AVX Corp Form 10-Q August 06, 201	8	
Table of Conte	<u>nts</u>	
UNITED STA	TES	
SECURITIES	AND EXCHANGE COMMISSION	
Washington, D	C 20549	
FORM 10-Q		
	quarterly Report Pursuant to Section 13 or 15(d) of the Securitierly period ended June 30, 2018	es Exchange Act of 1934
or		
	ransition Report Pursuant to Section 13 or 15(d) of the Securition period from to	ies Exchange Act of 1934
Commission fi	le number <u>1-7201</u>	
(Exact name of	registrant as specified in its charter)	
	Delaware (State or other jurisdiction of incorporation or organization)	33-0379007 (IRS Employer ID No.)
	1 AVX Boulevard Fountain Inn, South Carolina (Address of principal executive offices)	29644 (Zip Code)
	(864) 967-2150 (Registrant's phone number, including area code)	· •

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

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

Large accelerated filer

Non-accelerated filer

(Do not check if a 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 No

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

Class Outstanding at August 2, 2018
Common Stock, par value \$0.01 per share 168,734,806

# **AVX Corporation and Subsidiaries**

## **Table of Contents**

		Page
PART I:	Financial Information:	
ITEM 1.	Financial Statements (unaudited):	3
	Consolidated Balance Sheets as of March 31, 2018 and June 30, 2018	3
	Consolidated Statements of Operations for the three months ended June 30, 2017 and 2018	4
	Consolidated Statements of Comprehensive Income for the three months ended June 30, 2017 and 2018	5
	Consolidated Statements of Cash Flows for the three months ended June 30, 2017 and 2018	6
	Notes to Consolidated Financial Statements	7
ITEM 2.	Management's Discussion and Analysis of Financial Condition and Results of Operations	21
ITEM 3.	Quantitative and Qualitative Disclosures About Market Risk	26
ITEM 4.	Controls and Procedures	26
PART II:	Other Information:	
ITEM 1.	<u>Legal Proceedings</u>	27
ITEM 1A.	Risk Factors	27
ITEM 2.	<u>Unregistered Sales of Equity Securities and Use of Proceeds</u>	27
ITEM 6.	<u>Exhibits</u>	27
<u>Signature</u>		28
2		

## PART I: FINANCIAL INFORMATION

## ITEM 1. FINANCIAL STATEMENTS (Unaudited)

## **AVX** Corporation and Subsidiaries

## **Consolidated Balance Sheets (unaudited)**

(in thousands, except per share data)

	As of March 31, 2018	As of June 30, 2018
Assets		
Current assets:		
Cash and cash equivalents	\$547,415	\$457,935
Short-term investments in securities	279,787	388,217
Accounts receivable - trade, net	275,259	268,575
Accounts receivable - affiliates	9,255	2,802
Inventories, net	516,777	513,909
Income taxes receivable	2,566	3,211
Prepaid and other	70,665	73,417
Total current assets	1,701,724	1,708,066
Property and equipment, net	418,286	424,808
Goodwill	316,298	322,358
Intangible assets, net	128,612	129,341
Deferred income taxes	75,720	72,214
Other assets	32,126	33,711
Total Assets	\$2,672,766	\$2,690,498
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable - trade	\$89,726	\$96,662
Accounts payable - affiliates	26,320	384
Income taxes payable	8,290	24,460
Accrued payroll and benefits	52,044	46,641
Accrued expenses	118,183	145,961
Total current liabilities	294,563	314,108
Income taxes payable	69,645	69,645
Pensions	10,605	10,132

Deferred income taxes Other liabilities Total Liabilities	12,895 41,615 429,323	14,066 41,828 449,779
Stockholders' Equity:		
Preferred stock, par value \$.01 per share:		
Authorized, 20,000 shares; None issued and outstanding	-	-
Common stock, par value \$.01 per share:		
Authorized, 300,000 shares; issued, 176,369 shares; outstanding, 168,434 and 168,529 shares at March 31, 2018 and June 30, 2018, respectively	1,764	1,764
Additional paid-in capital	360,077	358,775
Retained earnings	1,962,467	1,998,964
Accumulated other comprehensive income (loss)	21,257	(17,791)
Treasury stock, at cost:		
7,935 and 7,839 shares at March 31, 2018 and June 30, 2018, respectively	(102,122)	(100,993)
Total Stockholders' Equity	2,243,443	2,240,719
Total Liabilities and Stockholders' Equity	\$2,672,766	\$2,690,498

See accompanying notes to consolidated financial statements.

## **AVX** Corporation and Subsidiaries

# **Consolidated Statements of Operations (Unaudited)**

(in thousands, except per share data)

	<b>Three Months</b>	
	Ended	
	June 30,	
	2017	2018
Net sales	\$331,354	\$454,116
Cost of sales	257,508	345,783
Gross profit	73,846	108,333
Selling, general and administrative expenses	31,415	40,316
Profit from operations	42,431	68,017
Other income (loss):		
Interest income	2,331	3,483
Other, net	(418)	(730)
Income before income taxes	44,344	70,770
Provision for income taxes	12,860	14,807
Net income	\$31,484	\$55,963
Income per share:		
Basic	\$0.19	\$0.33
Diluted	\$0.19	\$0.33
Dividends declared (per share)	\$0.110	\$0.115
Weighted average common shares outstanding:		
Basic	168,071	168,492
Diluted	168,632	168,964

See accompanying notes to consolidated financial statements.

## **AVX** Corporation and Subsidiaries

## **Consolidated Statements of Comprehensive Income (Unaudited)**

(in thousands)

	Three Months Ended June 30,	
	2017	2018
Net income	\$31,484	\$55,963
Other comprehensive income (loss), net of income taxes		
Foreign currency translation adjustment	21,062	(41,741)
Foreign currency cash flow hedges adjustment	(687)	63
Pension liability adjustment	(182)	2,630
Other comprehensive income (loss), net of income taxes	20,193	(39,048)
Comprehensive income	\$51,677	\$16,915

See accompanying notes to consolidated financial statements.

## **AVX Corporation and Subsidiaries**

## **Consolidated Statements of Cash Flows (Unaudited)**

(in thousands)

	Three Months Ended June 30,	
	•	2018
Operating Activities:		
Net income	\$31,484	\$55,963
Adjustment to reconcile net income to net cash from operating activities:		
Depreciation and amortization	10,355	20,289
Stock-based compensation expense	847	838
Deferred income taxes	1,005	(1,250)
Loss on disposal of property and equipment	-	33
Equity income from equity-method investments	-	44
Changes in operating assets and liabilities, excluding acquisitions:		
Accounts receivable	(2,969)	22,579
Inventories	5,077	(1,373)
Accounts payable and accrued expenses	(1,687)	(8,479)
Income taxes payable	840	14,107
Other assets	17,065	(10,488)
Other liabilities	1,514	5,364
Net cash provided by operating activities	63,531	97,627
Investing Activities:		
Purchases of property and equipment	(21,807)	(38,020)
Purchase of business, net of cash and debt acquired	-	(12,909)
Purchases of investment securities	(455,013)	(380,803)
Redemptions of investment securities	485,286	270,947
Other investing activities	(969)	(958)
Net cash provided by (used in) investing activities	7,497	(161,743)
Financing Activities:		
Dividends paid	(18,495)	(19,381)
Purchase of treasury stock	_	(811)
Net change of equity awards	2,185	(199 )
Principle payments of debt	_	(1,892)
Payments of tax withholdings for vested restricted stock units	(450)	(720 )
Net cash used in financing activities	(16,760)	
Effect of exchange rate on cash	674	(2,361 )
Increase (decrease) in cash and cash equivalents	54,942	(89,480 )

Cash and cash equivalents at beginning of period 578,634 547,415

Cash and cash equivalents at end of period \$633,576 \$457,935

See accompanying notes to consolidated financial statements.

### **Table of Contents**

### **AVX Corporation and Subsidiaries**

**Notes to the Consolidated Financial Statements (Unaudited)** 

(in thousands, except per share data)

#### 1. Basis of Presentation:

The consolidated financial statements of AVX Corporation and its subsidiaries ("AVX" or the "Company") include all accounts of the Company and its subsidiaries. All significant intercompany transactions and accounts have been eliminated. We have prepared the accompanying financial statements pursuant to the rules and regulations of the Securities and Exchange Commission ("SEC") for interim financial reporting. These consolidated financial statements are unaudited and, in the opinion of management, include all adjustments, consisting of normal recurring adjustments and accruals, necessary for the fair statement of the consolidated balance sheets, operating results, comprehensive income, and cash flows for the periods presented. Operating results for the three month period ended June 30, 2018 are not necessarily indicative of the results that may be expected for the fiscal year ending March 31, 2019 due to changes in economic conditions and other factors. Certain information and footnote disclosures normally included in financial statements prepared in accordance with accounting principles generally accepted in the United States have been omitted in accordance with the rules and regulations of the SEC for interim financial statements. These consolidated financial statements should be read in conjunction with the audited consolidated financial statements and accompanying notes included in our Annual Report on Form 10-K for the fiscal year ended March 31, 2018.

### Summary of Significant Accounting Policies

We have identified the accounting policies and estimates that are critical to our business operations and understanding our results of operations. Those policies and estimates can be found in Note 1, "Summary of Significant Accounting Policies," of the Notes to Consolidated Financial Statements and in "Critical Accounting Policies and Estimates," in "Management's Discussion and Analysis of Financial Condition and Results of Operations" contained in our Annual Report on Form 10-K for the fiscal year ended March 31, 2018. Accordingly, this Quarterly Report on Form 10-Q should be read in conjunction with our Annual Report on Form 10-K for the fiscal year ended March 31, 2018. During the three month period ended June 30, 2018, there were no significant changes to any critical accounting policies or to the methodology used in determining estimates including those related to investment securities, inventories, goodwill, intangible assets, property and equipment, and contingencies other than those discussed below and in Note 3 related to revenue recognition.

Revenue Recognition:

All products are built to specification and tested by AVX or our suppliers for adherence to such specification before shipment to customers. We ship products to customers based upon firm orders. Shipping and handling costs are treated as fulfillment costs and as such are included in cost of sales. The Company applies this accounting policy election consistently to its sales. We recognize revenue as performance obligations are satisfied, which is when the customer takes control of the products as they are shipped to or received by the customer in accordance with the terms of the agreement of sale.

There are general product warranties within our contracts, as the Company warrants that products will function as expected in accordance with the specifications per the contract. These warranties cannot be purchased by the customer separately and accordingly these warranties are not considered to be separate performance obligations.

Payment terms for the Company's sales are generally less than 90 days. Substantially all of the Company's receivables are collected within twelve months of the transfer of products to the customer and the Company expects this to continue going forward. The Company applies the practical expedient within ASC 606 to all of its contracts with payment terms less than or equal to twelve months and does not recognize a financing component in the determination of the transaction price.

We evaluate gross versus net presentation on revenues from products purchased and resold in accordance with the revenue recognition criteria outlined in ASC 606. Based on the evaluation of our resale arrangements with Kyocera, including consideration of the primary indicators set forth in ASC 606, we record revenue related to products purchased and resold on a gross basis.

The Company pays commissions to sales representatives on a per-sale basis and applies the practical expedient available within ASC 340. Accordingly, commissions are expensed as incurred.

The Company recognizes the estimated variable consideration to be received as revenue and records a related reduction to accounts receivable or as an accrued expense for the consideration not expected to be received, based upon its estimate of credits issued or products returned under the sales allowance programs described below. Marketplace volatilities which impact the estimates of variable consideration include, but are not limited to, changes in economic conditions, pricing changes, product demand, inventory levels in the supply chain, the effects of technological change, and other variables that might result in changes to our estimates. Accordingly, there can be no assurance that actual results will not differ from those estimates. We utilize the "portfolio approach" practical expedient in ASC 606, which allows entities to apply the guidance to a portfolio of contracts with similar characteristics because the effects on the financial statements of this approach would not differ materially from applying the guidance to individual contracts. Using the "portfolio approach," we believe we have an adequate basis to assess the reasonableness and reliability of our estimates for each program.

### Returns

Sales revenue and cost of sales reported in the statement of operations are reduced to reflect estimated returns. We record an estimated right of return liability for returns at the time of sale based on historical trends, current pricing and volume information, other market specific information, and input from sales, marketing, and other key management personnel. The liability accrued reflects the variable consideration not expected to be received. The estimated value of the return to customer's inventory is recorded as an asset. These procedures require the exercise of significant judgments. We believe that these procedures enable us to make reliable estimates of future returns. Our actual results have historically approximated our estimates. When the product is returned and verified, the customer is given credit against their accounts receivable.

### **Table of Contents**

### **Distribution Programs**

A portion of our sales to independent electronic component distributor customers are subject to various distributor sales programs. We report provisions for distributor allowances in connection with such sales programs as a reduction in revenue and report distributor allowances on the balance sheet as either a reduction in accounts receivable or right-of-return liabilities. For the distribution programs described below, we do not track the individual units that are recorded against specific products sold from distributor inventories, which would allow us to directly compare revenue reduction for credits recorded during any period with credits ultimately awarded in respect of products sold during that period. Rather, we believe our use of the "portfolio approach" provides an adequate basis to assess the reasonableness and reliability of our estimates for each program.

### Distributor Stock Rotation Program

Stock rotation is a program whereby distributor customers are allowed to return, for credit, qualified inventory, semi-annually, equal to a certain percentage, primarily limited to 5% of the previous six months net sales. We record an estimated right of return liability for stock rotation at the time of sale based on a percentage of distributor sales using historical trends, current pricing and volume information, other market specific information, and input from sales, marketing, and other key management personnel. An asset is recorded for the estimated value of returned product. These procedures require the exercise of significant judgments. We believe that these procedures enable us to make reliable estimates of future returns under the stock rotation program. Our actual results have historically approximated our estimates. When the product is returned and verified, the distributor is given credit against their accounts receivable.

#### Distributor Ship-from-Stock and Debit Program

Ship-from-Stock and Debit ("ship and debit") is a program designed to assist distributor customers in meeting competitive prices in the marketplace on sales to their end customers. Ship and debit programs require a request from the distributor for a pricing adjustment for a specific part for a sale to the distributor's end customer from the distributor's stock. The pricing adjustment is deemed variable consideration. Ship and debit authorizations may cover current and future distributor activity for a specific part for sale to their customer. At the time we record sales to the distributors, we provide an allowance for the variable consideration of the estimated future distributor activity related to such sales since it is probable that such sales to distributors will result in ship and debit activity. We record an estimated sales allowance based on sales during the period, credits issued to distributors, distributor inventory levels, historical trends, market conditions, pricing trends we see in our direct sales activity with original equipment manufacturers and other customers, and input from sales, marketing, and other key management personnel. These procedures require the exercise of significant judgments. We believe that these procedures enable us to make reliable estimates of future credits under the ship and debit program. Our actual results have historically approximated our estimates. At the time the distributor ships the part from stock, the distributor debits us for the authorized pricing

adjustment.

Relevant New Accounting Standards

In 2014, the FASB issued ASU 2014-09, "Revenue from Contracts with Customers." This guidance modifies how an entity will determine the measurement of revenue and timing of when it is recognized. The Company adopted this guidance effective April 1, 2018, using the modified retrospective method, with no material impact on our results of operations. Please refer to Note 3 for additional information.

In February 2016, FASB issued ASU 2016-02, "Leases." This guidance changes the requirements for inclusion of certain right-of-use assets and the associated lease liabilities to be included in a statement of financial position. The classification criteria maintains the distinction between finance leases and operating leases. Regarding finance leases, lessees are required to 1) recognize a right-of-use asset and a lease liability, initially measured at the present value of the lease payments, in the statement of financial position, 2) recognize interest on the lease liability separate from the amortization of the right-of-use asset in the statement of comprehensive income, and 3) classify repayments of the principal portion of the lease liability within financing activities and payments of interest on the lease liability and variable lease payments within operating activities in the statement of cash flows. Regarding operating leases, lessees are required to 1) recognize a right-of-use asset and a lease liability, initially measured at the present value of the lease payments, in the statement of financial position, 2) recognize a single lease cost, calculated so that the cost of the lease is allocated over the lease term on a generally straight-line basis, and 3) classify all cash payments within operating activities in the statement of cash flows. This guidance is effective for public companies for interim and annual reporting periods beginning after December 15, 2018. Early adoption is permitted. Prior to our recent acquisitions, we disclosed that we anticipated no material impact from adopting ASU 2016-02. However, we are in the process of updating our assessment to include the impact of our recently acquired companies.

In August 2017, the FASB issued ASU 2017-12, "Derivatives and Hedging." The standard aims to align the designation and measurement guidance for qualifying hedging relationships and the presentation of hedge results for cash flow and fair value hedge accounting with risk management activities. The guidance is effective for public companies for annual reporting periods beginning after December 15, 2018, and interim periods within those annual periods. Early adoption is permitted in any interim period after issuance. Management is currently evaluating the impact this guidance will have on our consolidated financial statements.

### 2. Acquisitions:

We used the acquisition method of accounting to record the below transactions in accordance with FASB Accounting Standards Codification Topic 805, "Business Combinations." In accordance with the acquisition method, the purchase price is allocated to the assets acquired and liabilities assumed based on their estimated fair values with the excess being allocated to goodwill. Factors that contributed to the recognition of goodwill include expected synergies and the trained workforce. The goodwill is not deductible for tax purposes.

On October 2, 2017, AVX acquired the AB Electronics sensing and control business from TT Electronics, PLC, for \$162,038, net of cash acquired. Now named Sensing and Control ("S&C") and consolidated with our Interconnect, Sensing and Control Devices segment (formerly AVX Interconnect) for financial reporting purposes, the acquisition enhances AVX's position in the automotive business and provides further opportunities for expansion and growth.

The results of operations for S&C since the acquisition date are included in the accompanying consolidated statement of operations.

	Allocation of	1
<b>Assets Acquired and Liabilities Assumed</b>		
	Purchase	
	Price	
Accounts receivable	\$61,483	
Inventory	42,443	
Accounts payable and accrued liabilities	(67,343	)
Other current assets and liabilities, net	9,250	
Working capital	45,833	
Property and equipment	85,794	
Intangible assets	18,168	
Other non-current assets and liabilities, net	(13,806	)
Total identified assets and liabilities	135,989	
Purchase price	162,038	
Goodwill	\$ 26,049	

We recorded approximately \$18,168 of identifiable intangible assets and \$26,049 of goodwill pertaining to this acquisition. The acquired intangible assets relate to the AB Electronics trade name, existing technology and customer relationships which are being amortized over one, eleven, and six years respectively.

The unaudited pro forma combined financial information is provided for the three month periods ended June 30, 2017 and 2018 as though S&C had been acquired as of April 1, 2017. These pro forma combined results of revenues have been prepared by adjusting our historical results to include the historical results of S&C based on information available. Unaudited pro forma net sales for the three month period ended June 30, 2017 would have been \$415,126 with the inclusion of S&C's net sales for such period. We recognized revenue of \$97,750 from S&C in the three month period ended June 30, 2018.

On January 31, 2018, AVX acquired Ethertronics, Inc. ("Ethertronics") for \$128,242 net of cash and debt acquired. The Ethertronics business is now named AVX Antenna and is consolidated with our Electronic Components segment. The purchase of Ethertronics expands AVX's extensive electronic product offering into the antenna technology market and will provide new and exciting growth opportunities for AVX going forward.

Assets Acquired and Liabilities Assumed	Allocation of
•	Purchase
	Price
Accounts receivable	\$ 14,419
Accounts payable	(10,140)
Other current assets and liabilities, net	3,613
Working capital	7,892
Debt	(21,105)
Property and equipment	13,769
Intangible assets	64,800
Other non-current assets and liabilities, net	(12,739)
Total identified assets and liabilities	52,617
Purchase price	128,242
Goodwill	\$75,625

The results of operations for AVX Antenna since the acquisition date are included in the accompanying consolidated statement of operations. We recorded approximately \$64,800 of identifiable intangible assets and \$75,625 of goodwill. The acquired intangible assets relate to the Ethertronics trade name, existing technology and customer relationships which are being amortized over ten, ten, and thirteen years, respectively. We recognized revenue of \$31,941 from AVX Antenna in the three month period ended June 30, 2018.

On April 30, 2018, AVX, through its subsidiary AVX Interconnect Europe GmbH, acquired KUMATEC Sondermaschinenbau & Kunststoffverarbeitung GmbH ("Kumatec") for a consideration of approximately \$12,305, net of cash acquired and debt assumed, subject to customary post-closing adjustments. Now named Kumatec and consolidated with our Interconnect, Sensing and Control segment, the purchase of Kumatec provides AVX with additional manufacturing capabilities and new business opportunities. We recorded approximately \$3,189 of identifiable intangible assets and \$7,815 of goodwill. The acquired intangible assets relate to the Kumatec trade name, existing technology and customer relationships which are being amortized over six years. We recognized revenue of \$2,097 from Kumatec in the three month period ended June 30, 2018.

## 3. Revenue Recognition:

We adopted ASC 606 effective April 1, 2018 using the modified retrospective approach. We elected the practical expedient to only apply the standard to contracts that were not completed at the effective date. The impact of implementing this standard had no impact on our revenue recognition for the uncompleted contracts and accordingly no cumulative adjustment was made to the opening balance of retained earnings as of April 1, 2018.

### **Table of Contents**

We identified a change in how we record right-of-return liabilities which impacts Current Assets and Current Liabilities. The change is primarily due to how ASC 606 defines a right-of-return contract liability. The following table compares the amounts reported in the Consolidated Balance Sheet had the previous revenue recognition guidance been in effect:

	Three Months Ended June 30, 2018		
	As reported	Balances without ASC 606 Adoption	Increase Due to Adoption
Accounts Receivable - trade, net Accrued Expenses		\$ 254,708 \$ 132,094	\$ 13,867 \$ 13,867

Reference Note 5, "Trade Accounts Receivable and Contract Liabilities," for information on variable consideration and right-of-return liability details.

Reference Note 11, "Segment and Geographic Information," for disaggregated revenue information.

#### 4. Earnings per Share:

Basic earnings per share are computed by dividing net earnings by the weighted average number of shares of common stock outstanding for the period. Diluted earnings per share are computed by dividing net earnings by the sum of (a) the weighted average number of shares of common stock outstanding during the period and (b) the dilutive effect of potential common stock equivalents during the period. Stock options and unvested service-based RSU awards make up the common stock equivalents and are computed using the treasury stock method.

The table below represents the basic and diluted earnings per share and sets forth the weighted average number of shares of common stock outstanding and potential common stock equivalents for the three month periods ending June 30, 2017 and 2018.

Three Months Ended June 30, 2017 2018

Net income	\$31,484	\$55,963
Computation of Basic EPS:		
Weighted Average Shares Outstanding used in Computing Basic EPS	168,071	168,492
Basic earnings per share	\$0.19	\$0.33
Computation of Diluted EPS:		
Weighted Average Shares Outstanding used in Computing Basic EPS	168,071	168,492
Effect of stock awards	561	472
Weighted Average Shares used in Computing Diluted EPS (1)	168,632	168,964
Diluted earnings per share	\$0.19	\$0.33

Common stock equivalents not included in the computation of diluted earnings per share because the impact (1) would have been anti-dilutive were 161 shares and 55 shares for the three month periods ended June 30, 2017 and 2018, respectively.

## 5. Trade Accounts Receivable and Contract Liabilities:

	March	June 30,
	31, 2018	2018
Gross Accounts Receivable - Trade	\$300,016	\$280,327
Less:		
Allowances for doubtful accounts	1,893	1,294
Stock rotation	7,109	-
Ship from stock and debit	9,663	9,869
Sales returns	5,374	-
Discounts	718	589
Total allowances	24,757	11,752
Accounts Receivable - Trade, net	275,259	268,575
11		

Charges related to allowances for doubtful accounts are charged to selling, general and administrative expenses. Charges related to stock rotation, ship from stock and debit, sales returns, and sales discounts are reported as deductions from revenue. Please refer to Note 3, "Revenue Recognition," for additional information.

	Three Months Ended June 30,		
	2017	2018	
Allowances for doubtful accounts:			
Beginning balance	\$1,285	\$1,893	
Charges	164	91	
Applications	(2)	(690)	
Ending balance	\$1,447	\$1,294	

	Three Mo	onths
	June 30,	
	2017	2018
Stock rotation and ship from stock and debit:		
Beginning balance	\$14,853	\$15,989
Charges	6,739	6,392
Applications	(6,699)	(6,186)
Stock rotation reclassified to liability	-	(6,326)
Ending balance	\$14,893	\$9,869

	Three M Ended June 30,	onths
	2017	2018
Sales returns and discounts:		
Beginning balance	\$5,623	\$6,875
Charges	4,065	86
Applications	(4,553)	(215)
Sales returns reclassified to liability	-	(6,157)
Translation, acquisition and other	28	-
Ending balance	\$5,163	\$589

## 6. Fair Value:

Fair Value Hierarchy:

The fair value framework requires the categorization of assets and liabilities into three levels based upon the assumptions (inputs) used to value the assets or liabilities. Level 1 provides the most reliable measure of fair value, whereas Level 3 generally requires significant management judgment. The three levels are defined as follows:

Level 1: Unadjusted quoted prices in active markets for identical assets and liabilities.

Level 2: Observable inputs other than those included in Level 1. For example, quoted prices for similar assets or liabilities in active markets or quoted prices for identical assets or liabilities in inactive markets.

Level 3: Unobservable inputs reflecting management's own assumptions about the inputs used in pricing the asset or liability.

During the three month periods ended March 31, 2018 and June 30, 2018, there have been no transfers of assets or liabilities between levels within the fair value hierarchy.

		Based of Quoted prices in active	o	ther oservable	Unob	servable
	Fair Value market at		sinputs inputs		5	
	March 31, 2018	(Level 1)	(L	evel 2)	(Leve	13)
Assets measured at fair value on a recurring basis:						
Assets held in the non-qualified deferred compensation program(1)	\$6,649	\$5,959	\$	690	\$	-
Foreign currency derivatives(2)	257	-		257		-
Total	\$6,906	\$5,959	\$	947	\$	-

		Based on Quoted prices Other in observable Unobserva markets inputs inputs			servable
	Fair Value at				
	March 31, 2018	(Level 1)	(Level 2)	(Level	. 3)
Liabilities measured at fair value on a recurring basis:					
Obligation related to assets held in the non-qualified deferred compensation program(1)	\$6,649	\$5,959	\$ 690	\$	-
Foreign currency derivatives(2)	514	-	514		-
Total	\$7,163	\$5,959	\$ 1,204	\$	-

Based on Quoted prices Other observable Unobservable

		in active			
	Fair Value	market	a <b>innut</b> a	innuta	
	at	market	Siliputs	inputs	
	June 30, 2018	(Level 1)	(Level 2)	(Level	3)
Assets measured at fair value on a recurring basis:					
Assets held in the non-qualified deferred compensation program(1)	\$6,730	\$6,031	\$ 699	\$	-
Foreign currency derivatives(2)	1,421	-	1,421		-
Total	\$8,151	\$6,031	\$ 2,120	\$	-

		Based on Quoted prices Other in		e Unobservable		
	Fair	active	observable	Ullouse	lobservable	
	Value at	market	sinputs	inputs		
	June 30, 2018	(Level 1)	(Level 2)	(Level	3)	
Liabilities measured at fair value on a recurring basis:						
Obligation related to assets held in the non-qualified deferred compensation program(1)	\$6,730	\$6,031	\$ 699	\$	-	
Foreign currency derivatives(2)	1,215	-	1,215		-	
Total	\$7,945	\$6,031	\$ 1,914	\$	_	

- (1) The market value of the assets held in the trust for the non-qualified deferred compensation program is included as an asset and as a liability as the trust's assets are both assets of the Company and also a liability as they are available to general creditors in certain circumstances.
- (2) Foreign currency derivatives in the form of forward contracts are included in prepaid and other assets or accrued expenses in the consolidated balance sheets. Unrealized gains and losses on derivatives designated as cash flow hedges are recorded in other comprehensive income (loss). Realized gains and losses on derivatives designated as cash flow hedges and gains and losses on derivatives not designated as hedges are recorded in other income.

Tai	ble	of	Contents

Valuation Techniques:

The following describes valuation techniques used to appropriately value our assets held in the non-qualified deferred compensation plan and derivatives.

Assets held in the non-qualified deferred compensation plan

Assets valued using Level 1 and Level 2 inputs in the table above represent assets from our non-qualified deferred compensation program. The funds in the non-qualified deferred compensation program are valued based on the number of shares in the funds using a price per share traded in an active market.

Investments are considered to be impaired when a decline in fair value is judged to be other-than-temporary. If the cost of an investment exceeds its fair value, among other factors, we evaluate general market conditions, the duration and extent to which the fair value is less than cost, and whether or not we expect to recover the security's entire amortized cost. Once a decline in fair value is determined to be other-than-temporary, an impairment charge is recorded and a new cost basis in the investment is established.

#### **Derivatives**

We primarily use forward contracts, with maturities generally less than four months, designated as cash flow hedges, to protect against the foreign currency exchange rate risks inherent in our forecasted transactions related to purchase commitments and sales, denominated in various currencies. We also use derivatives not designated as hedging instruments to hedge foreign currency balance sheet exposures. These derivatives are used to offset currency changes in the fair value of the hedged assets and liabilities. Fair values for all of our derivative financial instruments are valued by adjusting the market spot rate by forward points, based on the date of the contract. The spot rates and forward points used are an average rate from an actively traded market. At March 31, 2018 and June 30, 2018, all of our forward contracts are valued using Level 2 measurements.

#### 7. Financial Instruments and Investments in Securities:

At March 31, 2018 and June 30, 2018, we classified investments in debt securities and time deposits as held-to-maturity securities.

Our long-term and short-term investment securities are accounted for as held-to-maturity securities and are carried at amortized cost. We have the ability and intent to hold these investments until maturity. All income generated from the held-to-maturity securities investments are recorded as interest income.

Investments in held-to-maturity securities, recorded at amortized cost, were as follows:

	March 31, 2018						
			ross nrealized		oss realized	Estimated	
	Cost	G	ains	Lo	sses	Fair Value	
Short-term investments:							
Commercial Paper	\$10,597	\$	-	\$	(1	\$10,596	
Time deposits	269,190		203		-	269,393	
_	\$279,787	\$	203	\$	(1	) \$279,989	

	June 30, 2018							
		Gı	ross	Gı	oss			
		Uı	nrealized	Ur	realized		<b>Estimated</b>	
	Cost	Gains		Losses			Fair Value	
Short-term investments:								
Commercial paper	\$34,862	\$	4	\$	-		\$34,866	
Time deposits	353,355		244		(42	)	353,557	
	\$388,217	\$	248	\$	(42	)	\$388,423	

The amortized cost and estimated fair value of held-to-maturity investments at June 30, 2018, by contractual maturity, are shown below. The estimated fair value of these investments are based on valuation inputs that include benchmark yields, reported trades, broker and dealer quotes, issuer spreads, two-sided markets, benchmark securities, bids, offers, and reference data, which are Level 2 inputs in the fair value hierarchy. Actual maturities may differ from contractual maturities because issuers may have the right to call or prepay obligations without call or prepayment penalties.

	Held-to-M Amortized	Iaturity dEstimated
	Cost	Fair Value
Due in one year or less	\$388,217	\$388,423
Due after one year through five years	-	-
Total	\$388,217	\$388,423

### 8. Inventories:

	March	<b>June 30</b> ,
	31, 2018	2018
Finished goods	\$93,467	\$76,419
Work in process	133,556	143,044
Raw materials	289,754	294,446
Total Inventories, net	\$516,777	\$513,909

## 9. Commitments and Contingencies:

We have been identified by the United States Environmental Protection Agency ("EPA"), state governmental agencies or other private parties as a potentially responsible party ("PRP") under the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), or equivalent non-U.S., state or local laws, for clean-up and response costs associated with certain sites at which remediation is required with respect to prior contamination. Because CERCLA or such state statutes authorize joint and several liability, the EPA or non-U.S., state or local regulatory authorities could seek to recover all clean-up costs from any one of the PRPs at a site despite the involvement of other PRPs. At certain sites, financially responsible PRPs other than AVX also are, or have been, involved in site investigation and clean-up activities. We believe that liability resulting from these sites will be apportioned between AVX and other PRPs.

To resolve our liability at the sites at which we have been named a PRP, we have entered into various administrative orders and consent decrees with federal and state regulatory agencies governing the timing and nature of investigation and remediation. As is customary, the orders and decrees regarding sites where the PRPs are not themselves implementing the chosen remedy contain provisions allowing the EPA to reopen the agreement and seek additional amounts from settling PRPs in the event that certain contingencies occur, such as the discovery of significant new information about site conditions.

On June 3, 2010, AVX entered into an agreement with the EPA and the City of New Bedford, pursuant to which AVX is required to perform environmental remediation at a site referred to as the "Aerovox Site" (the "Site"), located in New Bedford, Massachusetts. AVX has substantially completed its obligations pursuant to such agreement with the EPA and the City of New Bedford with respect to the satisfaction of AVX's federal law requirements. The Massachusetts Department of Environmental Protection has jurisdiction over the balance of the environmental remediation at the Site. AVX has submitted its proposed remedy, but until the state has approved such proposal, AVX cannot determine if additional groundwater and soil remediation will be required, if substantial material will have to be disposed of offsite, or if additional remediation techniques will be required, any of which could result in a more extensive and costly plan of remediation. Further, the Site and the remediation may be subject to additional scrutiny under other statutory procedures which could also add to the cost of remediation. We have a remaining accrual of \$1,683 million at June 30, 2018, representing our current estimate of the potential liability related to the remaining performance of environmental remediation actions at the Site and neighboring properties using certain assumptions regarding the plan of remediation. Until all parties agree and remediation is complete, we cannot be certain there will be no additional cost relating to the Site.

We had total reserves of approximately \$18,618 and \$18,750 at March 31, 2018 and June 30, 2018, respectively, related to various environmental matters and sites, including those discussed above. These reserves are classified in the Consolidated Balance Sheets as \$3,329 and \$3,461 in accrued expenses at March 31, 2018 and June 30, 2018, respectively, and \$15,289 in other non-current liabilities at both March 31, 2018 and June 30, 2018. The amounts recorded for identified environmental liabilities are based on estimates. Periodically, we review amounts recorded and adjust them to reflect additional legal and technical information that becomes available. Uncertainties about the status of laws, regulatory actions, technology, and information related to individual sites make it difficult to develop an estimate of the reasonably possible aggregate environmental remediation exposure. Accordingly, these costs could differ from our current estimates.

On April 19, 2016, the Canadian Ministry of the Environment and Climate Change (the "MoE") issued a Director's Order naming AVX Corporation, and others, as responsible parties with respect to a location in Hamilton, Ontario that was at one time the site of operations of Aerovox Canada, a former subsidiary of Aerovox Corporation, a predecessor of AVX. This Director's Order follows a draft order issued on November 4, 2015. AVX has taken the position that any liability of Aerovox Canada for such site under the laws of Canada cannot be imposed on AVX. At present, it is unclear whether the MoE will seek to enforce such Canadian order against AVX, and whether, in the event it does so, AVX will have any liability under applicable law. AVX intends to contest any such course of action that may be taken by the MoE.

We also operate, or did at one time, on other sites that may have potential future environmental issues as a result of activities at sites during AVX's long history of manufacturing operations or prior to the start of operations by AVX. Even though we may have rights of indemnity for such environmental matters at certain sites, regulatory agencies in those jurisdictions may require us to address such issues. Once it becomes probable that we will incur costs in connection with remediation of a site and such costs can be reasonably estimated, we establish reserves or adjust our reserves for our projected share of these costs. A separate account receivable is recorded for any indemnified costs. Our environmental reserves are not discounted and do not reflect any possible future insurance recoveries, which are not expected to be significant, but do reflect a reasonable estimate of cost sharing at multiple party sites or indemnification of our liability by a third party.

We are not involved in any pending or threatened environmental proceedings that would require curtailment of our operations. We continually expend funds to ensure that our facilities comply with applicable environmental regulations. While we believe that we are in compliance with applicable environmental laws, we cannot accurately predict future developments and do not necessarily have knowledge of all past occurrences on sites that we currently occupy. New environmental regulations may be enacted and we cannot determine the modifications, if any, in our operations that any such future regulations might require, or the cost of compliance with such regulations. Moreover, the risk of environmental liability and remediation costs is inherent in the nature of our business and, therefore, there can be no assurance that material environmental costs, including remediation costs, will not arise in the future.

On April 25, 2013, AVX was named as a defendant in a patent infringement case filed in the United States District Court for the District of Delaware captioned *Greatbatch, Inc. v. AVX Corporation*. This case alleged that certain AVX products infringe on one or more of six Greatbatch patents. On January 26, 2016, the jury returned a verdict in favor of the plaintiff in the first phase of a segmented trial and a mixed verdict in the second phase of a segmented trial, and found damages to Greatbatch in the amount of \$37,500, which was recorded in fiscal 2016. That verdict was later vacated by the court on March 30, 2018. The amount of damages will be subject to further legal proceedings including a potential trial on damages, which we expect to occur in fiscal 2019. AVX is continuing to litigate the case.

On September 2, 2014, a subsidiary of AVX, American Technical Ceramics ("ATC"), was named as a defendant in a patent infringement case filed in the United States District Court of the Southern District of California captioned *Presidio Components, Inc. v. American Technical Ceramics Corp.* This case alleged that certain ATC products infringe on a Presidio patent. On April 18, 2016, the jury returned a verdict in favor of the plaintiff and found damages

to Presidio. On August 17, 2016, the court issued a permanent injunction prohibiting ATC from manufacturing or selling the related products after November 16, 2016. Subsequently, on October 21, 2016, the Federal Circuit Court granted AVX's request for a stay of the permanent injunction whereby ATC was allowed to continue to sell the disputed product until March 17, 2017 to anyone who was a customer prior to June 17, 2016. Any sales subsequent to November 16, 2016 pursuant to the stay of the permanent injunction were subject to court mandated intellectual property damages for each product sold. In December, 2017, a panel of the Federal Circuit vacated the damage award to Presidio, vacated the injunction, and remanded the case for further proceedings to determine damages limited to "reasonable royalties" and to reconsider the requested injunction in light of its opinion and any additional facts.

As of June 30, 2018, we had total reserves of \$73,392 plus accrued interest in accrued expenses with respect to the two intellectual property cases discussed above. The amounts recorded are based on estimated outcomes. Amounts recorded are reviewed periodically and adjusted to reflect additional information that becomes available. Accordingly, these costs could differ from our current estimates.

During calendar year 2014, AVX was named as a co-defendant in a series of cases filed in the United States and in the Canadian provinces of Quebec, Ontario, British Columbia, Saskatchewan and Manitoba alleging violations of United States, state and Canadian antitrust laws and asserting that AVX and numerous other companies were participants in alleged price-fixing in the capacitor market. The cases in the United States were consolidated into the Northern District of California on October 2, 2014. However, some plaintiffs have broken off from the United States class action and filed actions on their own, although AVX is not named in all of these independent actions. The cases in Canada have not been consolidated. These cases are still in progress. AVX believes it has meritorious defenses and intends to vigorously defend the cases.

We are involved in other disputes, warranty, and legal proceedings arising in the normal course of business. While we cannot predict the outcome of these other disputes and proceedings, we believe, based upon a review with legal counsel, that none of these other disputes or proceedings will have a material impact on our financial position, results of operations, comprehensive income (loss), or cash flows. However, we cannot be certain of the eventual outcome in these or other matters that may arise and their potential impact on our financial position, results of operations, comprehensive income (loss), or cash flows.

### 10. Comprehensive Income (Loss):

Comprehensive income (loss) represents changes in equity during a period except those resulting from investments by and distributions to shareholders. The specific components include net income, pension liability and other post-retirement benefit adjustments, deferred gains and losses resulting from foreign currency translation adjustments and unrealized gains and losses on qualified foreign currency cash flow hedges.

Other comprehensive income (loss) includes the following components:

	Three Months Ended June 30,			
	2017		2018	
	Pre-tax	Net of Tax	Pre-tax	Net of Tax
Foreign currency translation adjustment	\$21,062	\$21,062	\$(41,741)	\$(41,741)
Foreign currency cash flow hedges adjustment	(720)	(687)	77	63
Pension liability adjustment	(240)	(182)	3,307	2,630
Other comprehensive income (loss)	\$20,102	\$20,193	\$(38,357)	\$(39,048)

Amounts reclassified out of accumulated other comprehensive income (loss) into net income (loss) include those that pertain to the Company's pension and postretirement benefit plans and realized gains and losses on derivative instruments designated as cash flow hedges. Please see Note 12 for additional information related to the amortization of prior service cost and the recognized actuarial losses, which amounts are reclassified from accumulated other comprehensive income (loss) into net income (loss) and are included in selling, general and administrative expenses in the statement of operations during the three month periods ended June 30, 2017 and 2018. Please see Note 13 for additional information related to realized gains and losses on derivative instruments reclassified from accumulated other comprehensive income (loss) into net income (loss) during the three month periods ended June 30, 2017 and 2018.

### 11. Segment and Geographic Information:

Our operating segments are based on the types of products from which we generate revenues. We are organized into a product line organization with four product groups and two reportable segments. Our four product groups are: Ceramic Components; Tantalum Components; Advanced Components; and Interconnect, Sensing and Control Devices (formerly AVX Interconnect). Historically, KED Resale reported as its own product group, but it has now

been combined with Advanced Components. The reportable segments are: Electronic Components and Interconnect, Sensing and Control Devices. The product groups of Ceramic, Advanced, and Tantalum Components have been aggregated into the Electronic Components reportable segment in accordance with the SEC's aggregation criteria and quantitative thresholds. The aggregation criteria consist of similar economic characteristics, products and services, production processes, customer classes, and distribution channels. The Electronic Components segment consists primarily of surface mount and leaded ceramic capacitors, RF thick and thin film components, surface mount and leaded tantalum capacitors, polymer tantalum capacitors, surface mount and leaded film capacitors, ceramic and film power capacitors, super capacitors, EMI filters (bolt in and surface mount), thick and thin film packages of multiple passive integrated components, varistors, thermistors, inductors, resistive products, and passive and active electronic antennas and antenna systems manufactured by us or purchased from other manufacturers for resale. The Interconnect, Sensing and Control Devices segment consists primarily of automotive sensing and control devices and automotive, telecom, and memory connectors manufactured by or for AVX. Sales and operating results from these reportable segments are shown in the tables below. In addition, we have a corporate administration group consisting of finance, legal, environmental, health & safety, and administrative activities.

We evaluate performance of our segments based upon sales and operating profit. There are no intersegment revenues. We allocate the costs of shared resources between segments based on each segment's usage of the shared resources. Cash, accounts receivable, investments in securities, and certain other assets, which are centrally managed, are not readily allocable to operating segments.

The tables below present information about reported segments:

	Three Months		
	Ended		
	<b>June 30</b> ,		
Sales Revenue:	2017	2018	
Ceramic Components	\$51,057	\$78,836	
Tantalum Components	88,953	101,032	
Advanced Components	161,659	139,344	
Total Electronic Components	301,669	319,212	
Interconnect, Sensing and Control Devices	29,685	134,904	
Total Revenue	\$331,354	\$454,116	

	Three Months Ended June 30, 2017 2018		
Operating profit:			
Electronic Components	\$54,719	\$86,410	
Interconnect, Sensing and Control Devices	3,278	(2,750)	
Corporate activities	(15,566)	(15,643)	
Total	\$42,431	\$68,017	

	As of March 31, 2018	As of June 30, 2018
Assets:		
Electronic Components	\$632,014	\$755,644
Interconnect, Sensing and Control Devices	241,959	250,659
Cash, A/R, and investments in securities	1,111,716	1,117,529
Goodwill - Electronic Components	278,247	288,676
Goodwill - Interconnect, Sensing and Control Devices	38,051	33,682
Corporate activities	370,779	244,308
Total	\$2,672,766	\$2,690,498

The following geographic data is based upon net sales generated by operations located within particular geographic areas. Substantially all of the sales in the Americas region were generated in the United States.

Three Months Ended

**June 30,** 

2017 2018

Net sales:

Americas	\$99,940	\$114,567
Europe	92,520	198,404
Asia	138,894	141,145
Total	\$331,354	\$454,116

#### 12. Pension Plans:

Net periodic pension cost for our defined benefit plans consisted of the following for the three month periods ended June 30, 2017 and 2018:

	U.S. Plans Three Months Ended June 30,		International Plans		
			Three Months Ended		
			June 30,		
	2017	2018	2017	2018	
Service cost	\$33	\$-	\$228	\$215	
Interest cost	352	327	1,108	1,045	
Expected return on plan assets	(450)	(393)	(1,417)	(1,471)	
Recognized actuarial loss	286	221	321	257	
Net periodic pension cost	\$221	\$155	\$240	\$46	

Based on current actuarial computations, during the three months ended June 30, 2018, we made contributions of \$1,750 to the international plans. We expect to make additional contributions of approximately \$5,500 to the international plans over the remainder of fiscal 2019. We made no contributions to the U.S. plans during the three months ended June 30, 2018. We expect to make additional contributions of \$1,065 to the U.S. plans the remainder of fiscal 2019.

#### 13. Derivative Financial Instruments:

We are exposed to foreign currency exchange rate fluctuations in the normal course of business. We use derivative instruments (forward contracts) to hedge certain foreign currency exposures as part of our risk management strategy. The objective is to offset gains and losses resulting from these exposures with gains and losses on the forward contracts used to hedge them, thereby reducing volatility of earnings or protecting fair values of assets and liabilities. We do not enter into any trading or speculative positions with regard to derivative instruments.

We primarily use forward contracts, with maturities less than four months, to protect against the foreign currency exchange rate risks inherent in our forecasted transactions related to purchase commitments and sales, denominated in various currencies. These derivative instruments are designated and qualify as cash flow hedges.

The effectiveness of the cash flow hedges is determined by comparing the cumulative change in the fair value of the hedge contract with the cumulative change in the fair value of the hedged transaction, both of which are based on forward rates. The effective portion of the gain or loss on these cash flow hedges is initially recorded in accumulated other comprehensive income (loss) as a separate component of stockholders' equity. Once the hedged transaction is recognized, the gain or loss is recognized in our statement of operations. At March 31, 2018 and June 30, 2018, respectively, the following forward contracts were entered into to hedge against the volatility of foreign currency exchange rates for certain forecasted sales and purchases:

March 31, 2018

**Fair Value of Derivative Instruments** 

**Asset Derivatives** Liability Derivatives

**Balance** Balance

Sheet Fair Sheet Fair Caption Value Caption Value

Foreign exchange contracts Prepaid and other \$212 Accrued expenses \$377

June 30, 2018

**Fair Value of Derivative Instruments** 

**Asset Derivatives** Liability Derivatives

**Balance** Balance

Sheet Fair Sheet Fair Caption Value Caption Value

Foreign exchange contracts Prepaid and other \$671 Accrued expenses \$759

#### **Table of Contents**

For these derivatives designated as cash flow hedging instruments, during the three month period ended June 30, 2018, net pre-tax losses of \$833 were recognized in other comprehensive income (loss). In addition, during the three month period ended June 30, 2018, net pre-tax losses of \$2,045 were reclassified from accumulated other comprehensive income (loss) into cost of sales (for hedging purchases), and net pretax gains of \$1,370 were reclassified from accumulated other comprehensive income (loss) into sales (for hedging sales) in the accompanying statement of operations.

Derivatives not designated as cash flow hedging instruments consist primarily of forwards used to hedge foreign currency balance sheet exposures. These hedging instruments are used to offset foreign currency changes in the fair values of the underlying assets and liabilities. The gains and losses on these foreign currency forward contracts are recognized in other income (loss) in the same period as the remeasurement gains and losses of the related foreign currency denominated assets and liabilities and thus naturally offset these gains and losses. At March 31, 2018 and June 30, 2018, we had the following forward contracts that were entered into to hedge against these exposures.

March 31, 2018

**Fair Value of Derivative Instruments** 

**Asset Derivatives** Liability Derivatives

**Balance** Balance

Sheet Fair Sheet Fair Caption Value Caption Value

Foreign exchange contracts Prepaid and other \$ 45 Accrued expenses \$ 137

June 30, 2018

**Fair Value of Derivative Instruments** 

**Asset Derivatives** Liability Derivatives

**Balance** Balance

Sheet Fair Sheet Fair Caption Value Caption Value

Foreign exchange contracts Prepaid and other \$750 Accrued expenses \$456

For these derivatives not designated as cash flow hedging instruments during the three month period ended June 30, 2018, gains of \$539 on hedging contracts were recognized in other income (loss), along with the approximately \$1,067 in exchange gains that were recognized in other income (loss) in the accompanying statement of operations.

At March 31, 2018 and June 30, 2018, we had outstanding foreign exchange contracts with notional amounts totaling \$156,238 and \$171,725, respectively, denominated primarily in Euros, Czech Korunas, and Japanese Yen.

# 14. Subsequent Events:

On July 18, 2018, the Board of Directors of the Company declared a \$0.115 dividend per share of common stock with respect to the quarter ended June 30, 2018. The dividend will be paid to stockholders of record on August 1, 2018 and will be disbursed on August 15, 2018.

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

# Forward-Looking Statements

This Quarterly Report on Form 10-Q contains "forward-looking" information within the meaning of the Private Securities Litigation Reform Act of 1995. All statements other than statements of historical fact, including statements regarding industry prospects and future results of operations or financial position, made in this Quarterly Report on Form 10-Q are forward-looking. The forward-looking information may include, among other information, statements concerning our outlook for fiscal year 2019, overall volume and pricing trends, cost reduction and acquisition strategies and their anticipated results, and expectations for research and development and capital expenditures. There may also be other statements of expectations, beliefs, future plans and strategies, anticipated events or trends, and similar expressions concerning matters that are not historical facts. Forward-looking statements reflect management's expectations and are inherently uncertain. The forward-looking information and statements in this report are subject to risks and uncertainties, including those discussed in our Annual Report on Form 10-K for the fiscal year ended March 31, 2018, that could cause actual results to differ materially from those expressed in or implied by the information or statements herein. Forward-looking statements should be read in context with, and with the understanding of, the various other disclosures concerning the Company and its business made elsewhere in this quarterly report as well as other public reports filed by the Company with the SEC. You should not place undue reliance on any forward-looking statements as a prediction of actual results or developments.

Any forward-looking statements by the Company are intended to speak only as of the date thereof. We do not intend to update or revise any forward-looking statement contained in this quarterly report to reflect new events or circumstances unless and to the extent required by applicable law. All forward-looking statements contained in this quarterly report constitute "forward-looking statements" within the meaning of Section 21E of the United States Securities Exchange Act of 1934 and, to the extent it may be applicable by way of incorporation of statements contained in this quarterly report by reference or otherwise, Section 27A of the United States Securities Act of 1933, each of which establishes a safe-harbor from private actions for forward-looking statements as defined in those statutes.

## Critical Accounting Policies and Estimates

"Management's Discussion and Analysis of Financial Condition and Results of Operations" is based upon our unaudited Consolidated Financial Statements and Notes thereto contained in this Form 10-Q, which have been prepared in accordance with generally accepted accounting principles in the United States. The preparation of these financial statements requires management to make estimates and judgments that affect the reported amounts of assets and

liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reported periods. On an ongoing basis, management evaluates its estimates and judgments, including those related to investment securities, revenue recognition, inventories, property and equipment, goodwill, intangible assets, income taxes, and contingencies. Management bases its estimates and judgments on historical experience and on various other factors that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. There can be no assurance that actual results will not differ from those estimates.

We have identified the accounting policies and estimates that are critical to our business operations and understanding the Company's results of operations. Those policies and estimates can be found in Note 1, "Summary of Significant Accounting Policies," of the Notes to Consolidated Financial Statements and in "Critical Accounting Policies and Estimates," in "Management's Discussion and Analysis of Financial Condition and Results of Operations" contained in our Annual Report on Form 10-K for the fiscal year ended March 31, 2018, in Note 1, "Summary of Significant Accounting Policies," and in Note 3, "Revenue Recognition" in the Notes to Consolidated Financial Statements in this Form 10-Q. Accordingly, this Quarterly Report on Form 10-Q should be read in conjunction with our Annual Report on Form 10-K for the fiscal year ended March 31, 2018. Other than revenue recognition as discussed in Note 1, "Summary of Significant Accounting Policies," in the Notes to Consolidated Financial Statements in this Form 10-Q, there were no significant changes to other critical accounting policies, judgments involved in applying those policies, or the methodology used in determining estimates with respect to those related to investment securities, inventories, goodwill, intangible assets, property and equipment, and contingencies, during the three month period ended June 30, 2018 other than those discussed in Note 1, "Basis of Presentation," and Note 3, "Revenue Recognition," in the Notes to Consolidated Financial Statements in the Form 10-Q related to revenue recognition.

## **Business Overview**

AVX is a leading worldwide manufacturer, supplier, and reseller of a broad line of electronic components, interconnect, sensing and control devices, and related products. Electronic components and connector, sensing and control products manufactured or resold by AVX are used in many types of end-use products, including those in telecommunications, automotive, transportation, energy harvesting, consumer electronics, military/aerospace, medical, computer, and industrial markets.

We have manufacturing, sales, and distribution facilities located throughout the world, which are divided into three geographic regions: the Americas, Asia, and Europe. AVX is organized into four product groups with two reportable segments: Electronic Components and Interconnect, Sensing and Control Devices. The Electronic Components segment consists primarily of surface mount and leaded ceramic capacitors, RF thick and thin film components, surface mount and leaded tantalum capacitors, polymer tantalum capacitors, surface mount and leaded film capacitors, ceramic and film power capacitors, super capacitors, EMI filters (bolt in and surface mount), thick and thin film packages of multiple integrated components, varistors, thermistors, inductors, resistive products, and passive and active electronic antennas and antenna systems manufactured by us or purchased from other manufacturers for resale. The Interconnect, Sensing and Control Devices segment consists primarily of automotive sensing and control devices and automotive, telecom, and memory connectors manufactured by, or for, AVX.

Our customers consist of multi-national original equipment manufacturers, or OEMs, independent electronic component distributors, and electronic manufacturing service providers, or EMSs. We market our products through our own direct sales force and independent manufacturers' representatives, based upon market characteristics and demands. We coordinate our sales, marketing, and manufacturing organizations by strategic customer account and globally by region.

#### Results of Operations - Three Months Ended June 30, 2017 and 2018

Our net income for the three months ended June 30, 2018 was \$56.0 million, or \$0.33 per share, compared to net income of \$31.5 million, or \$0.19 per share, for the three months ended June 30, 2017.

	<b>Three Months</b>	
	Ended	
	<b>June 30</b> ,	
(in thousands, except per share data)	2017	2018
Net sales	\$331,354	\$454,116
Gross profit	73,846	108,333
Operating income	42,431	68,017
Net income (loss)	31,484	55,963
Diluted earnings (loss) per share	\$0.19	\$0.33

Net sales in the three month period ended June 30, 2018 increased \$122.7 million or 37.0%, to \$454.1 million compared to \$331.4 million in the three month period ended June 30, 2017. The increase in revenue includes sales of \$97.8 million in our Interconnect, Sensing and Control Devices segment that are attributable to our acquisition of the AB Electronic sensing and control ("S&C") business and \$31.9 million in our Electronic Components segment attributable to our acquisition of Ethertronics ("AVX Antenna"). The increase was partially offset by the loss of Kyocera Resale sales in our Electronic Components segment, due to Kyocera's decision to market and sell certain of its products globally using its own sales force rather than have AVX resell such products in various

geographies, which were \$17.2 million for the three month period ended June 30, 2018 compared to \$76.7 million for the three month period ended June 30, 2017. Global market conditions remained robust, contributing to higher overall demand, primarily in the automotive, medical, telecommunications, and defense and aerospace markets. The improved market demand is being driven in part by the power of electronics to enhance the user experience in automotive, wearables, smartphones, drones, solid state drives, personal and industrial robots, virtual reality devices, smart home control and security devices enabled through the internet within a broad category called IoT, or Internet of Things. Sales were favorably impacted by approximately \$8.4 million as a result of currency movement due to the strengthening of the Japanese Yen and Euro as compared to the U.S. Dollar when compared to the same period last year.

The table below represents product group revenues for the quarters ended June 30, 2017 and 2018.

	Three Months Ended June 30,		
(in thousands)			
Sales Revenue	2017	2018	
Ceramic Components	\$51,057	\$78,836	
Tantalum Components	88,953	101,032	
Advanced Components	161,659	139,344	
Total Electronic Components	301,669	319,212	
Interconnect, Sensing and Control Devices	29,685	134,904	
Total Revenue	\$331,354	\$454,116	

Electronic Components sales increased \$17.5 million, or 5.8% to \$319.2 million in the three month period ended June 30, 2018 compared to sales of \$301.7 million during the same period last year driven by favorable global macro-economic conditions, increased electronic content in automobiles, increased global defense spending, and technological advances across a broad range of IoT products. Sales increases for our Ceramic and Tantalum Components were partially offset by sales decreases in our Advanced Component group primarily due to the previously announced decision by Kyocera to market and sell globally using Kyocera's salesforce rather than Kyocera continuing to have AVX resell such products globally. Kyocera Resale sales were \$17.2 million for the three month period ended June 30, 2018 compared to \$76.7 million for the three month period ended June 30, 2017. Sales in our Advanced Component group were favorably impacted by \$31.9 million attributable to our acquisition of Ethertronics when compared to the same quarter last year.

Interconnect, Sensing and Control Devices product sales increased \$105.2 million to \$134.9 million in the three month period ended June 30, 2018 compared to \$29.7 million during the same period last year. This increase is primarily attributable to increased sales resulting from the addition of the S&C business in addition to increased demand in the European automotive markets. S&C sensor and control devices accounted for \$97.8 million of the increased sales during the quarter ended June 30, 2018.

With the addition of S&C, whose sales are concentrated in Europe, overall sales percentages decreased in the Asian and American regions while sales increased in our European region compared to the same three-month period last year. Sales in the Asian, American, and European markets represented 31%, 25% and 44% of total sales, respectively, for the three month period ended June 30, 2018. This compares to 42%, 30% and 28% of total sales for the Asian, American, and European regions in the same period last year, respectively.

Our sales to independent electronic distributor customers represented 40% of total sales for the three month period ended June 30, 2018, compared to 49% for the three month period ended June 30, 2017. Our S&C sales are primarily direct to OEM customers, which led to the decrease in our distributor sales percentage when compared to the same period last year. Overall, distributor sales activity increased when compared to the same period last year as distributors increased order activity during the past several quarters in response to improved end-market demand and extended product delivery lead times. Our sales to distributor customers involve specific ship-and-debit and stock rotation programs for which sales allowances are recorded as reductions in sales. Such allowance charges were \$6.4 million, or 3.5% of gross sales to distributor customers for the three month period ended June 30, 2018, and \$6.7 million, or 4.2% of gross sales to distributor customers, for the three month period ended June 30, 2017. Applications under such programs for the three month periods ended June 30, 2018 and 2017 were approximately \$6.2 million and \$6.7 million, respectively.

Gross profit in the three month period ended June 30, 2018 was \$108.3 million, compared to a gross profit of \$73.8 million in the three month period ended June 30, 2017. This overall increase in dollars is primarily attributable to higher sales in addition to improved margins. Gross profit as a percentage of sales for the three month period ended June 30, 2018 was 23.9% compared to 22.3% for the three month period ended June 30, 2017. This increase in gross profit as a percentage of sales is reflective of our continued focus on the sale of value added components with better margin opportunities, increased operational efficiencies, and an improved pricing environment in the global marketplace. Costs due to currency movement were unfavorably impacted by \$4.4 million when compared to the same period last year.

Selling, general and administrative expenses in the three month period ended June 30, 2018 were \$40.3 million, or 8.9% of net sales, compared to \$31.4 million, or 9.5% of net sales, in the three month period ended June 30, 2017. When compared to the same quarter last year, the overall increase in these expenses is primarily due to higher selling expenses resulting from the increase in sales as well as the effects of increased amortization for intangible assets related to the S&C and Ethertronics acquisitions.

Income from operations was \$68.0 million in the three month period ended June 30, 2018 compared to \$42.4 million in the three month period ended June 30, 2017. This increase was a result of the factors described above.

Other income, net, was \$2.8 million for the three month period ended June 30, 2018 compared to \$1.9 million for the same three month period last year.

The provision for income tax for the three month period ended June 30, 2018 was \$14.8 million compared to \$12.9 million for the three month period ended June 30, 2017. On December 22, 2017, the Tax Cuts and Jobs Act (the "Act") was enacted in the U.S. Among numerous other provisions, the Act reduced the statutory U.S. corporation income tax rate from 35% to 21%, effective January 1, 2018. Our effective tax rate for the quarter ended June 30, 2018 was approximately 21%, reflective of the lower income tax rates arising from the Act. The Company will continue to assess all relevant aspects of the Act, including additional guidance under the Act, among other things which may impact our income tax provision.

As a result of the factors discussed above, net income for the three month period ended June 30, 2018 was \$56.0 million compared to net income of \$31.5 million for the same three month period last year.

<u>Outlook</u>			
Near-Term:			

With unpredictable global geopolitical and economic conditions, it is difficult to quantify expectations for the remainder of fiscal 2019. Near-term results for us will depend on the impact of the overall global geopolitical and economic conditions and their impact on telecommunications, information technology hardware, automotive, consumer electronics, and other electronic markets. Looking ahead, visibility is low and forecasting is a challenge in this uncertain and volatile market. We expect to see lower than normal sales price pressure in the markets we serve due to increasing demand combined with lower product availability. In response to anticipated market conditions, we expect to continue to focus on cost management and product line rationalization to maximize earnings potential. We also continue to focus on process improvements and enhanced production capabilities in conjunction with our focus on the sales of value-added electronic components to support today's advanced electronic use products. If current global geopolitical and economic conditions worsen, the overall impact on our customers as well as end-user demand for electronic products could have a significant adverse impact on our near-term results.

Long-Term:

**Table of Contents** 

Although there is unpredictability in the near-term market as a result of the current global geopolitical and economic conditions, we continue to see opportunities for long-term growth and profitability improvement due to: (a) a projected increase in the long-term worldwide demand for more sophisticated electronic end use products, which require electronic components and interconnect, sensing and control devices such as the ones we sell, (b) cost reductions and improvements in our production processes, (c) opportunities for growth in our Electronic Component and Interconnect, Sensing and Control Devices product lines due to advances in component design and our production capabilities. We have fostered our financial health and the strength of our balance sheet putting us in a good position to react to changes in the marketplace as they occur. We remain confident that our strategies will enable our continued long-term success.

#### Liquidity and Capital Resources

Our liquidity needs arise primarily from working capital requirements, dividends, capital expenditures, and acquisitions. Historically, we have satisfied our liquidity requirements through funds from operations, investment income from cash and investments in securities, and cash on hand. As of June 30, 2018, we had a current ratio of 5.4 to 1, \$846.2 million of cash, cash equivalents, and investments in securities, \$2.2 billion of stockholders' equity, and no borrowings. On December 22, 2017, the Act was enacted in the U.S. Among numerous other provisions, the Act reduced or eliminated certain corporate tax deductions and provided for a transition from a worldwide to a territorial

tax system for resident corporations and related corporate group members. As a result of the Act we will have greater flexibility to redirect our global cash resources where they are needed. The Company will continue to assess all relevant aspects of the Act, including additional guidance under the Act, among other things which may impact our income tax provision.

Net cash provided by operating activities was \$97.6 million in the three month period ended June 30, 2018 compared to \$63.5 million of cash provided by operating activities in the three month period ended June 30, 2017.

Purchases of property and equipment were \$38.0 million in the three month period ended June 30, 2018 and \$21.8 million in the three month period ended June 30, 2017. Expenditures in the current quarter were primarily made in connection with strategic building expansion and equipment purchase activities in our Fountain Inn, South Carolina facilities and our plants in El Salvador, and Malaysia. We expect to continue making strategic capital investments in our Electronic Component and Interconnect, Sensing and Control Devices product lines and estimate that we will incur capital expenditures of approximately \$110 million in fiscal 2019. The actual amount of capital expenditures will depend upon the outlook for end-market demand and timing of capital projects.

On April 30, 2018, AVX completed its purchase of Kumatec for \$12.3 million in cash, net of cash acquired and debt assumed. Kumatec develops, constructs and manufactures automation equipment and manufactures plastic components.

#### **Table of Contents**

Historically, our operating funding is internally generated through operations, investment income from cash, cash equivalents, and investments in securities and cash on hand. We have assessed the condition of our financial resources and our current business and believe that, based on our financial condition as of June 30, 2018, cash on hand and cash expected to be generated from operating activities and investment income from cash, cash equivalents, and investments in securities will be sufficient to satisfy our anticipated financing needs for working capital, capital expenditures, environmental clean-up costs, expenses related to ongoing litigation, pension plan funding, research, development, and engineering expenses, and dividend payments or stock repurchases to be made during the next twelve months. While changes in customer demand have an impact on our future cash requirements, changes in those requirements are mitigated by our ability to adjust manufacturing capabilities to meet increases or decreases in customer demand. We do not anticipate any significant changes in our ability to generate capital or meet our liquidity needs in the foreseeable future.

From time to time we enter into delivery contracts with selected suppliers for certain precious metals used in our production processes. The delivery contracts represent routine purchase orders for delivery within three months and payment is due upon receipt. As of June 30, 2018, we did not have any significant delivery contracts outstanding.

# **Commitments and Contingencies**

Information related to commitments and contingencies can be found in Note 13, "Commitments and Contingencies," of the Notes to Consolidated Financial Statements and in "Management's Discussion and Analysis of Financial Condition and Results of Operations" contained in the Annual Report on Form 10-K for the fiscal year ended March 31, 2018, as well as in Note 9, "Commitments and Contingencies," in the Notes to the Consolidated Financial Statements in this Form 10-Q. Accordingly, this Quarterly Report on Form 10-Q should be read in conjunction with our Annual Report on Form 10-K for the fiscal year ended March 31, 2018.

# New Accounting Standards

Information related to new Statements of Financial Accounting Standards and Financial Accounting Standards Board Staff Positions that we have recently adopted or are currently reviewing can be found in Note 1, "Summary of Significant Accounting Policies," of the Notes to Consolidated Financial Statements and in "Critical Accounting Policies and Estimates" in "Management's Discussion and Analysis of Financial Condition and Results of Operations" contained in the Annual Report on Form 10-K for the fiscal year ended March 31, 2018, as well as in Note 1, "Summary of Significant Accounting Policies," in the Notes to the Consolidated Financial Statements in this Form 10-Q. Accordingly, this Quarterly Report on Form 10-Q should be read in conjunction with our Annual Report on Form 10-K for the fiscal year ended March 31, 2018.

# Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements that have or are reasonably likely to have a current or future effect on our financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources.

#### ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Our sales are denominated in various foreign currencies in addition to the U.S. Dollar. Certain manufacturing and operating costs denominated in local currencies are incurred in Europe, Asia, Mexico, and Central and South America. Additionally, purchases of resale products from Kyocera may be denominated in Yen. As a result, fluctuations in currency exchange rates affect our operating results and cash flow. In order to minimize the effect of movements in currency exchange rates, we periodically enter into forward exchange contracts to hedge external and intercompany foreign currency transactions. We do not hold or issue derivative financial instruments for speculative purposes. Accordingly, we have hedging commitments to cover a portion of our exchange risk on purchases, operating expenses, and sales. There have been no material net changes in our exposure to foreign currency exchange rates as reflected in Part II, Item 7A "Quantitative and Qualitative Disclosures About Market Risk" in our Annual Report on Form 10-K for the fiscal year ended March 31, 2018. See Note 13 of our Notes to Consolidated Financial Statements contained in this Quarterly Report on Form 10-Q for further discussion of derivative financial instruments.

### ITEM 4. CONTROLS AND PROCEDURES

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our reports under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), is recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

As of the end of the period covered in this report, we carried out an evaluation, under the supervision and with the participation of management, including the Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures, as such term is defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act. Based upon that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that as of the end of the period covered by this report, our disclosure controls and procedures were effective to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms, and is accumulated and communicated to our management, including the Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosures.

In addition, there were no changes in our internal control over financial reporting during the first quarter of fiscal 2019 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

### **PART II: OTHER INFORMATION**

### ITEM 1. LEGAL PROCEEDINGS

Please refer to Note 9, "Commitments and Contingencies," in our Notes to Consolidated Financial Statements in Part I, Item 1 to this Form 10-Q for a discussion of our involvement in certain environmental and other pending legal proceedings.

#### ITEM 1A. RISK FACTORS

Please refer to Part I, Item 1A, Risk Factors, in our Annual Report on Form 10-K for the fiscal year ended March 31, 2018 for information regarding factors that could affect our results of operations, financial condition, and liquidity. There have been no material changes to the risk factors affecting the company as reported in our Annual Report on Form 10-K for the fiscal year ended March 31, 2018.

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

### **Issuer Purchases of Equity Securities**

The following table shows our purchases of common stock during the quarter.

			Total	Maximum
			number of	number
			shares	of shares
			purchased	that may
	Total		as part of	yet be
	number		publicly	purchased
	of shares	Average	announced	under the
	price	plans	plans or	
		paid	or	programs
Period	purchased	per	programs	(1)
		share	(1)	* *

4/1/18 - 4/30/18	20,000	\$ 14.65	20,000	3,047,074
5/1/18 - 5/31/18	35,000	14.80	35,000	3,012,074
6/1/18 - 6/30/18	-	-	-	3,012,074
Total	55,000	\$ 14.74	55,000	3,012,074

On October 17, 2007, the Board of Directors of the Company authorized the repurchase of 5,000,000 shares of our common stock from time to time in the open market. The repurchased shares are held as treasury stock and are available for general corporate purposes. As of June 30, 2018, there were 3,012,074 shares that may yet be repurchased under this program.

# 6. EXHIBITS

Exhibit Certification of John Sarvis, Chairman, Chief Executive Officer and President, pursuant to Rule 13a-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, dated August 6, 2018.

Exhibit 31.2 Certification of Michael Hufnagel, Senior Vice President, Chief Financial Officer and Treasurer, pursuant to Rule 13a-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, dated August 6, 2018.

Exhibit Certification Pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley 32.1 Act of 2002 - John Sarvis and Michael Hufnagel.

The following financial information from our Quarterly Report on Form 10-Q for the quarter ended June 30, 2018, formatted in XBRL (eXtensible Business Reporting Language): (i) Consolidated Balance Sheets, (ii) Consolidated Statements of Operation, (iii) Consolidated Statements of Comprehensive Income (Loss), (iv) Consolidated Statements of Cash Flows, and (v) the Notes to Consolidated Financial Statements.

# **Table of Contents**

# Signature

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized, and the undersigned also has signed this report in his capacity as the registrant's Chief Financial Officer.

Date: August 6, 2018

**AVX** Corporation

By:/s/ Michael Hufnagel

Michael Hufnagel Senior Vice President, Chief Financial Officer, and Treasurer