current liabilities	90,299	91,213
Long-term debt, net of current portion, less prepaid debt issuance cost of $441 at September 30, 2017	-	132,997
Deferred income taxes	62	63
Other long-term liabilities	34,940	14,790
Total liabilities	125,301	239,063
Commitments and contingencies (Note 10)		
Stockholders' equity:		
Common Stock: Authorized: 200,000,000 shares, $0.001 par value; Issued: 35,806,136 shares at June 30, 2018, and 35,230,742 shares at September 30, 2017	36	35
Capital in excess of par value of common stock	615,543	580,938
Retained earnings	433,818	397,881
Accumulated other comprehensive income	6,114	3,949
Treasury stock at cost, 10,262,236 shares at June 30, 2018, and 9,948,190 shares at September 30, 2017	(421,330)	(387,766)
Total stockholders' equity	634,181	595,037
Total liabilities and stockholders' equity	$759,482	$834,100

The accompanying notes are an integral part of these Consolidated Financial Statements.

5

INDEX
CABOT MICROELECTRONICS CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited and amounts in thousands)

	Nine Months Ended June 30, 2018	2017
Cash flows from operating activities:		
Net income	$61,825	$60,450
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	19,527	19,530
Provision for doubtful accounts	80	25
Share-based compensation expense	14,269	9,716
Deemed repatriation transition tax	24,641	-
Deferred income tax expense	9,280	2,081
Non-cash foreign exchange (gain)	(1,340)	470
Loss (gain) on disposal of property, plant and equipment	45	(621)
Impairment of assets	-	860
Realized loss on the sale of available-for-sale securities	117	-
(Gain) on sale of assets	(956)	-
Other	4,030	(323)
Changes in operating assets and liabilities:		
Accounts receivable	(9,612)	(5,638)
Inventories	(5,526)	(247)
Prepaid expenses and other assets	(12,482)	(3,405)
Accounts payable	473	(1,186)
Accrued expenses, income taxes payable and other liabilities	(375)	8,304
Net cash provided by operating activities	103,996	90,016
Cash flows from investing activities:		
Additions to property, plant and equipment	(15,245)	(15,901)
Proceeds from the sale of property, plant and equipment	-	637
Proceeds from the sale of assets	3,027	-
Purchases of available-for-sale securities	(178,412)	-
Proceeds from the sale and maturities of available-for-sale securities	55,194	175
Settlement of net investment hedge	(9,882)	-
Net cash used in investing activities	(145,318)	(15,089)
Cash flows from financing activities:		
Repayment of long-term debt	(144,375)	(7,656)
Repurchases of common stock	(33,072)	(5,882)
Proceeds from issuance of stock	20,297	27,561
Dividends paid	(20,507)	(13,977)
Tax benefits associated with share-based compensation expense	-	5,826
Net cash provided by (used in) financing activities	(177,657)	5,872
Effect of exchange rate changes on cash	7,213	(4,376)
(Decrease) increase in cash and cash equivalents	(211,766)	76,423
Cash and cash equivalents at beginning of period	397,890	287,479
Cash and cash equivalents at end of period	$186,124	$363,902

Supplemental disclosure of non-cash investing and financing activities:		
Purchases of property, plant and equipment in accrued liabilities and accounts payable at the end of the period	$1,588	$2,018

The accompanying notes are an integral part of these Consolidated Financial Statements.

INDEX

CABOT MICROELECTRONICS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited and in thousands, except share and per share amounts)

1. BACKGROUND AND BASIS OF PRESENTATION

Cabot Microelectronics Corporation ("Cabot Microelectronics", "the Company", "us", "we", or "our") supplies high-performance polishing slurries and pads used in the manufacture of advanced integrated circuit (IC) devices within the semiconductor industry, in a process called chemical mechanical planarization (CMP). CMP polishes surfaces at an atomic level, thereby helping to enable IC device manufacturers to produce smaller, faster and more complex IC devices with fewer defects. We develop, produce and sell CMP slurries for polishing many of the conducting and insulating materials used in IC devices. We develop, manufacture and sell CMP polishing pads, which are used in conjunction with slurries in the CMP process. We also develop and provide products for demanding surface modification applications in other industries through our Engineered Surface Finishes (ESF) business. For additional information, refer to Part 1, Item 1, "Business", in our Annual Report on Form 10-K for the fiscal year ended September 30, 2017.

The unaudited Consolidated Financial Statements have been prepared by Cabot Microelectronics pursuant to the rules of the Securities and Exchange Commission (SEC) and accounting principles generally accepted in the United States of America (U.S. GAAP). In the opinion of management, these unaudited Consolidated Financial Statements include all adjustments, consisting of normal recurring adjustments, necessary for the fair statement of Cabot Microelectronics' financial position as of June 30, 2018, cash flows for the nine months ended June 30, 2018 and June 30, 2017, and results of operations for the three and nine months ended June 30, 2018 and June 30, 2017. The Consolidated Balance Sheets as of September 30, 2017 were derived from audited financial statements. The results of operations for the three and nine months ended June 30, 2018 may not be indicative of results to be expected for future periods, including the fiscal year ending September 30, 2018. This Report on Form 10-Q does not contain all of the footnote disclosures from the annual financial statements and should be read in conjunction with the Consolidated Financial Statements and related notes thereto included in Cabot Microelectronics' Annual Report on Form 10-K for the fiscal year ended September 30, 2017.

The Consolidated Financial Statements include the accounts of Cabot Microelectronics and its subsidiaries. All intercompany transactions and balances between the companies have been eliminated as of June 30, 2018.

USE OF ESTIMATES

The preparation of financial statements and related disclosures in conformity with U.S. GAAP requires management to make judgments, assumptions and estimates that affect the amounts reported in the Consolidated Financial Statements and accompanying notes. The accounting estimates that require management's most difficult and subjective judgments include, but are not limited to, those estimates related to bad debt expense, inventory valuation, valuation and classification of auction rate securities, impairment of long-lived assets and investments, business combinations, goodwill, other intangible assets, interest rate swaps, share-based compensation, income taxes and contingencies. We base our estimates on historical experience, current conditions and on various other assumptions that we believe are reasonable under the circumstances. However, future events are subject to change and estimates and judgments routinely require adjustment. Actual results may differ from these estimates under different assumptions or conditions.

The results of operations for the quarter ended December 31, 2017 and nine months ended June 30, 2018 include a correction to prior period amounts, which we determined to be immaterial to the prior periods to which they relate and are expected to be immaterial to our fiscal 2018 results. The adjustments, relating primarily to accumulated earnings taxes of a foreign operation, increased the income tax expense for the first quarter of fiscal 2018 by $2,071. Separately, in Note 14 of this Report on Form 10-Q, we discuss the effects of the Tax Cuts and Jobs Act ("Tax Act") on our financial statements.

2. AVAILABLE-FOR-SALE SECURITIES

The Company has a managed investment arrangement with a third party to invest in fixed income securities. These assets were classified as available-for-sale securities and were recorded at fair value. We have presented these securities on the Consolidated Balance Sheets as of June 30, 2018 as a current asset due to management's intent to use these funds for current business requirements. Unrealized gains and losses, net of the related tax effect, are recorded within other comprehensive income. Realized gains and losses, interest and dividends are recorded in the other income (expense), net line item of the Consolidated Statements of Income. Cash flows from purchases, sales and maturities of these securities are presented as investing activities on the Consolidated Statements of Cash Flows.

INDEX

Available-for-sale securities consist of the following as of June 30, 2018:

	Amortized Cost	Unrealized Gains	Unrealized Losses	Estimated Fair Value
Available-for-sale securities:				
Asset backed securities	$ 13,900	$ 1	$ -	$ 13,901
Certificates of deposit	2,439	3	-	2,442
Commercial paper	7,756	-	(2)	7,754
Corporate debt securities	75,312	-	(52)	75,260
U.S. Treasuries	25,094	4	-	25,098
Total available-for-sale securities	$ 124,501	8	$ (54)	$ 124,455

Available-for-sale securities, by contractual maturity, as of June 30, 2018 are as follows:

	Amortized Cost	Estimated Fair Value
Mature in one year or less	$ 79,397	$ 79,373
Mature after one year through four years	45,104	45,082
	$ 124,501	$ 124,455

3. FAIR VALUE OF FINANCIAL INSTRUMENTS

Fair value is defined as the price that would be received from the sale of an asset or paid to transfer a liability (an 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. The Financial Accounting Standards Board ("FASB") established a three-level hierarchy for disclosure based on the extent and level of judgment used to estimate fair value. Level 1 inputs consist of valuations based on quoted market prices in active markets for identical assets or liabilities. Level 2 inputs consist of valuations based on quoted prices for similar assets or liabilities, quoted prices for identical assets or liabilities in an inactive market, or other observable inputs. Level 3 inputs consist of valuations based on unobservable inputs that are supported by little or no market activity.

The following table presents financial instruments, other than long-term debt, that we measured at fair value on a recurring basis at June 30, 2018 and September 30, 2017. See Note 8 for a detailed discussion of our long-term debt. We have classified the following assets and liabilities in accordance with the fair value hierarchy set forth in the applicable standards. In instances where the inputs used to measure the fair value of an asset fall into more than one level of the hierarchy, we have classified them based on the lowest-level input that is significant to the determination of the fair value.

INDEX

June 30, 2018	Level 1	Level 2	Level 3	Total Fair Value
Assets:				
Cash and cash equivalents	$174,089	$12,035	$ -	$186,124
Other long-term investments	1,089	-	-	1,089
Available-for-sale securities:				
Asset Backed Securities		13,901		13,901
Certificates of Deposit		2,442		2,442
Commercial Paper		7,754		7,754
Corporate debt securities		75,260		75,260
U.S. Treasuries		25,098		25,098
Derivative financial instruments	-	8	-	8
Total assets	$175,178	$136,498	$ -	$311,676
Liabilities:				
Derivative financial instruments	-	44	-	44
Total liabilities	$-	$44	$ -	$44

September 30, 2017	Level 1	Level 2	Level 3	Total Fair Value
Assets:				
Cash and cash equivalents	$397,890	$-	$ -	$397,890
Other long-term investments	929	-	-	929
Derivative financial instruments	-	263	-	263
Total assets	$398,819	$263	$ -	$399,082
Liabilities:				
Derivative financial instruments	-	1,881	-	1,881
Total liabilities	$-	$1,881	$ -	$1,881

Our cash and cash equivalents consist of various bank accounts used to support our operations and investments in institutional money-market funds that are traded in active markets. We are invested exclusively in AAA-rated, prime institutional money market funds, comprised of high quality, fixed income securities. Our other long-term investments represent the fair value of investments under the Cabot Microelectronics Supplemental Employee Retirement Plan (SERP), which is a nonqualified supplemental savings plan. The fair value of the investments is determined through quoted market prices within actively traded markets. Although the investments are allocated to individual participants and investment decisions are made solely by those participants, the SERP is a nonqualified plan. Consequently, the Company owns the assets and the related offsetting liability for disbursement until a participant makes a qualifying withdrawal. The long-term investment was adjusted to $1,089 in the third quarter of fiscal 2018 to reflect its fair value as of June 30, 2018.

We use an investment pricing valuation methodology of a third-party service provider to determine fair values of our available-for-sale securities, consisting of fixed income securities that are under our managed investment arrangement; these are listed in Note 2 of this report on Form 10-Q. Our available-for-sale securities are valued using a market-based valuation methodology at the end of each reporting period. Market-based valuation is determined on the basis of the last reported sale price or market quotation, typically obtained from the third-party service provider. Market quotations may also include exchange trades and publicly-available bid/offer data from established market makers or quotation systems. All available-for-sale securities are classified as Level 2 based upon inputs other than quoted prices with observable market data.

INDEX

The fair value of our derivative instruments is estimated using standard valuation models and market-based observable inputs over the contractual term, including one-month LIBOR-based yield curves for interest rate swaps, and forward rates and/or the Overnight Index Swap (OIS) curve for forward foreign exchange contracts, among others. We consider the risk of nonperformance, including counterparty credit risk, in the calculation of the fair value of derivative financial instruments. Our derivative financial instruments include forward foreign exchange contracts and interest rate swaps. We terminated our interest rate swap agreements during the quarter, in connection with the extinguishment of debt. In the fourth quarter of fiscal 2017, we entered into forward foreign exchange contracts in an effort to protect our net investment in a foreign operation against potential adverse changes resulting from foreign currency fluctuation. This net investment hedge was terminated during the quarter driven by a significant repatriation of funds from this foreign operation. See Note 9 of this Report on Form 10-Q for more information on our use of derivative financial instruments.

4. INVENTORIES

Inventories consisted of the following:

	June 30, 2018	September 30, 2017
Raw materials	$40,255	$ 36,415
Work in process	8,036	7,365
Finished goods	29,011	28,093
Total	$77,302	$ 71,873

5. GOODWILL AND OTHER INTANGIBLE ASSETS

Goodwill was $101,059 as of June 30, 2018, and $101,932 as of September 30, 2017. The decrease in goodwill was due to $178 in foreign exchange fluctuations of the New Taiwan dollar, and a $695 decrease related to the sale of certain ESF assets. As a result of this sale of assets in March 2018, we received net proceeds of $3,277, of which $250 is held in escrow, and recorded a gain of $956 in other income in the Consolidated Statements of Income.

The components of other intangible assets are as follows:

	June 30, 2018		September 30, 2017	
	Gross Carrying Amount	Accumulated Amortization	Gross Carrying Amount	Accumulated Amortization
Other intangible assets subject to amortization:				
Product technology	$46,273	$ 21,444	$42,287	$ 17,604
Acquired patents and licenses	8,270	8,250	8,270	8,241
Trade secrets and know-how	2,550	2,550	2,550	2,550
Customer relationships, distribution rights and other	28,061	17,098	28,229	15,421
Total other intangible assets subject to amortization	85,154	49,342	81,336	43,816
Other intangible assets not subject to amortization:				
In-process technology	-		4,000	

Other indefinite-lived intangibles*	1,170		1,190	
Total other intangible assets not subject to amortization	1,170		5,190	
Total other intangible assets	$86,324	$ 49,342	$86,526	$ 43,816

*Other indefinite-lived intangible assets not subject to amortization consist primarily of trade names.

During the first quarter of fiscal 2018, development of our in-process technology was completed, and we reclassified $4,000 to product technology under other intangible assets subject to amortization.

INDEX

Amortization expense on our intangible assets was $1,780 and $5,716 for the three and nine months ended June 30, 2018, respectively, and was $1,935 and $5,860 for the three and nine months ended June 30, 2017, respectively. Estimated future amortization expense for the five succeeding fiscal years is as follows:

Fiscal Year	Estimated Amortization Expense
Remainder of 2018	$ 1,780
2019	7,119
2020	7,115
2021	7,108
2022	7,108

In the first quarter of fiscal 2018, we adopted ASU No. 2017-04 "Simplifying the Test for Goodwill Impairment." The provisions of this standard eliminate Step 2 from the goodwill impairment test, which required an entity to determine the fair value of its assets and liabilities at the impairment testing date of its goodwill and compare it to its carrying amount to determine a possible impairment loss. Goodwill impairment quantification is now done by comparing the fair value of a reporting unit and its carrying amount.

We completed our annual impairment test during our fourth quarter of fiscal 2017 and concluded that no impairment existed. There were no indicators of potential impairment during the quarter ended June 30, 2018, so it was not necessary to perform an impairment review for goodwill and indefinite-lived intangible assets during the quarter. There have been no impairment charges recorded on the goodwill for any of our reporting units.

6. OTHER LONG-TERM ASSETS

Other long-term assets consisted of the following:

	June 30, 2018	September 30, 2017
Auction rate securities (ARS)	$3,975	$ 5,319
Long-term contract assets	1,809	2,115
Other long-term assets	2,026	2,154
Other long-term investments	1,089	929
Total	$8,899	$ 10,517

Our ARS investment at June 30, 2018 consisted of one tax exempt municipal debt security with a par and fair value of $3,975 which has a maturity greater than ten years. The balance of our ARS investment decreased due to redemption of one of our securities during the quarter. The fair value of our ARS was determined using Level 2 fair value inputs. We have classified our ARS as held-to-maturity security based on our intention and ability to hold the security until maturity. There was no unrecognized gain or loss on our ARS investment during the quarter. Although we believe this security will ultimately be collected in full, we believe that it is not likely that we will be able to monetize the security in our next business cycle (which for us is generally one year). We will continue to monitor our ARS for impairment indicators, which may require us to record an impairment charge that is deemed other-than-temporary.

11

INDEX

In the third quarter of fiscal 2015, we amended a supply agreement with an existing supplier. The amended agreement includes a fee of $4,500, of which we already have paid $3,000, which provides us the option to purchase certain raw materials beyond calendar 2016 through the expiration of the agreement in December 2019. This fee was recorded as a long-term asset at its present value and is being amortized into cost of goods sold on a straight-line basis through the expiration date of the agreement. See Note 10 for more information regarding this agreement.

Other long-term assets are comprised of the long-term portion of prepaid unamortized debt costs, related to our Revolving Credit Facility, as well as miscellaneous deposits and prepayments on contracts extending beyond the next twelve months. As discussed in Note 3, we recorded a long-term asset and a corresponding long-term liability of $1,089 representing the fair value of our SERP investments as of June 30, 2018.

7. ACCRUED EXPENSES, INCOME TAXES PAYABLE AND OTHER CURRENT LIABILITIES

Accrued expenses, income taxes payable and other current liabilities consisted of the following:

	June 30, 2018	September 30, 2017
Accrued compensation	$30,205	$ 35,332
Income taxes payable	14,255	9,717
Dividends payable	10,687	5,314
Goods and services received, not yet invoiced	3,763	2,172
Deferred revenue and customer advances	3,296	1,559
Warranty accrual	220	247
Taxes, other than income taxes	2,213	1,688
Current portion of long-term contract liability	1,473	1,500
Other accrued expenses	5,897	5,122
Total	$72,009	$ 62,651

8. DEBT

On February 13, 2012, we entered into a credit agreement (the "Credit Agreement") among the Company, as Borrower, Bank of America, N.A., as administrative agent, swing line lender and an L/C issuer, Bank of America, Merrill Lynch and J.P. Morgan Securities LLC, as joint lead arrangers and joint book managers, JPMorgan Chase Bank, N.A., as syndication agent, and Wells Fargo Bank, N.A. as documentation agent. The Credit Agreement provided us with a $175,000 term loan (the "Term Loan"), which we drew on February 27, 2012 to fund approximately half of the special cash dividend we paid to our stockholders on March 1, 2012, and a $100,000 revolving credit facility (the "Revolving Credit Facility"), which has never been drawn, with sub-limits for multicurrency borrowings, letters of credit and swing-line loans. The Term Loan and the Revolving Credit Facility are referred to as the "Credit Facilities." On June 27, 2014, we entered into an amendment (the "Amendment") to the Credit Agreement, which (i) increased term loan commitments by $17,500, from $157,500 to $175,000, the same level as the original amount under the Credit Agreement at its inception in 2012; (ii) increased the uncommitted accordion feature on the Revolving Credit Facility from $75,000 to $100,000; (iii) extended the expiration date of the Credit Facilities from February 13, 2017 to June 27, 2019; (iv) relaxed the consolidated leverage ratio financial covenant; and (v) revised certain pricing terms and other terms within the Credit Agreement. On June 27, 2014, we drew the $17,500 of increased term loan commitments, bringing the total outstanding commitments under the Term Loan to $175,000.

The enactment of the Tax Act in the United States in December 2017 facilitated the repatriation of a substantial amount of the Company's non-U.S. cash. In April 2018, the Company paid off its remaining outstanding Term Loan pursuant to the Credit Agreement. There was no penalty upon the Company's prepayment of the Term Loan. As a result of this early extinguishment of the Term Loan, we expensed the remaining $315 of unamortized debt issuance cost in the third quarter of fiscal 2018. In conjunction with the payoff the Term Loan, we terminated the related interest rate swaps, and recognized a gain of $532 in the Consolidated Statements of Income.

INDEX

Although there are currently no borrowings on the Revolving Credit Facility, if we were to draw down on it, the borrowings under the amended Credit Facilities (other than in respect of swing-line loans) would bear interest at a rate per annum equal to the "Applicable Rate" (as defined below) plus, at our option, either (1) a LIBOR rate determined by reference to the cost of funds for deposits in the relevant currency for the interest period relevant to such borrowing or (2) the "Base Rate", which is the highest of (x) the prime rate of Bank of America, N.A., (y) the federal funds rate plus 1/2 of 1.00% and (z) the one-month LIBOR rate plus 1.00%. The current Applicable Rate for borrowings under the amended Credit Facilities is 1.50%, with respect to LIBOR borrowings and 0.25% with respect to Base Rate borrowings, with such Applicable Rate subject to adjustment based on our consolidated leverage ratio. Swing-line loans bear interest at the Base Rate plus the Applicable Rate for Base Rate loans under the Revolving Credit Facility. We pay a quarterly commitment fee to the lenders under the Revolving Credit Facility in respect of the unutilized commitments thereunder. As amended, the fee ranges from 0.20% to 0.30%, based on our consolidated leverage ratio. We also pay letter of credit fees as necessary. All obligations under the Credit Agreement are guaranteed by certain of our existing and future direct and indirect domestic subsidiaries. The obligations under the Credit Agreement and guarantees of those obligations are secured, subject to certain exceptions, by first priority liens and security interests in the assets of the Company and certain of its domestic subsidiaries.

As of September 30, 2017, unamortized debt issuance costs related to our Term Loan that were presented as a reduction of long-term debt were $441, and these costs were subsequently recorded in interest expense upon payoff of the Term Loan. Unamortized debt issuance costs related to our Revolving Credit Facility were not material.

The Credit Agreement contains covenants that restrict the ability of the Company and its subsidiaries to take certain actions, including, among other things and subject to certain significant exceptions: creating liens, incurring indebtedness, making investments, engaging in mergers, selling property, paying dividends or amending organizational documents. The Credit Agreement requires us to comply with certain financial ratio maintenance covenants. These include a maximum consolidated leverage ratio of 2.75 to 1.00 and a minimum consolidated fixed charge coverage ratio of 1.25 to 1.00 for the period January 1, 2016 through the expiration of the Credit Agreement. As of June 30, 2018, our consolidated leverage ratio was 0.00 to 1.00 and our consolidated fixed charge coverage ratio was 3.74 to 1.00. The Credit Agreement also contains customary affirmative covenants and events of default. We believe we are in compliance with these covenants.

9. DERIVATIVE FINANCIAL INSTRUMENTS

We are exposed to various market risks, including risks associated with interest rates and foreign currency exchange rates. We enter into certain derivative transactions to mitigate the volatility associated with these exposures. We have policies in place that define acceptable instrument types we may enter into and we have established controls to limit our market risk exposure. We do not use derivative financial instruments for trading or speculative purposes. In addition, all derivatives, whether designated in hedging relationships or not, are required to be recorded on the Consolidated Balance Sheets at fair value on a gross basis.

Cash Flow Hedges – Interest Rate Swap Agreements

In the first quarter of fiscal 2015, we entered into floating-to-fixed interest rate swap agreements to hedge the variability in LIBOR-based interest payments on $86,406 of our outstanding variable rate debt. The notional amount of the swaps decreased each quarter by an amount in proportion to our scheduled quarterly principal payment of debt. The interest rate swap agreements were terminated during the third quarter of fiscal 2018 in conjunction with the payoff of the Term Loan.

We designated these swap agreements as cash flow hedges pursuant to ASC 815, "Derivatives and Hedging". As cash flow hedges, unrealized gains were recognized as assets and unrealized losses were recognized as liabilities. Unrealized gains and losses were designated as effective or ineffective based on a comparison of the changes in fair value of the interest rate swaps and changes in fair value of the underlying exposures being hedged. The effective portion was recorded as a component of accumulated other comprehensive income or loss, while the ineffective portion was recorded as a component of interest expense. Changes in the method by which we paid interest from one-month LIBOR to another rate of interest could create ineffectiveness in the swaps and result in amounts which were reclassified from other comprehensive income into net income. Hedge effectiveness was tested quarterly to determine if hedge treatment continued to be appropriate.

INDEX

Foreign Currency Contracts Not Designated as Hedges

On a regular basis, we enter into forward foreign exchange contracts in an effort to mitigate the risks associated with currency fluctuations on certain foreign currency balance sheet exposures. These foreign exchange contracts do not qualify for hedge accounting; therefore, the gains and losses resulting from the impact of currency exchange rate movements on our forward foreign exchange contracts are recognized as other income or expense in the accompanying consolidated income statements in the period in which the exchange rates change. As of June 30, 2018 and September 30, 2017, the notional amounts of the forward contracts we held to purchase U.S. dollars in exchange for foreign currencies were $7,907 and $8,176, respectively, and the notional amounts of forward contracts we held to sell U.S. dollars in exchange for foreign currencies were $20,825 and $24,295, respectively.

Net Investment Hedge - Foreign Exchange Contracts

In September 2017, we entered into two forward foreign exchange contracts in an effort to protect the net investment of our South Korean subsidiary against potential adverse changes resulting from currency fluctuations in the Korean won. We entered into forward contracts to sell 100 billion Korean won and buy U.S. dollars, settling in September 2022. We had designated these forward contracts as an effective net investment hedge. As a result of cash repatriation facilitated by the Tax Act, the Company terminated these foreign exchange contracts in the third quarter of fiscal 2018.

Amounts recognized in the Consolidated Statements of Comprehensive Income for our net investment hedge during the nine months ended June 30, 2018 were as follows:

Balance at September 30, 2017	$920
Loss on net investment hedge	8,440
Tax benefit	(2,183)
Balance at June 30, 2018	$7,177

The fair value of our derivative instruments included in the Consolidated Balance Sheets, which was determined using Level 2 inputs, was as follows:

	Consolidated Balance Sheet Location	Asset Derivatives June 30, 2018	Asset Derivatives September 30, 2017	Liability Derivatives June 30, 2018	Liability Derivatives September 30, 2017
Derivatives designated as hedging instruments					
Interest rate swap contracts	Other long-term assets	$ -	$ 117	$-	$ -
	Accrued expenses, income taxes payable and other current liabilities	$ -	$ -	$-	$ 31
Foreign exchange contracts designated as net investment hedge	Other long-term liabilities	$ -	$ -	$-	$ 1,442
Derivatives not designated as hedging instruments					
Foreign exchange contracts	Prepaid expenses and other current assets	$ 8	$ 146	$-	$ -
		$ -	$ -	$44	$ 408

Accrued expenses, income taxes payable
and other current liabilities

14

INDEX

The following table summarizes the effect of our derivative instruments on our Consolidated Statements of Income for the three and nine months ended June 30, 2018 and 2017:

		Gain (Loss) Recognized in Statement of Income			
		Three Months Ended		Nine Months Ended	
	Statement of Income Location	June 30, 2018	June 30, 2017	June 30, 2018	June 30, 2017
Derivatives not designated as hedging instruments					
Foreign exchange contracts	Other income, net	$(1,080)	$(235)	$(1,002)	$(1,709)

We recorded a $532 gain in other income (expense) on our Consolidated Statements of Income as part of the termination of interest rate swap agreements.

10. COMMITMENTS AND CONTINGENCIES

LEGAL PROCEEDINGS

While we are not involved in any legal proceedings that we believe will have a material impact on our consolidated financial position, results of operations or cash flows, we periodically become a party to legal proceedings in the ordinary course of business.

Refer to Note 18 of "Notes to the Consolidated Financial Statements" in Item 8 of Part II of our Annual Report on Form 10-K for the fiscal year ended September 30, 2017, for additional information regarding commitments and contingencies.

POSTRETIREMENT OBLIGATIONS IN FOREIGN JURISDICTIONS

We have defined benefit plans covering employees in certain foreign jurisdictions as required by local law, which are unfunded. Benefit costs, consisting primarily of service costs, are recorded as fringe benefit expense under cost of goods sold and operating expenses in our Consolidated Statements of Income. The projected benefit obligations and accumulated benefit obligations under all such unfunded plans are updated annually during the fourth quarter of the fiscal year. Benefit payments under all such unfunded plans to be paid over the next ten years are expected to be approximately $5,785. For more information regarding these plans, refer to Note 18 of "Notes to the Consolidated Financial Statements" included in Item 8 of Part II of our Annual Report on Form 10-K for the fiscal year ended September 30, 2017.

PURCHASE OBLIGATIONS

Purchase obligations include take-or-pay arrangements with suppliers, and purchase orders and other obligations entered into in the normal course of business regarding the purchase of goods and services. We have been operating under a fumed silica supply agreement with Cabot Corporation, our former parent company which is not a related party, the current term of which runs through December 2019. This agreement provides us the option to purchase fumed silica, with no minimum purchase requirements as of 2017, for which we have paid a fee of $1,500 in each of calendar years 2017 and 2018, and will pay in 2019. The $1,500 payment due in 2019 is included in accrued expenses on our Consolidated Balance Sheets. As of June 30, 2018, purchase obligations include $1,502 of contractual commitments related to our Cabot Corporation supply agreement for fumed silica.

INDEX

11. ACCUMULATED OTHER COMPREHENSIVE INCOME

The table below summarizes the components of accumulated other comprehensive income (AOCI), net of tax provision/(benefit), as of June 30, 2018 and 2017:

	Foreign Currency Translation	Cash Flow Hedges	Pension and Other Postretirement Liabilities	Available-for-Sale Securities	Total
Balance at September 30, 2017	$ 5,239	$ 46	$ (1,336)	$ -	$ 3,949
Foreign currency translation adjustment, net of tax of $(2,303)	2,276	-	-	-	2,276
Unrealized loss on available-for-sale securities, net of tax of $0	-	-	-	(48)	(48)
Unrealized gain (loss) on cash flow hedges:					
Change in fair value, net of tax of $111	-	319	-	-	319
Reclassification adjustment into earnings, net of tax of $(133)	-	(382)	-	-	(382)
Balance at June 30, 2018	$ 7,515	$ (17)	$ (1,336)	$ (48)	$ 6,114

	Foreign Currency Translation	Cash Flow Hedges	Pension and Other Postretirement Liabilities	Total
Balance at September 30, 2016	$ 11,985	$ (817)	$ (1,612)	$ 9,556
Foreign currency translation adjustment, net of tax of $(1,814)	(6,326)	-	-	(6,326)
Unrealized gain (loss) on cash flow hedges:				
Change in fair value, net of tax of $610	-	1,088	-	1,088
Reclassification adjustment into earnings, net of tax of $(150)	-	(269)	-	(269)
Balance at June 30, 2017	$ 5,659	$ 2	$ (1,612)	$ 4,049

For the nine months ended June 30, 2018, we recorded $2,276 in currency translation gains, net of tax, primarily due to exchange rate fluctuations in the Japanese yen and Korean won versus the U.S. dollar, that are included in other comprehensive income. These gains and losses primarily relate to changes in the U.S. dollar value of assets and liabilities denominated in local currencies when these asset and liability amounts are translated at month-end exchange rates.

12. SHARE-BASED COMPENSATION PLANS

We issue share-based awards under the following programs: our Cabot Microelectronics Corporation 2012 Omnibus Incentive Plan, as amended effective March 7, 2017 (OIP); our Cabot Microelectronics Corporation 2007 Employee Stock Purchase Plan, as Amended and Restated January 1, 2010 (ESPP); and, pursuant to the OIP, our Directors' Deferred Compensation Plan, as amended September 23, 2008 (DDCP), and our 2001 Executive Officer Deposit Share Program (DSP). In March 2017, our stockholders reapproved the material terms of performance-based awards under the OIP for purposes of complying with Section 162(m) of the Internal Revenue Code of 1986, as amended. Prior to March 2012, when our stockholders first approved the OIP, we issued share-based payments under our

Second Amended and Restated Cabot Microelectronics Corporation 2000 Equity Incentive Plan, as amended and restated September 23, 2008 (EIP); our ESPP, and, pursuant to the EIP, the DDCP and DSP. For additional information regarding these programs, refer to Note 13 of "Notes to the Consolidated Financial Statements" included in Item 8 of Part II of our Annual Report on Form 10-K for the fiscal year ended September 30, 2017. Other than the ESPP, all share-based payments granted beginning March 6, 2012 are made from the OIP, and since then, the EIP no longer has been available for any awards.

INDEX

We record share-based compensation expense for all share-based awards, including stock option grants, and restricted stock, restricted stock unit and performance share unit ("PSU") awards, and employee stock purchase plan purchases. We calculate share-based compensation expense using the straight-line approach based on awards ultimately expected to vest, which requires the use of an estimated forfeiture rate. Our estimated forfeiture rate is primarily based on historical experience, but may be revised in future periods if actual forfeitures differ from the estimate. We use the Black-Scholes option-pricing model to estimate the grant date fair value of our stock options and employee stock purchase plan purchases. This model requires the input of highly subjective assumptions, including the price volatility of the underlying stock, the expected term of our stock options, expected dividend yield and the risk-free interest rate. We estimate the expected volatility of our stock options based on a combination of our stock's historical volatility and the implied volatilities from actively-traded options on our stock. We calculate the expected term of our stock options using historical stock option exercise data, and for stock option grants made prior to December 2017, we have added a slight premium to this expected term for employees who meet the definition of retirement-eligible pursuant to their stock option grants during the contractual term of the grant. As of December 2017, the provisions of new stock option grants and restricted stock unit awards state that except in certain circumstances including termination for cause, once an employee meets the retirement eligibility requirements, any remaining unvested share-based awards will continue to vest regardless of termination of service. Consequently, the requisite service period for the award is satisfied upon retirement eligibility. Therefore, for those employees who have met the retirement eligibility at the grant date, we now record the total share-based compensation expense upon award; for those employees who will meet the retirement eligibility during the four-year vesting period, we now record the share-based compensation expense over the period from the grant date through the date of retirement eligibility, rather than over the four-year vesting period stated in the award agreement.

The expected dividend yield represents our annualized dividend in dollars divided by the stock price on the date of grant. The risk-free interest rate is derived from the U.S. Treasury yield curve in effect at the time of grant.

The PSUs that have been awarded may be subject to downward or upward adjustment depending on the total shareholder return achieved by the Company during the particular performance period related to the PSUs, relative to the total shareholder return of the S&P SmallCap 600 Index. We use a third-party service provider to estimate the fair value of the PSUs at grant date by using a Monte Carlo simulation model. This model simulates the stock price movements of the Company and Index constituents using certain assumptions, including the stock price of our company and Index constituents, the risk-free interest rate and stock price volatility.

In the first quarter of fiscal 2018, we adopted ASU No. 2016-09, "Improvements to Employee Share Based Payment Accounting" (Topic 718) (ASU 2016-09) prospectively. The provisions of this standard relate to aspects of the accounting for share-based payments transactions, including income tax consequences, classification of awards as either equity or liabilities, classification of excess tax benefits on the Consolidated Statements of Cash Flows and earnings per share calculations. Upon adoption, we recorded a tax benefit of $2,806 in our Consolidated Statements of Income. The net income, including the impact of the tax benefits, was used to calculate our basic earnings per share under the new guidance. In addition, we have elected to continue to estimate forfeitures under ASC 718 pursuant to the adoption of ASU 2016-09.

During the three and nine months ended June 30, 2018, we recorded $858 and $2,602 of shared-based compensation expense associated with executive transitions, respectively.

Share-based compensation expense for the three and nine months ended June 30, 2018 and 2017, was as follows:

	Three Months Ended June 30,	Nine Months Ended June 30,

	2018	2017	2018	2017
Cost of goods sold	$542	$577	$1,896	$1,670
Research, development and technical	445	444	1,491	1,322
Selling and marketing	290	346	961	1,032
General and administrative	2,909	1,884	9,921	5,692
Total share-based compensation expense	4,186	3,251	14,269	9,716
Tax benefit	(1,023)	(1,052)	(3,272)	(3,219)
Total share-based compensation expense, net of tax	$3,163	$2,199	$10,997	$6,497

For additional information regarding the estimation of fair value, refer to Note 13 of "Notes to the Consolidated Financial Statements" included in Item 8 of Part II of our Annual Report on Form 10-K for the fiscal year ended September 30, 2017.

INDEX

13. OTHER INCOME (EXPENSE), NET

Other income (expense), net, consisted of the following:

	Three Months Ended June 30,		Nine Months Ended June 30,	
	2018	2017	2018	2017
Interest income	$1,141	$659	$3,248	$1,596
Other income (expense)	486	(774)	113	(481)
Total other income (expense), net	$1,627	$(115)	$3,361	$1,115

14. INCOME TAXES

Our effective tax rate was 18.3% and 47.0% for the three and nine months ended June 30, 2018, respectively, compared to a 22.4% and 21.1% effective income tax rate for the three and nine months ended June 30, 2017. The significant increase in our effective tax rate for the nine months ended June 30, 2018 compared to the prior year is primarily driven by discrete adjustments related to the enactment of the Tax Act in the United States in December 2017. Other factors that impacted the Company's effective tax rate for the three and nine months ended June 30, 2018 were primarily related to benefits in excess of compensation cost from share based compensation recorded in the income statement (as opposed to equity prior to October 2017), the absence of benefits of a tax holiday in South Korea that expired as of October 2017, and benefits related to changes in prior year tax positions.

The Tax Act includes broad and complex changes to the U.S. tax code, including but not limited to: (1) reducing the U.S. federal corporate income tax rate to 21% effective January 1, 2018; and (2) requiring a one-time transition tax on certain un-repatriated earnings of foreign subsidiaries that is payable over eight years. For fiscal 2018, we are recording our income tax provision using a blended U.S. statutory tax rate of 24.5%, which is based on a proration of the applicable tax rates before and after the Tax Act. The U.S. statutory tax rate of 21% will apply for fiscal 2019 and beyond.

As a result of the Tax Act, the SEC staff issued accounting guidance that provides up to a one-year measurement period during which a company may complete its accounting for the impacts of the Tax Act (SAB 118). To the extent that a company's accounting for certain income tax effects of the Tax Act is incomplete but for which the company is able to determine a reasonable estimate, it must record a provisional estimate in its financial statements. If a company cannot determine a provisional estimate to be included in its financial statements, it should continue to apply the provisions of the tax laws that were in effect immediately before the enactment of the Tax Act.

In connection with our initial analysis of the impact of the Tax Act, we recorded provisional discrete tax expense of $32,880 in the quarter ended December 31, 2017. During the second and third quarters of fiscal 2018, we recorded a reduction of $299 for a change in estimated withholding taxes and the re-measurement of U.S. deferred tax assets and liabilities. For various reasons that are discussed more fully below, we have not completed our accounting for the income tax effects of certain elements of the Tax Act, but we have recorded the following provisional estimates.

Deemed Repatriation Transition Tax: The Deemed Repatriation Transition Tax (Transition Tax) is a tax on previously untaxed accumulated and current earnings and profits (E&P) of certain of our foreign subsidiaries. To determine the amount of the Transition Tax, we must determine, in addition to other factors, the amount of post-1986 E&P of the relevant subsidiaries, as well as the amount of non-U.S. withholding taxes on such earnings. We were able to make an initial estimate, and recorded $24,641 of provisional estimate of Transition Tax, which included U.S.

federal and state tax implications, for the nine months ended June 30, 2018. Of this estimate, $22,450 was included in the other long-term liabilities as of June 30, 2018. In addition, we also recorded a provisional estimate of $6,126 for non-U.S. withholding taxes to be incurred on actual and future distributions of foreign earnings. We are monitoring U.S. federal and state legislative developments for further interpretative guidance and intend to continue to gather additional information, including an updated evaluation of our accumulated earnings and profits from foreign jurisdictions, to refine provisional estimates during the measurement period provided under SAB 118. Previously, the Company maintained an assertion to permanently reinvest the earnings of its non-U.S. subsidiaries outside of the U.S., with certain insignificant exceptions, and therefore, did not record U.S. deferred income taxes or foreign withholding taxes for these earnings. In light of the Tax Act and the associated transition to a territorial tax system the Company decided it will repatriate foreign earnings it expects to generate in the remainder of fiscal 2018, and consequently recorded deferred tax liabilities associated with withholding taxes on such planned distributions.

INDEX

Reduction of U.S. Federal Corporate Tax Rate: The Company re-measured its U.S. deferred tax assets and liabilities and recorded a discrete non-cash tax expense of $1,813 based on the rates at which the deferred tax assets and liabilities are expected to reverse in the future. We are still analyzing certain aspects of the Tax Act and the actual impact of the reduction in the U.S. federal corporate tax rate may be affected by the timing of the reversal of such balances.

The Company is also analyzing other provisions of the Tax Act to determine their impact on the Company's effective tax rate in fiscal year 2018 or in the future, including the following:

Global Intangible Low Taxed Income (GILTI): The Tax Act includes a provision designed to tax GILTI, which we are continuing to evaluate due to its complexity. Under U.S. GAAP, we are allowed to make an accounting policy choice of either: (1) treating taxes due on future U.S. inclusions in taxable income related to GILTI as a current-period expense when incurred (the "period cost method"); or, (2) factoring such amounts into a company's measurement of its deferred taxes (the "deferred method"). We are not yet able to reasonably estimate the effect of the GILTI provision, and have not made any adjustments related to potential GILTI tax in our financial statements. If applicable, GILTI tax would first apply to our fiscal year 2019, and would be accounted for as incurred under the period cost method.

Base Erosion and Anti-Abuse Tax (BEAT): The Tax Act creates a new minimum BEAT liability for corporations that make base erosion payments if the corporation has sufficient gross receipts and derives a sufficient level of "base erosion tax benefits". We are further assessing the provisions of the BEAT, and will evaluate the effects on the Company's financial statements as further information becomes available. If applicable, any BEAT would first apply to the Company in fiscal year 2019, and would be accounted for as incurred under the period cost method.

Foreign Derived Intangible Income (FDII): The Tax Act allows a domestic corporation an immediate deduction in U.S. taxable income for a portion of its FDII. The amount of the deduction will depend in part on the Company's U.S. taxable income. We are still assessing the benefits of the FDII deduction. If applicable, the FDII deduction would first be available to the Company in fiscal year 2019, and would be accounted for under the period cost method.

The Company previously operated under a tax holiday in South Korea in fiscal years 2013 through 2017 in conjunction with our investment in research, development and manufacturing facilities there, which expired at the end of fiscal year 2017. This arrangement allowed for a tax at 50% of the local statutory rate in effect for fiscal years 2016 and 2017, following a 0% tax rate in fiscal years 2013, 2014 and 2015. This tax holiday reduced our income tax provision by approximately $3,094 and increased our diluted earnings per share by approximately $0.12 during the nine months ended June 30, 2017.

15. EARNINGS PER SHARE

Basic earnings per share (EPS) is calculated by dividing net income available to common stockholders by the weighted-average number of common shares outstanding during the period, excluding the effects of unvested restricted stock awards that have a right to receive non-forfeitable dividends, which are considered participating securities as prescribed by the two-class method under ASC 260 "Earnings per Share". Diluted EPS is calculated in a similar manner, but the weighted-average number of common shares outstanding during the period is increased to include the weighted-average dilutive effect of "in-the-money" stock options and unvested restricted stock shares using the treasury stock method.

Pursuant to the adoption of ASU 2016-09 in the first quarter of fiscal 2018, the tax benefits associated with share-based compensation plans were recorded as a tax benefit in our Consolidated Statements of Income. The number of shares that would be repurchased with the proceeds from the tax benefits was excluded from the diluted weighted average shares outstanding using treasury stock method under the new guidance.

INDEX

The standards of accounting for earnings per share require companies to provide a reconciliation of the numerator and denominator of the basic and diluted earnings per share computations. Basic and diluted earnings per share were calculated as follows:

	Three Months Ended June 30,		Nine Months Ended June 30,	
	2018	2017	2018	2017
Numerator:				
Net Income	$35,171	$19,939	$61,825	60,450
Less: income attributable to participating securities	(34)	(52)	(73)	(191)
Earnings available to common shares	$35,137	$19,887	$61,752	60,259
Denominator:				
Weighted average common shares (Denominator for basic calculation)	25,611,505	25,228,468	25,479,078	24,941,190
Weighted average effect of dilutive securities:				
Share-based compensation	707,133	492,247	742,786	508,317
Diluted weighted average common shares (Denominator for diluted calculation)	26,318,638	25,720,715	26,221,864	25,449,507
Earnings per share:				
Basic	$1.37	$0.79	$2.42	2.42
Diluted	$1.34	$0.77	$2.35	2.37

For both the three months ended June 30, 2018 and 2017, approximately 0.1 million shares attributable to outstanding stock options were excluded from the calculation of diluted earnings per share.

For the nine months ended June 30, 2018 and 2017, approximately 0.1 million and 0.4 million shares, respectively, attributable to outstanding stock options were excluded from the calculation of diluted earnings per share.

16. FINANCIAL INFORMATION BY INDUSTRY SEGMENT AND PRODUCT LINE

We operate predominantly in one reportable segment, as defined under ASC 280 "Segment Reporting" – the development, manufacture, and sale of CMP consumables.

Revenue generated by product line for the three and nine months ended June 30, 2018 and 2017, was as follows:

	Three Months Ended June 30,		Nine Months Ended June 30,	
Revenue:	2018	2017	2018	2017
Tungsten slurries	$64,313	$54,731	$187,618	$161,867
Dielectric slurries	36,616	30,266	102,877	87,391
Polishing pads	20,918	17,599	60,813	50,947
Other metals slurries	18,124	16,090	51,476	46,540
ESF and other	10,466	9,271	30,610	23,650

Total revenue	$150,437	$127,957	$433,394	$370,395

INDEX

17. NEW ACCOUNTING PRONOUNCEMENTS

In May 2014, the FASB issued ASU No. 2014-09, "Revenue from Contracts with Customers" (Topic 606), an updated standard on revenue recognition. ASU 2014-09 provides enhancements to how revenue is reported and improves comparability in the financial statements of companies reporting using IFRS and U.S. GAAP. The core principle of the new standard is for companies to recognize revenue for goods or services in amounts that reflect the consideration to which the company expects to be entitled in exchange for those goods or services. The new standard is intended to enhance disclosures about revenue, provide guidance for transactions that were not previously addressed comprehensively, such as service revenue and contract modifications, and improve guidance for multiple-element arrangements. In August 2015, the FASB issued ASU No. 2015-14, "Deferral of Effective Date" (Topic 606). This standard defers the effective date of ASU 2014-09 by one year. ASU 2014-09 will be effective for us beginning October 1, 2018, and may be applied on a full retrospective or modified retrospective approach. In March 2016, the FASB issued ASU No. 2016-08, "Principal versus Agent Considerations (Reporting Revenue Gross versus Net)" (Topic 606). ASU 2016-08 provides clarification for the implementation guidance on principal versus agent considerations. In April 2016, the FASB issued ASU No. 2016-10, ASU No. 2016-11, and ASU 2016-12, and ASU 2017-13 issued in September 2017, all of which provide additional clarification of the original revenue standard. We continue to work to identify potential differences that would result from applying the requirements of the new standard to our revenue contracts, and identify and implement changes to business processes, systems and controls to support recognition and disclosure under the new standard. We anticipate any changes to revenue recognition for our Company are likely to be related to certain pricing and incentive arrangements with our customers within our CMP consumables business, but we believe the recognition of revenue will remain substantially unchanged for the majority of our contracts with customers. We anticipate we will adopt the new revenue standard in the first quarter of fiscal 2019 using the modified retrospective approach to adoption, which will require us to record the cumulative effect of adopting the standard as an adjustment to the beginning balance of retained earnings. We continue to evaluate the impact of the implementation of these standards on our financial statements.

In July 2015, the FASB issued ASU No, 2015-11, "Simplifying the Measurement of Inventory" (Topic 330). The provisions of ASU 2015-11 require an entity to measure inventory at the lower of cost and net realizable value. Net realizable value is the estimated selling price in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. We adopted ASU 2015-11 effective October 1, 2017, and this pronouncement had no material effect on our financial statements.

In January 2016, the FASB issued ASU No. 2016-01, "Recognition and Measurement of Financial Assets and Financial Liabilities" (Subtopic 825-10). The provision of ASU 2016-01 requires equity investments, other than those accounted for under the equity method of accounting or those that result in consolidation, to be measured at fair value with changes in fair value recognized in net income. ASU 2016-01 simplifies the impairment assessment of equity securities by permitting a qualitative assessment each reporting period, and makes changes to presentation and disclosure of certain classes of financial assets and liabilities. ASU 2016-01 will be effective for us beginning October 1, 2018, but early adoption is permitted. We are currently evaluating the impact of implementation of this standard on our financial statements.

In February 2016, the FASB issued ASU No. 2016-02, "Leases" (Topic 842). The provisions of ASU 2016-02 require a dual approach for lessee accounting under which a lessee would recognize a right-of-use asset and a corresponding lease liability. Leases will be classified as either finance or operating leases. For finance leases, a lessee will recognize interest expense and amortization of the right-of-use asset, and for operating leases, the lessee will recognize a straight-line total lease expense. The guidance also requires qualitative and specific quantitative disclosures to supplement the amounts recorded in the financial statements, to afford better understanding of an entity's leasing activities, including any significant judgments and estimates. ASU 2016-02 will be effective for us beginning October 1, 2019, but early adoption is permitted. We are currently evaluating the impact of implementation of this standard on our financial statements.

In March 2016, the FASB issued ASU No. 2016-05, "Effect of Derivative Contract Novations on Existing Hedge Accounting Relationships" (Topic 815). The provisions of ASU 2016-05 provide clarification that a change in a counterparty of a derivative instrument that has been designated as a hedging instrument does not require dedesignation of that hedging relationship, provided that all other hedge accounting criteria is met. ASU 2016-05 will be effective for us beginning October 1, 2018, but early adoption is permitted. We do not believe the adoption of this standard will have a material effect on our financial statements.

In March 2016, the FASB issued ASU No. 2016-07, "Simplifying the Transition to the Equity Method of Accounting" (Topic 323). The provisions of ASU 2016-07 require equity method investors to add the cost of acquiring additional interest in the investee to the current basis of the investor's previously held interest and adopt the equity method prospectively as of the date the investment qualifies for the equity method of accounting. ASU 2016-07 will be effective for us beginning October 1, 2018, but early adoption is permitted. We do not believe the adoption of this standard will have a material effect on our financial statements as we currently have no equity method investments.

INDEX

In June 2016, the FASB issued ASU No. 2016-13, "Measurement of Credit Losses on Financial Instruments" (Topic 326). The provisions of this standard require financial assets measured at amortized cost to be presented at the net amount expected to be collected. An allowance account would be established to present the net carrying value at the amount expected to be collected. ASU 2016-13 also provides that credit losses relating to available-for-sale debt securities should be recorded through an allowance for credit losses. ASU 2016-13 will be effective for us beginning October 1, 2020, but early adoption is permitted as of October 1, 2019. We are currently evaluating the impact of implementation of this standard on our financial statements.

In August 2016, the FASB issued ASU No. 2016-15 "Classification of Certain Cash Receipts and Cash Payments" (Topic 230). The provisions of this standard provide guidance on the classification within the Consolidated Statements of Cash Flows of certain types of cash receipts and cash payments in an effort to eliminate diversity in practice. ASU 2016-15 will be effective for us beginning October 1, 2018, but early adoption is permitted. We do not believe the adoption of this standard will have a material effect on our financial statements as we currently do not have any of the cash receipts or payments discussed in this standard.

In October 2016, the FASB issued ASU No. 2016-16 "Intra-Entity Transfers of Assets Other Than Inventory" (Topic 740). The provisions of this standard provide guidance on recognition of taxes related to intra-entity transfer of assets other than inventory when the transfer occurs. ASU 2016-16 will be effective for us beginning October 1, 2018, but early adoption is permitted. We are currently evaluating the impact of implementation of this standard on our financial statements.

In October 2016, the FASB issued ASU No. 2016-17 "Interest Held through Related Parties That Are under Common Control" (Topic 810). The provisions of this standard provide further guidance related to ASU 2015-02, and provide guidance on consolidation in relation to Variable Interest Entities (VIEs) and related parties. We adopted ASU 2016-17 effective October 1, 2017, and this pronouncement had no material effect on our financial statements as we currently have no interest in any entities that may be considered VIEs.

In January 2017, the FASB issued ASU No. 2017-01 "Clarifying the Definition of a Business" (Topic 805). The provisions of this standard provide guidance to determine whether the acquisition or sale of a set of assets or activities constitutes a business. The standard requires that an integrated set of assets and activities include an input and a substantive process that together contribute to the ability to create output. We adopted ASU 2017-01 effective October 1, 2017, and this pronouncement had no material effect on our financial statements.

In January 2017, the FASB issued ASU No. 2017-04 "Simplifying the Test for Goodwill Impairment" (Topic 350). The provisions of this standard eliminate Step 2 from the goodwill impairment test, which required an entity to determine the fair value of its assets and liabilities at the impairment testing date of its goodwill and compare it to its carrying amount to determine a possible impairment loss. Goodwill impairment quantification will now be done by comparing the fair value of a reporting unit and its carrying amount. We adopted ASU 2017-04 effective October 1, 2017 and we will apply the new guidance in our annual test for goodwill impairment in the fourth quarter of fiscal 2018.

In March 2017, the FASB issued ASU No. 2017-07 "Improving the Presentation of Net Period Pension Cost and Net Period Postretirement Benefit Cost" (Topic 715). The provisions of ASU 2017-07 provided specific guidance on the presentation of the components of net benefit cost. ASU 2017-07 will be effective for us beginning October 1, 2018. We are currently evaluating the impact of implementation of this standard on our financial statements.

In May 2017, the FASB issued ASU No. 2017-09 "Scope of Modification Accounting" (Topic 718). The provisions of ASU 2017-09 provide specific guidance about which changes to the term or conditions of a share-based payment require an entity to apply modification accounting. ASU 2017-09 will be effective for us beginning October 1, 2018.

We are currently evaluating the impact of implementation of this standard on our financial statements.

In August 2017, the FASB issued ASU No. 2017-12 "Derivatives and Hedging" (Topic 815). The provisions of this standard amend the hedge accounting model in ASC 815 to expand an entity's ability to hedge nonfinancial and financial risk components, reduce complexity in fair value hedges of interest rate risk, eliminate the requirement to separately measure and report hedge ineffectiveness, and generally require the entire change in the fair value of a hedging instrument to be presented in the same income statement line as the hedged item. The guidance also eases certain documentation and assessment requirements and modifies the accounting for components excluded from the assessment of hedge effectiveness. ASU 2017-12 will be effective for us beginning October 1, 2019, but early adoption is permitted. We are currently evaluating the impact of implementation of this standard on our financial statements.

INDEX

In February 2018, the FASB issued ASU No. 2018-02 "Income Statement – Reporting Comprehensive Income (Topic 220)". The amendments in this standard allow a company to reclassify the stranded tax effects resulting from the Tax Act from accumulated other comprehensive income to retained earnings. ASU 2018-02 will be effective for us beginning October 1, 2019, but early adoption is permitted. We are currently evaluating the impact of implementation of this standard on our financial statements.

In June 2018, the FASB issued ASU No. 2018-07 " Compensation—Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting". The ASU simplified the accounting for share-based payments granted to nonemployees for goods and services, therefore guidance on such payments to nonemployees would be mostly aligned with the requirements for share-based payments granted to employees. ASU 2018-07 will be effective for us beginning October 1, 2019, but early adoption is permitted (but no earlier than the adoption date of Topic 606). We are currently evaluating the impact of implementation of this standard on our financial statements.

INDEX

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following "Management's Discussion and Analysis of Financial Condition and Results of Operations", as well as disclosures included elsewhere in this Report on Form 10-Q, include "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. This Act provides a safe harbor for forward-looking statements to encourage companies to provide prospective information about themselves so long as they identify these statements as forward-looking and provide meaningful cautionary statements identifying important factors that could cause actual results to differ from the projected results. All statements other than statements of historical fact we make in this Report on Form 10-Q are forward-looking. In particular, the statements herein regarding future sales and operating results; growth or contraction of, and trends in the industry and markets in which the Company participates; the Company's management; various economic or political factors and international or national events, including related to the enactment of trade sanctions, tariffs, or other similar matters; regulatory or legislative activity, including the enactment of the Tax Cuts and Jobs Act ("Tax Act") in December 2017 in the United States; product performance; the generation, protection and acquisition of intellectual property, and litigation related to such intellectual property or third party intellectual property; new product introductions; development of new products, technologies and markets; the Company's supply chain; the financial conditions of the Company's customers; natural disasters; the acquisition of, investment in, or collaboration with other entities; uses and investment of the Company's cash balance, including dividends and share repurchases, which may be suspended, terminated or modified at any time for any reason by the Company, based on a variety of factors; financing facilities and related debt, payoff or payment of principal and interest, and compliance with covenants and other terms; the Company's capital structure; the Company's current or future tax rate, including the effects of the Tax Act in the U.S.; and the operation of facilities by the Company; and statements preceded by, followed by or that include the words "intends," "estimates," "plans," "believes," "expects," "anticipates," "should," "could" or similar expressions, are forward-looking statements. These forward-looking statements involve a number of risks, uncertainties, and other factors, that could cause actual results to differ materially from those described by these forward-looking statements. We assume no obligation to update this forward-looking information. The section entitled "Risk Factors" describes some, but not all, of the factors that could cause these differences.

This section, "Management's Discussion and Analysis of Financial Condition and Results of Operations" (MD&A), should be read in conjunction with our Annual Report on Form 10-K for the fiscal year ended September 30, 2017, including the Consolidated Financial Statements and related notes thereto.

THIRD QUARTER OF FISCAL 2018 OVERVIEW

In our third quarter of fiscal 2018, we experienced continued strong demand for our products, particularly for memory applications. This was driven in part by our memory customers' migration from 2D to 3D NAND, which requires more CMP processing steps. Additionally, continued capacity expansions in 3D NAND, primarily in Korea and China, should continue to provide future growth opportunities for us. In the advanced logic and foundry segments, we believe that new applications in areas such as mobile, artificial intelligence (or AI), and blockchain will continue to drive demand for advanced logic semiconductors going forward. In addition, the legacy logic and foundry area of the industry continues to benefit from growth in applications such as automotive, internet of things, industrial automation, and connectivity requirements, which in turn could drive increasing demand for our products. We believe we remain well positioned to benefit from these long-term demand trends. However, there are many factors that make it difficult for us to predict future revenue trends for our business, including those discussed in Part II, Item 1A entitled "Risk Factors" of this Report on Form 10-Q.

The enactment of the Tax Act in the United States in December 2017 facilitated our repatriation of a substantial amount of non-U.S. cash during the second and third quarters of fiscal 2018. In April 2018, we paid off our existing Term Loan utilizing a portion of this repatriated cash.

Revenue for our third quarter of fiscal 2018 was $150.4 million, which represented an increase of 17.6% from the third quarter of fiscal 2017, with revenue in dielectrics slurries, polishing pads and tungsten slurries increasing 21.0%, 18.9% and 17.5%, respectively, from the same quarter last year. Revenue for the first nine month of fiscal 2018 was $433.4 million, which represented an increase of 17.0% from the comparable period of fiscal 2017.

INDEX

Gross margin, representing gross profit as a percentage of revenue, for the third quarter of fiscal 2018 was 53.6%, compared to 48.9% for our third quarter of fiscal 2017, both periods of which included 90-basis points of adverse impact of NexPlanar amortization expense. Gross margin for the first nine months of fiscal 2018 was 53.0% of revenue, compared to 49.7% during the same period last year, which includes 90 and 100-basis points of adverse impact of NexPlanar amortization expense, comparatively. Factors affecting our gross margin for both the quarter and the first nine months of fiscal 2018 compared to last year included higher sales volume and a higher value product mix, partially offset by higher fixed manufacturing costs, including higher staffing-related expense. We currently expect our gross margin for the full fiscal year 2018 to be at the high end of our revised guidance range of 52% to 53%, including NexPlanar amortization expense; this is an increase from our prior full year guidance range of 51% to 53%. We may continue to experience fluctuations in our gross margin due to a number of factors, including changes in our product mix and the extent to which we utilize our manufacturing capacity, which may cause our annual and quarterly gross margin to be above or below this annual guidance range.

Operating expenses were $38.8 million in our third quarter of fiscal 2018 compared to $35.6 million in the third quarter of fiscal 2017, both periods of which included $0.5 million in NexPlanar amortization expense. The increase in operating expenses from the comparable quarter of fiscal 2017 was primarily due to higher staffing-related expenses and higher professional fees. Operating expenses were $113.6 million in the first nine months of fiscal 2018 compared to $105.1 million during the same period of fiscal 2017, which include $1.4 million of NexPlanar amortization expense for both periods. We currently expect operating expenses for full fiscal year 2018 to be between $150.0 million and $155.0 million, an increase from our prior full year guidance range of $148.0 million to $153.0 million. This includes approximately $1.9 million of NexPlanar amortization expense. We may continue to experience fluctuations in our operating expenses due to a number of factors, including changes in staffing-related expenses, including Short-Term Incentive Program ("STIP") costs, which may cause our operating expenses for the full fiscal year 2018 to be above or below this guidance range.

The Company reported diluted earnings per share of $1.34 in the third quarter of fiscal 2018, compared to diluted earnings per share of $0.77 in the same quarter last year. The increase was primarily due to higher revenue and a higher gross margin, partially offset by higher operating expenses. Diluted earnings per share were $2.35 for the first nine months of fiscal 2018, compared to $2.37 during the same period last year. The year-over-year decrease was primarily due to the negative impact of the enactment of the Tax Act in December 2017, which reduced diluted earnings per share by $1.24, and the positive impact from higher revenue and a higher gross margin, partially offset by higher operating expenses.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES AND EFFECTS OF RECENT ACCOUNTING PRONOUNCEMENTS

We discuss our critical accounting estimates and effects of recent accounting pronouncements in "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in Item 7 of Part II of our Annual Report on Form 10-K for the fiscal year ended September 30, 2017. There have been no material changes in our critical accounting estimates during the first nine months of fiscal 2018. See Note 17 of the Notes to the Consolidated Financial Statements of this Report on Form 10-Q for a discussion of new accounting pronouncements.

INDEX

RESULTS OF OPERATIONS

THREE MONTHS ENDED JUNE 30, 2018, VERSUS THREE MONTHS ENDED JUNE 30, 2017

REVENUE

Revenue was $150.4 million for the three months ended June 30, 2018, which represented a 17.6%, or $22.5 million, increase from the three months ended June 30, 2017. The increase in revenue was primarily driven by a $15.2 million increase due to higher sales volume, a $6.2 million increase due to higher value product mix, and a $1.7 million increase due to foreign exchange fluctuations, partially offset by a $0.6 million decrease due to price changes. The increase in sales volume was consistent with continued overall strong demand conditions in the global semiconductor industry. Revenue from our tungsten slurries, dielectrics slurries and polishing pads increased 17.5%, 21.0% and 18.9%, respectively, from the comparable period of fiscal 2017.

COST OF GOODS SOLD

Total cost of goods sold was $69.7 million for the three months ended June 30, 2018, which represented an increase of 6.6%, or $4.3 million, from the three months ended June 30, 2017. The increase in cost of goods sold was primarily driven by a $3.9 million increase due to higher sales volume, a $1.6 million increase in fixed manufacturing costs, including higher staffing-related expenses, a $0.9 million increase due to foreign exchange fluctuations, and a $0.8 million increase due to product mix, partially offset by a $3.5 million decrease in other variable manufacturing costs, including material costs. Fixed manufacturing costs included $1.3 million of NexPlanar amortization expense compared to $1.2 million in same period of fiscal 2017.

GROSS MARGIN

Our gross margin was 53.6% for the three months ended June 30, 2018, compared to 48.9% for the three months ended June 30, 2017. The increase in gross margin was primarily due to higher sales volume and a higher value product mix, partially offset by higher fixed manufacturing costs, including higher staffing-related expense.

RESEARCH, DEVELOPMENT AND TECHNICAL

Total research, development and technical expenses were $13.1 million for the three months ended June 30, 2018, which represented a decrease of 8.9%, or $1.3 million, from the three months ended June 30, 2017. The decrease was primarily due to the absence of an impairment charge of $0.9 million that occurred in the three months ended June 30, 2017, lower supplies and equipment costs used in research and development of $0.5 million, and lower professional expenses of $0.3 million, partially offset by the absence of a gain on equipment disposal of $0.6 million that occurred in the three months ended June 30, 2017.

Our research, development and technical efforts are focused on the following main areas:

Research related to fundamental CMP technology;
Development of new and enhanced CMP consumable products, including collaboration on joint development projects with technology-leading customers and suppliers;
Process development to support rapid and effective commercialization of new products;
Technical support of CMP products in our customers' research, development and manufacturing facilities; and,

Development of polishing and metrology applications outside of the semiconductor industry.

SELLING AND MARKETING

Selling and marketing expenses were $6.2 million for the three months ended June 30, 2018, which represented a decrease of 15.5%, or $1.1 million, from the three months ended June 30, 2017. The decrease was primarily due to lower staffing-related costs of $0.5 million, the absence of amortization expense of $0.3 million resulting from an intangible asset becoming fully amortized in the prior quarter, and lower information technology expenses of $0.2 million.

INDEX

GENERAL AND ADMINISTRATIVE

General and administrative expenses were $19.5 million for the three months ended June 30, 2018, which represented an increase of 39.8%, or $5.6 million, from the three months ended June 30, 2017. The increase was primarily due to higher staffing-related expenses of $1.9 million, including STIP costs, higher professional expenses of $1.4 million, and executive transition related costs of $1.4 million that occurred in the third quarter of fiscal 2018.

INTEREST EXPENSE

Interest expense was $0.5 million for the three months ended June 30, 2018, which represented a decrease of 54.1%, or $0.6 million for the three months ended June 30, 2017. The decrease resulted from the payoff of our Term Loan in April 2018.

OTHER INCOME (EXPENSE), NET

Other income was $1.6 million for the three months ended June 30, 2018, which represented an increase of 1,514.8%, or $1.7 million, from other expense of $0.1 million for the three months ended June 30, 2017. The increase was primarily due to lower foreign exchange loss of $0.6 million, higher interest income of $0.5 million resulting from higher average interest rates, and gain on the termination of interest rate swap agreements of $0.5 million in the third quarter of fiscal 2018.

PROVISION FOR INCOME TAXES

The Company's effective tax rate for the third quarter of fiscal 2018 was 18.3%, compared to 22.4% in the same quarter last year. The decrease is primarily driven by the decrease in our U.S. corporate income tax rate as a result of the Tax Act, benefit from stock option exercises recorded in the income statement beginning October 2017, benefit related to changes in prior year tax positions, partially offset by the absence of benefits of the tax holiday in South Korea, which expired as of October 2017. The Company continues to expect its effective tax rate for the fourth quarter of fiscal 2018 to be within the range of 21% to 24%. See Note 14 of the Notes to the Consolidated Financial Statements of this Report on Form 10-Q for more information on our income taxes.

NET INCOME

Net income was $35.2 million for the three months ended June 30, 2018, which represented an increase of 76.4%, or $15.2 million, from the three months ended June 30, 2017. The significant increase was primarily due to higher revenue and higher gross margin, partially offset by higher operating expenses.

NINE MONTHS ENDED JUNE 30, 2018, VERSUS NINE MONTHS ENDED JUNE 30, 2017

REVENUE

Revenue was $433.4 million for the nine months ended June 30, 2018, which represented a 17.0%, or $63.0 million, increase from the nine months ended June 30, 2017. The increase in revenue was primarily driven by a $42.4 million increase due to higher sales volume, a $20.4 million increase due to higher value product mix, and a $4.0 million increase due to exchange rate fluctuations, partially offset by a $3.8 million decrease due to price changes. Revenue from tungsten slurries, dielectrics slurries and polishing pads increased 15.9%, 17.7%, and 19.4%, respectively, from the comparable period of fiscal 2017.

COST OF GOODS SOLD

Total cost of goods sold was $203.6 million for the nine months ended June 30, 2018, which represented an increase of 9.3%, or $17.3 million, from the nine months ended June 30, 2017. The increase in cost of goods sold was primarily driven by a $9.9 million increase due to higher sales volume, a $6.9 million increase in fixed manufacturing costs, including higher incentive compensation expense, and a $1.9 million increase due to foreign exchange fluctuations, partially offset by a $5.7 million decrease in variable manufacturing costs, including material costs. Fixed manufacturing costs included $3.9 million of NexPlanar amortization expense, compared to $3.6 million in same period of fiscal 2017.

INDEX

GROSS MARGIN

Our gross margin was 53.0% for the nine months ended June 30, 2018, as compared to 49.7% for the nine months ended June 30, 2017. The increase in gross margin was primarily due to higher sales volume, a higher value product mix, partially offset by higher fixed manufacturing costs, including higher incentive compensation.

RESEARCH, DEVELOPMENT AND TECHNICAL

Total research, development and technical expenses were $38.6 million for the nine months ended June 30, 2018, which represented a decrease of 7.8%, or $3.2 million, from the nine months ended June 30, 2017. The decrease was primarily due to lower professional expenses of $1.0 million, lower supplies and equipment costs used in research and development of $0.7 million, and lower depreciation and amortization expense of $0.6 million.

SELLING AND MARKETING

Selling and marketing expenses were $18.8 million for the nine months ended June 30, 2018, which represented a decrease of 15.0%, or $3.3 million, from the nine months ended June 30, 2017. The decrease was primarily due to lower staffing-related costs of $1.6 million, lower severance expense of $0.7 million, lower information technology expenses of $0.6 million, and lower depreciation and amortization expense of $0.3 million.

GENERAL AND ADMINISTRATIVE

General and administrative expenses were $56.2 million for the nine months ended June 30, 2018, which represented an increase of 36.6%, or $15.1 million, from the nine months ended June 30, 2017. The increase was primarily due to higher staffing-related costs of $4.7 million, including STIP costs, $4.2 million in costs associated with executive transitions, higher long-term incentive compensation expenses of $1.6 million, higher professional expenses of $1.6 million, and higher information technology expenses of $1.2 million.

INTEREST EXPENSE

Interest expense was $2.8 million for the nine months ended June 30, 2018, which represented a decrease of 17.6%, or $0.6 million, from the nine months ended June 30, 2017. The decrease resulted from the payoff of our Term Loan in April 2018.

OTHER INCOME (EXPENSE), NET

Other income was $3.4 million for the nine months ended June 30, 2018, which represented an increase of 201.4%, or $2.2 million, from the nine months ended June 30, 2017. The increase was primarily due to higher interest income of $1.7 million resulting from higher investment balances and higher average interest rates, gain on the sale of certain ESF assets of $1.0 million in the second quarter of fiscal 2018, and gain on the termination of interest rate swap agreements of $0.5 million in the third quarter of fiscal 2018, partially offset by higher foreign exchange loss of $0.4 million.

PROVISION FOR INCOME TAXES

Our effective income tax rate was 47.0% for the nine months ended June 30, 2018 compared to 21.1% for the nine months ended June 30, 2017. The increase in the effective tax rate during the first nine months of fiscal 2018 was primarily due to the unfavorable initial impact of the Tax Act that was enacted in the first quarter of fiscal 2018 and the absence of benefits of the tax holiday in South Korea, which expired as of October 2017, partially offset by the benefit from stock option exercises beginning October 2017 and benefits related to changes in prior year tax positions.

INDEX

NET INCOME

Net income was $61.8 million for the nine months ended June 30, 2018, which represented an increase of 2.3%, or $1.4 million, from the nine months ended June 30, 2017. The increase was primarily due to higher revenue and a higher gross margin, partially offset by higher operating expenses and the $32.6 million initial unfavorable impact of the Tax Act enacted in December 2017.

INDEX

LIQUIDITY AND CAPITAL RESOURCES

We generated $104.0 million in cash flows from operating activities in the first nine months of fiscal 2018, compared to $90.0 million in cash from operating activities in the first nine months of fiscal 2017. Our cash provided by operating activities in the first nine months of fiscal 2018 reflected net income of $61.8 million, $69.7 million in non-cash items, including $24.6 million related to the deemed repatriation transition tax of the Tax Act, and a $27.5 million decrease in cash flow due to a net increase in working capital. The increase in cash flows from operating activities compared to the first nine months of fiscal 2017 was primarily due to higher revenue and gross margin, partially offset by a higher increase in working capital. We are still analyzing certain aspects of the Tax Act, which could potentially affect the measurement of these balances or give rise to new deferred tax amounts. Our accruals for incentive compensation under our STIP are higher in fiscal 2018 than in fiscal 2017. In addition, the STIP payment related to our performance in fiscal 2017, which we made in the first quarter of fiscal 2018, was $14.1 million higher than the STIP payment related to our performance in fiscal 2016, which was paid in the first quarter of fiscal 2017.

In the first nine months of fiscal 2018, cash flows used in investing activities were $145.3 mill