

# FORM 10-Q

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

For the quarterly period ended December 31, 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 001-36632

**emcore**<sup>®</sup>

**EMCORE Corporation**

(Exact name of registrant as specified in its charter)

**New Jersey**

(State or other jurisdiction of incorporation or organization)

**22-2746503**

(I.R.S. Employer Identification No.)

**2015 W. Chestnut Street, Alhambra, California, 91803**

(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: **(626) 293-3400**

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 every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T 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 definition of "large accelerated filer", "accelerated filer", "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.  Large accelerated filer  Accelerated filer  Non-accelerated filer  **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

As of January 31, 2019, the number of shares outstanding of our no par value common stock totaled 27,670,466.

---

**CAUTIONARY STATEMENT  
REGARDING FORWARD-LOOKING STATEMENTS**

This Quarterly Report on Form 10-Q includes forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). These forward-looking statements are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These forward-looking statements are based on our current expectations and projections about future events and financial trends affecting the financial condition of our business. Such forward-looking statements include, in particular, projections about our future results included in our Exchange Act reports and statements about our plans, strategies, business prospects, changes and trends in our business and the markets in which we operate. These forward-looking statements may be identified by the use of terms and phrases such as “anticipates,” “believes,” “can,” “could,” “estimates,” “expects,” “forecasts,” “intends,” “may,” “plans,” “projects,” “should,” “targets,” “will,” “would,” and similar expressions or variations of these terms and similar phrases. Additionally, statements concerning future matters such as our expected liquidity, development of new products, enhancements or technologies, sales levels, expense levels, expectations regarding the outcome of legal proceedings and other statements regarding matters that are not historical are forward-looking statements. Management cautions that these forward-looking statements relate to future events or our future financial performance and are subject to business, economic, and other risks and uncertainties, both known and unknown, that may cause actual results, levels of activity, performance, or achievements of our business or our industry to be materially different from those expressed or implied by any forward-looking statements. Factors that could cause or contribute to such differences in results and outcomes include without limitation the following: (a) the rapidly evolving markets for the Company’s products and uncertainty regarding the development of these markets; (b) the Company’s historical dependence on sales to a limited number of customers and fluctuations in the mix of products and customers in any period; (c) delays and other difficulties in commercializing new products; (d) the failure of new products: (i) to perform as expected without material defects, (ii) to be manufactured at acceptable volumes, yields, and cost, (iii) to be qualified and accepted by our customers, and (iv) to successfully compete with products offered by our competitors; (e) uncertainties concerning the availability and cost of commodity materials and specialized product components that we do not make internally; (f) actions by competitors; (g) risks and uncertainties related to applicable laws and regulations, including the impact of changes to applicable tax laws and tariff regulations and (h) other risks and uncertainties discussed in Part I, Item 1A, Risk Factors in our Annual Report on Form 10-K for the fiscal year ended September 30, 2018, as such risk factors may be amended, supplemented or superseded from time to time by our subsequent periodic reports we file with the Securities and Exchange Commission (“SEC”). These cautionary statements apply to all forward-looking statements wherever they appear in this Quarterly Report.

Forward-looking statements are based on certain assumptions and analysis made in light of our experience and perception of historical trends, current conditions and expected future developments as well as other factors that we believe are appropriate under the circumstances. While these statements represent our judgment on what the future may hold, and we believe these judgments are reasonable, these statements are not guarantees of any events or financial results. All forward-looking statements in this Quarterly Report are made as of the date hereof, based on information available to us as of the date hereof, and subsequent facts or circumstances may contradict, obviate, undermine, or otherwise fail to support or substantiate such statements. We caution you not to rely on these statements without also considering the risks and uncertainties associated with these statements and our business that are addressed in this Quarterly Report on Form 10-Q and our Annual Report on Form 10-K for the fiscal year ended September 30, 2018. Certain information included in this Quarterly Report may supersede or supplement forward-looking statements in our other reports filed with the SEC. We assume no obligation to update any forward-looking statement to conform such statements to actual results or to changes in our expectations, except as required by applicable law or regulation.

---

**EMCORE Corporation**  
**FORM 10-Q**  
**For The Quarterly Period Ended December 31, 2018**

**TABLE OF CONTENTS**

	<b><u>Page</u></b>
<b><u>Part I:</u></b>	
<b>Financial Information</b>	
<u>Item 1.</u> <u>Financial Statements (Unaudited)</u>	<u>4</u>
<u>Condensed Consolidated Statements of Operations and Comprehensive Loss for the three months ended December 31, 2018 and 2017</u>	<u>4</u>
<u>Condensed Consolidated Balance Sheets as of December 31, 2018 and September 30, 2018</u>	<u>5</u>
<u>Condensed Consolidated Statements of Cash Flows for the three months ended December 31, 2018 and 2017</u>	<u>6</u>
<u>Notes to our Condensed Consolidated Financial Statements</u>	<u>7</u>
<u>Item 2.</u> <u>Management's Discussion and Analysis of Financial Condition and Results of Operation</u>	<u>21</u>
<u>Item 3.</u> <u>Quantitative and Qualitative Disclosures about Market Risk</u>	<u>28</u>
<u>Item 4.</u> <u>Controls and Procedures</u>	<u>29</u>
<b><u>Part II:</u></b>	
<b>Other Information</b>	
<u>Item 1.</u> <u>Legal Proceedings</u>	<u>30</u>
<u>Item 1A.</u> <u>Risk Factors</u>	<u>30</u>
<u>Item 6.</u> <u>Exhibits</u>	<u>30</u>
<u>SIGNATURES</u>	<u>32</u>

**PART I. Financial Information.****ITEM 1. Financial Statements**

**EMCORE CORPORATION**  
**Condensed Consolidated Statements of Operations and Comprehensive Loss**  
**For the three months ended December 31, 2018 and 2017**  
**(in thousands, except per share data)**  
**(unaudited)**

	<b>For the three months ended December 31,</b>	
	<b>2018</b>	<b>2017</b>
Revenue	\$ 24,001	\$ 24,036
Cost of revenue	18,193	16,122
Gross profit	5,808	7,914
Operating expense:		
Selling, general, and administrative	7,593	4,819
Research and development	4,019	3,800
Loss on sale of assets	—	107
Total operating expense	11,612	8,726
Operating loss	(5,804)	(812)
Other income:		
Interest income, net	267	111
Foreign exchange gain	14	286
Total other income	281	397
Loss before income tax (expense) benefit	(5,523)	(415)
Income tax (expense) benefit	(15)	333
Net loss	\$ (5,538)	\$ (82)
Foreign exchange translation adjustment	14	253
Comprehensive (loss) income	\$ (5,524)	\$ 171
<b>Per share data:</b>		
Net loss per basic share	\$ (0.20)	\$ (0.00)
Weighted-average number of basic and diluted shares outstanding	27,534	27,032

**The accompanying notes are an integral part of these condensed consolidated financial statements.**

**EMCORE CORPORATION**  
**Condensed Consolidated Balance Sheets**  
**As of December 31, 2018 and September 30, 2018**  
(in thousands)  
(unaudited)

	As of December 31, 2018	As of September 30, 2018
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 57,284	\$ 63,117
Restricted cash	11	78
Accounts receivable, net of allowance of \$322 and \$548, respectively	18,362	19,275
Inventory	20,466	20,850
Prepaid expenses and other current assets	13,251	12,730
Total current assets	109,374	116,050
Property, plant, and equipment, net	19,088	18,216
Non-current inventory	1,415	1,433
Other non-current assets	114	199
Total assets	\$ 129,991	\$ 135,898
<b>LIABILITIES and SHAREHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable	\$ 10,515	\$ 12,997
Accrued expenses and other current liabilities	16,008	14,205
Total current liabilities	26,523	27,202
Asset retirement obligations	1,823	1,809
Other long-term liabilities	89	82
Total liabilities	28,435	29,093
Commitments and contingencies (Note 11)		
Shareholders' equity:		
Common stock, no par value, 50,000 shares authorized; 34,578 shares issued and 27,668 shares outstanding as of December 31, 2018; 34,487 shares issued and 27,577 shares outstanding as of September 30, 2018	734,341	734,066
Treasury stock at cost; 6,910 shares	(47,721)	(47,721)
Accumulated other comprehensive income	899	885
Accumulated deficit	(585,963)	(580,425)
Total shareholders' equity	101,556	106,805
Total liabilities and shareholders' equity	\$ 129,991	\$ 135,898

**The accompanying notes are an integral part of these condensed consolidated financial statements.**

**EMCORE CORPORATION**  
**Condensed Consolidated Statements of Cash Flows**  
**For the three months ended December 31, 2018 and 2017**  
**(in thousands)**  
**(unaudited)**

	<b>For the three months ended December 31,</b>	
	<b>2018</b>	<b>2017</b>
<b>Cash flows from operating activities:</b>		
Net loss	\$ (5,538)	\$ (82)
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization expense	1,594	1,202
Stock-based compensation expense	425	915
Provision adjustments related to doubtful accounts	—	17
Provision adjustments related to product warranty	56	58
Net loss on disposal of equipment	—	107
Other	28	(132)
Total non-cash adjustments	2,103	2,167
Changes in operating assets and liabilities:		
Accounts receivable	911	(883)
Inventory	392	2,169
Other assets	(436)	(277)
Accounts payable	(2,064)	(4,322)
Accrued expenses and other current liabilities	1,763	(727)
Total change in operating assets and liabilities	566	(4,040)
Net cash used in operating activities	(2,869)	(1,955)
<b>Cash flows from investing activities:</b>		
Purchase of equipment	(2,878)	(1,881)
Proceeds from disposal of property, plant and equipment	—	8
Net cash used in investing activities	(2,878)	(1,873)
<b>Cash flows from financing activities:</b>		
Proceeds from stock plans	—	16
Tax withholding paid on behalf of employees for stock-based awards	(150)	(724)
Net cash used in financing activities	(150)	(708)
Effect of exchange rate changes on foreign currency	(3)	15
Net decrease in cash, cash equivalents and restricted cash	(5,900)	(4,521)
Cash, cash equivalents and restricted cash at beginning of period	63,195	68,754
Cash, cash equivalents and restricted cash at end of period	\$ 57,295	\$ 64,233
<b>SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION</b>		
Cash paid during the period for interest	\$ 25	\$ 16
Cash paid during the period for income taxes	\$ 2	\$ 33
<b>NON-CASH INVESTING AND FINANCING ACTIVITIES</b>		
Changes in accounts payable related to purchases of equipment	\$ (410)	\$ (176)

**The accompanying notes are an integral part of these condensed consolidated financial statements.**

**EMCORE Corporation**  
**Notes to our Condensed Consolidated Financial Statements**

**NOTE 1. Description of Business**

Business Overview

EMCORE Corporation (referred to herein, together with its subsidiaries, as the “Company,” “we,” “our,” or “EMCORE”) was established in 1984 as a New Jersey corporation. The Company became publicly traded in 1997 and is listed on the Nasdaq stock exchange under the ticker symbol EMKR. EMCORE pioneered the linear fiber optic transmission technology that enabled the world’s first delivery of Cable TV directly on fiber, and today is a leading provider of advanced *Mixed-Signal Optics* products that enable communications systems and service providers to meet growing demand for increased bandwidth and connectivity. The *Mixed-Signal Optics* technology at the heart of our broadband communications products is shared with our fiber optic gyros and inertial sensors to provide the aerospace and defense markets with state-of-the-art navigation systems technology. With both analog and digital circuits on multiple chips, or even a single chip, the value of *Mixed-Signal* device solutions are often far greater than traditional digital applications and requires a specialized expertise held by EMCORE which is unique in the optics industry.

We currently have one reporting segment: Fiber Optics. This segment is comprised of three product lines: Broadband (which includes Cable TV (“CATV”) systems and components, radio frequency over glass (“RFoG”) products, satellite/microwave communications products and wireless communication products), Chip Devices and Navigation Systems.

Interim Financial Statements

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (“U.S. GAAP”) for interim information, and with the instructions to Form 10-Q and Rule 10-01 of Regulation S-X promulgated by the Securities and Exchange Commission (“SEC”). Accordingly, they do not include all of the information and notes required by U.S. GAAP for annual financial statements. In our opinion, the interim financial statements reflect all normal adjustments that are necessary to provide a fair presentation of the financial results for the interim periods presented. Operating results for interim periods are not necessarily indicative of results that may be expected for an entire fiscal year. The condensed consolidated balance sheet as of September 30, 2018 has been derived from the audited consolidated financial statements as of such date. For a more complete understanding of our business, financial position, operating results, cash flows, risk factors and other matters, please refer to our Annual Report on Form 10-K for the fiscal year ended September 30, 2018.

**NOTE 2. Recent Accounting Pronouncements**

(a) New Accounting Updates Recently Adopted

- In May 2014, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) 2014-09, *Revenue from Contracts with Customers (Topic 606)*, which replaces numerous requirements in U.S. GAAP, including industry-specific requirements, and provides companies with a single revenue recognition model for recognizing revenue from contracts with customers. Under the new standard, recognition of revenue occurs when the seller satisfies a performance obligation by transferring to the customer promised goods or services in an amount that reflects the consideration the entity expects to receive for those goods or services. In July 2015, the FASB approved the deferral of the new standard’s effective date by one year. The new standard was effective for our fiscal year beginning October 1, 2018.

Effective October 1, 2018, we adopted the requirements of Topic 606 using the modified retrospective method. There was no significant cumulative impact to our accumulated deficit upon adoption.

- In May 2017, the FASB issued ASU 2017-09, *Compensation — Stock Compensation (Topic 718): Scope of Modification Accounting*. ASU 2017-09 clarifies when changes to the terms or conditions of a share-based payment award must be accounted for as modifications. The new guidance is intended to reduce diversity in practice and result in fewer changes to the terms of an award being accounted for as a modification. Under ASU 2017-09, an entity will not apply modification accounting to a share-based payment award if the award's fair value, vesting conditions and classification as an equity or liability instrument are the same immediately before and after the change. ASU 2017-09 will be applied prospectively to awards modified on or after the adoption date. The new standard was effective for our fiscal year beginning October 1, 2018. The adoption of ASU 2017-09 did not have an impact on the Company's condensed consolidated financial statements.
- In January 2016, the FASB issued ASU 2016-01, *Financial Instruments-Overall (Topic 825): Recognition and Measurement of Financial Assets and Financial Liabilities*. This ASU amends certain aspects of recognition, measurement, presentation and disclosure of financial instruments, and supersedes the guidance to classify equity securities with readily determinable fair values into different categories (that is, trading or available-for-sale) and requires equity securities to be measured at fair value with changes in the fair value recognized through net income. This new standard was effective for our fiscal year beginning October 1, 2018. The adoption of ASU 2016-01 did not have an impact on our condensed consolidated financial statements and related disclosures.

(b) Recent Accounting Standards or Updates Not Yet Effective

- In June 2016, the FASB issued ASU 2016-13 *Financial Instruments - Credit Losses, Measurement of Credit Losses on Financial Instruments*, which changes the way entities measure credit losses for most financial assets and certain other instruments that are not measured at fair value through net earnings. The new standard is effective for annual periods beginning after December 15, 2019, including interim periods within those annual periods. The new standard will be effective for our fiscal year beginning October 1, 2020 and early adoption is permitted. We are continuing to evaluate the impact the adoption of the new standard will have on our consolidated financial statements and related disclosures.
- In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)*. ASU 2016-02 introduces a lessee model that requires recognition of assets and liabilities arising from qualified leases on the consolidated balance sheets and disclosure of qualitative and quantitative information about lease transactions. This guidance is effective for fiscal years beginning after December 15, 2018 and interim periods within those years. We are in the process of implementing changes to our systems and processes in conjunction with our review of lease agreements. Topic 842 will be effective for our fiscal year beginning October 1, 2019 and we expect to elect certain available transitional practical expedients. Early adoption is permitted.

As currently issued, entities are required to use a modified retrospective transition approach for leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements. There are additional optional practical expedients that an entity may elect to apply. The Company is continuing to evaluate the effect of this update on its consolidated financial statements and related disclosures.

**NOTE 3. Summary of Significant Accounting Policies**

Our significant accounting policies are detailed in "Note 2 - Summary of Significant Accounting Policies" of our Annual Report on Form 10-K for the year ended September 30, 2018. Significant changes to our accounting policies as a result of adopting Topic 606 are discussed below:

**Revenue Recognition** - To determine the proper revenue recognition, we perform the following five steps: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) we satisfy a performance obligation. We only apply the five-step model to contracts when it is probable that we will collect the consideration we are entitled to in exchange for the goods or services we transfer to the customer.



The vast majority of our revenues are from product sales to our customers, pursuant to purchase orders with short lead times. Revenues from product sales are recognized when the customer obtains control of our product, which occurs at a point in time. The Company has elected to account for shipping and handling activities as a fulfillment cost as permitted by the standard. When we perform shipping and handling activities after the transfer of control to the customer (e.g. when control transfers prior to delivery), they are considered fulfillment activities, and accordingly, the costs are accrued when the related revenue is recognized. We expense incremental costs of obtaining a contract as and when incurred if the expected amortization period of the asset that we would have recognized is one year or less.

In certain instances, inventory is maintained by our customers at consigned locations. Revenues from consigned sales are recognized when the customer obtains control of our product, which occurs at a point in time. This is typically when the customer pulls product for use.

We use a number of wholesale distributors around the world and recognize revenue when the wholesale distributor obtains control of our product, which occurs at a point in time, typically upon shipment. Our wholesale distributors are contractually obligated to pay us on standard commercial terms, consistent with our end-use customers. We do not sell to wholesale distributors on consignment and do not give wholesale distributors a right of return.

In certain instances, prior to customers accepting product that is manufactured at one of our contract manufacturers, these customers require that they first qualify the product and manufacturing processes at our contract manufacturer (e.g. customer acceptance clause). The customers' qualification process determines whether the product manufactured at our contract manufacturer achieves their quality, performance, and reliability standards. After a customer completes the initial qualification process, we receive approval to ship qualified product to that customer. Revenues are recognized when the customer obtains control of the qualified product, which occurs at a point in time, typically upon shipment.

To a lesser extent, we enter into other types of contracts including non-recurring engineering contracts. We recognize revenue for these arrangements over time or at a point in time depending on our evaluation of when the customer obtains control of the promised goods or services. For contracts that include multiple performance obligations, we allocate revenue to each performance obligation based on estimates of the relative standalone selling price that we would charge the customer for each promised product or service.

**Receivables, Net** - Receivables, net, include amounts billed and currently due from customers. The amounts due are stated at their net estimated realizable value. Payments are generally due within 90 days or less of invoicing and do not include a significant financing component. We maintain an allowance for doubtful accounts to provide for the estimated amount of receivables that will not be collected. The allowance is based upon an assessment of customer creditworthiness, historical payment experience, the age of outstanding receivables and collateral to the extent applicable. Receivables, net, totaled \$18.4 million and \$19.3 million at December 31, 2018 and September 30, 2018, respectively.

**Remaining Performance Obligations** - Remaining performance obligations represent the transaction price of firm orders for long-term contracts which control has not transferred to the customer. As of December 31, 2018, the aggregate amount of the transaction price allocated to remaining performance obligations was \$4.3 million. The Company expects to recognize revenue on approximately 84% of the remaining performance obligations over the next year with the remaining amount recognized thereafter.

**Product Warranty Reserves** - We provide our customers with warranty claims for certain products and warranty-related services are not considered a separate performance obligation. Pursuant to Accounting Standards Codification ("ASC") 450, *Contingencies*, we make estimates of product warranty expense using historical experience rates and accrue estimated warranty expense as a cost of revenue. We estimate the costs of our warranty obligations based on historical experience of known product failure rates and anticipated rates of warranty claims, use of materials to repair or replace defective products, and service delivery costs incurred in correcting the product issues. In addition, from time to time, specific warranty accruals may be made if unforeseen technical problems arise.

**Disaggregation of Revenue** - Revenue is classified based on the product line of business. For additional information on the disaggregated revenues by geographical region see [Note 14 - Geographical Information](#) in the notes to the condensed consolidated financial statements.

Revenue is also classified by major product category and is presented below:

## For the three months ended December 31,

<i>(in thousands)</i>	2018	% of Revenue	2017	% of Revenue
Broadband	\$ 17,327	72%	\$ 20,866	87%
Chips	4,215	18%	2,151	9%
Navigation	2,459	10%	1,019	4%
Total revenue	\$ 24,001	100%	\$ 24,036	100%

**NOTE 4. Cash, Cash Equivalents and Restricted Cash**

The following table provides a reconciliation of cash, cash equivalents and restricted cash reported within the unaudited consolidated balance sheets that sum to the total of the same amounts shown in the unaudited statements of consolidated cash flows:

<i>(in thousands)</i>	As of December 31, 2018	As of September 30, 2018	As of December 31, 2017
Cash	\$ 2,619	\$ 2,965	\$ 3,769
Cash equivalents	\$ 54,665	\$ 60,152	\$ 60,431
Restricted cash	11	78	33
Total cash, cash equivalents and restricted cash	\$ 57,295	\$ 63,195	\$ 64,233

The Company's restricted cash includes cash balances which are legally or contractually restricted to use. The Company's restricted cash is included in current assets as of December 31, 2018, September 30, 2018 and December 31, 2017.

**NOTE 5. Fair Value Accounting**

ASC Topic 820 ("ASC 820"), *Fair Value Measurements*, establishes a valuation hierarchy for disclosure of the inputs to valuation techniques used to measure fair value. This standard describes a fair value hierarchy based on three levels of inputs, of which the first two are considered observable and the last unobservable, that may be used to measure fair value:

- Level 1 inputs are unadjusted quoted prices in active markets for identical assets or liabilities.
- Level 2 inputs are quoted prices for similar assets and liabilities in active markets or inputs that are observable for the assets or liabilities, either directly or indirectly, through market corroboration, for substantially the full term of the financial instrument.
- Level 3 inputs are unobservable inputs based on our own assumptions used to measure assets or liabilities at fair value.

Classification of an asset or liability within this hierarchy is determined based on the lowest level input that is significant to the fair value measurement.

Valuation techniques used to measure fair value under ASC 820 must maximize the use of observable inputs and minimize the use of unobservable inputs.

Cash consists primarily of bank deposits or highly liquid short-term investments with a maturity of three months or less at the time of purchase. Restricted cash represents temporarily restricted deposits held as compensating balances against short-term borrowing arrangements. Cash, cash equivalents and restricted cash are based on Level 1 measurements.

The carrying amounts of cash and cash equivalents, restricted cash, accounts receivable, other current assets, and accounts payable approximate fair value because of the short maturity of these instruments.

**NOTE 6. Accounts Receivable**

The components of accounts receivable consisted of the following:

<i>(in thousands)</i>	As of	
	December 31, 2018	September 30, 2018
Accounts receivable, gross	\$ 18,684	\$ 19,823
Allowance for doubtful accounts	(322)	(548)
Accounts receivable, net	<u>\$ 18,362</u>	<u>\$ 19,275</u>

The allowance for doubtful accounts is based on the age of receivables and a specific identification of receivables considered at risk of collection.

The following table summarizes changes in the allowance for doubtful accounts for the three months ended December 31, 2018 and 2017.

<b>Allowance for Doubtful Accounts</b> <i>(in thousands)</i>	For the three months ended December 31,	
	2018	2017
Balance at beginning of period	\$ 548	\$ 22
Provision adjustment - expense, net of recoveries	—	17
Write-offs and other adjustments - deductions to receivable balances	(226)	—
Balance at end of period	<u>\$ 322</u>	<u>\$ 39</u>

**NOTE 7. Inventory**

The components of inventory consisted of the following:

<i>(in thousands)</i>	As of	
	December 31, 2018	September 30, 2018
Raw materials	\$ 11,951	\$ 11,857
Work in-process	5,515	5,402
Finished goods	4,415	5,024
Inventory balance at end of period	<u>\$ 21,881</u>	<u>\$ 22,283</u>
Current portion	<u>\$ 20,466</u>	<u>\$ 20,850</u>
Non-Current portion	<u>\$ 1,415</u>	<u>\$ 1,433</u>

The non-current inventory balance of \$1.4 million as of both December 31, 2018 and September 30, 2018 is comprised entirely of raw materials which we acquired as part of a last time purchase as a result of the vendor announcing it would cease manufacturing a part. During the three months ended December 31, 2018, we recorded a \$0.4 million reserve on non-current inventory due to the decline in sales and future demand of the inventory.

**NOTE 8. Property, Plant, and Equipment, net**

The components of property, plant, and equipment, net consisted of the following:

<i>(in thousands)</i>	As of	
	December 31, 2018	September 30, 2018
Equipment	\$ 37,025	\$ 36,625
Furniture and fixtures	1,109	1,109
Computer hardware and software	2,934	2,928
Leasehold improvements	2,089	2,049
Construction in progress	5,683	3,648
Property, plant, and equipment, gross	\$ 48,840	46,359
Accumulated depreciation	(29,752)	(28,143)
Property, plant, and equipment, net	\$ 19,088	\$ 18,216

**NOTE 9. Accrued Expenses and Other Current Liabilities**

The components of accrued expenses and other current liabilities consisted of the following:

<i>(in thousands)</i>	As of	
	December 31, 2018	September 30, 2018
Compensation	\$ 2,826	\$ 3,065
Warranty	652	642
Professional fees	1,095	604
Customer deposits	285	22
Deferred revenue	474	368
Income and other taxes	9,311	7,593
Severance and restructuring accruals	85	82
Other	1,280	1,829
Accrued expenses and other current liabilities	\$ 16,008	\$ 14,205

Compensation: Compensation is primarily comprised of accrued employee salaries, taxes and benefits.

Severance and restructuring accruals: On December 4, 2018, the Company and Jikun Kim, the Company's former Chief Financial Officer, entered into a Separation and General Release Agreement (the "Separation Agreement") pursuant to which the Company and Mr. Kim agreed that he would cease service with the Company effective as of December 31, 2018 (the "Separation Date"). The Separation Agreement provided for, among other things, the continuation of his base salary for a period of two months following the Separation Date and a lump sum payment of \$22,875 in lieu of any cash bonus payment under the Company's Fiscal Year 2018 Bonus Plan, in each case subject to his execution and non-revocation of a general release agreement releasing the Company from any liability or obligation to him and compliance with certain confidentiality, non-solicitation and other restrictive covenants as provided in the Separation Agreement. Mr. Kim's outstanding equity awards that remained unvested as of the Separation Date were cancelled and terminated. The Company recorded a charge of approximately \$0.1 million in the three months ended December 31, 2018 related to this Separation Agreement.

Our severance and restructuring-related accruals specifically relate to the separation agreement discussed above and non-cancelable obligations associated with an abandoned leased facility. Expense related to severance and restructuring accruals is included in selling, general, and administrative expense on our statements of operations and comprehensive income. The following table summarizes the changes in the severance and restructuring accrual account:

<i>(in thousands)</i>	Severance-related accruals	Restructuring- related accruals	Total
Balance as of September 30, 2018	7	75	82
Expense - charged to accrual	57	—	57
Payments and accrual adjustments	(13)	(41)	(54)
Balance as of December 31, 2018	<u>\$ 51</u>	<u>\$ 34</u>	<u>\$ 85</u>

Warranty: The following table summarizes the changes in our product warranty accrual accounts:

<b>Product Warranty Accruals</b>	<b>For the three months ended December 31,</b>	
<i>(in thousands)</i>	<b>2018</b>	<b>2017</b>
Balance at beginning of period	\$ 642	\$ 684
Provision for product warranty - expense	56	58
Adjustments and utilization of warranty accrual	(46)	(29)
Balance at end of period	<u>\$ 652</u>	<u>\$ 713</u>

#### **NOTE 10. Credit Facilities**

On November 11, 2010, we entered into a Credit and Security Agreement (the "Credit Facility") with Wells Fargo Bank, N.A. The Credit Facility is secured by the Company's assets and is subject to a borrowing base formula based on the Company's eligible accounts receivable, inventory, and machinery and equipment accounts.

On July 27, 2017, we entered into a Ninth Amendment of the Credit Facility which adjusted the interest rate to LIBOR plus 1.75%. On November 7, 2018, we entered into a Tenth Amendment of the Credit Facility which extended the maturity date of the facility to November 2021. The Credit Facility currently provides us with a revolving credit line of up to \$15.0 million, subject to a borrowing base formula, that can be used for working capital requirements, letters of credit, acquisitions, and other general corporate purpose subject to a requirement, for certain specific uses, that the Company have liquidity of at least \$25 million after such use.

As of December 31, 2018, there were no amounts outstanding under this Credit Facility and the Company was in compliance with all financial covenants. Also, as of December 31, 2018, the Credit Facility had approximately \$0.5 million reserved for one outstanding stand-by letter of credit and \$5.5 million available for borrowing. As of January 31, 2019, there was no outstanding balance under this Credit Facility and \$0.5 million reserved for one outstanding stand-by letter of credit.

#### **NOTE 11. Income and Other Taxes**

For the three months ended December 31, 2018 and 2017, the Company recorded income tax (expense) benefit of approximately \$(15,000) and \$0.3 million, respectively. Income tax expense for the three months ended December 31, 2018 is primarily comprised of state minimum tax expense. Income tax benefit for three months ended December 31, 2017 is primarily comprised of the effect of the December 22, 2017 Tax Cuts and Jobs Act (the "Tax Act") which eliminated Alternative Minimum Taxes and resulted in a refund to the Company of amounts paid in prior fiscal years, state minimum tax expense, and foreign tax expense included within continuing operations.

For the three months ended December 31, 2018 and 2017, the effective tax rate on continuing operations was 0% and (80.2)%, respectively. The lower tax rate for the three months ended December 31, 2018 is primarily due to the operating loss and state minimum tax expense. The higher beneficial tax rate for three months ended December 31, 2017 was primarily due to the effect of the Tax Act, which resulted in a credit to the Company on future tax payments for past AMT amounts paid and the fiscal year 2018 operating loss. Income tax expense is comprised of estimated alternative minimum tax as prescribed by ASC 740 and foreign tax expense. The Company uses some estimates to forecast permanent differences between book and tax accounting.

We have not provided for income taxes on non-U.S. subsidiaries' undistributed earnings as of December 31, 2018 because we plan to indefinitely reinvest the unremitted earnings of our non-U.S. subsidiaries and all of our non-U.S. subsidiaries historically have negative earnings and profits.

All deferred tax assets have a full valuation allowance at December 31, 2018. However, on a quarterly basis, the Company will evaluate the positive and negative evidence to assess whether the more likely than not criteria, mandated by ASC 740, has been satisfied in determining whether there will be further adjustments to the valuation allowance.

During the three months ended December 31, 2018 and 2017, there were no material increases or decreases in unrecognized tax benefits. As of December 31, 2018 and September 30, 2018, we had approximately \$0.4 million of interest and penalties accrued as tax liabilities on our balance sheet. We believe that it is reasonably possible that none of the uncertain tax position will be paid or settled within the next 12 months. Interest that is accrued on tax liabilities is recorded within interest expense on the statement of condensed consolidated statements of operations.

**NOTE 12. Commitments and Contingencies**

Operating Lease Obligations: We lease certain facilities and equipment under non-cancelable operating leases. Operating lease amounts exclude renewal option periods, property taxes, insurance, and maintenance expenses on leased properties. Our facility leases typically provide for rental adjustments for increases in base rent (up to specific limits), property taxes, insurance, and general property maintenance that would be recorded as rent expense. Rent expense was approximately \$0.3 million for the three months ended December 31, 2018 and 2017. There are no off-balance sheet arrangements other than our operating leases.

Asset Retirement Obligation: We have known conditional Asset Retirement Obligations (“AROs”) such as certain asset decommissioning and restoration of rented facilities to be performed in the future. Our ARO includes assumptions related to renewal option periods for those facilities where we expect to extend lease terms. The Company recognizes its estimate of the fair value of its ARO in the period incurred in long-term liabilities. The fair value of the ARO is also capitalized as property, plant and equipment.

In future periods, the ARO is accreted for the change in its present value and capitalized costs are depreciated over the useful life of the related assets. If the fair value of the estimated ARO changes, an adjustment will be recorded to both the ARO and the asset retirement capitalized cost. Revisions in estimated liabilities can result from revisions of estimated inflation rates, changes in estimated retirement costs, and changes in the estimated timing of settling the ARO. The fair value of our ARO was estimated by discounting projected cash flows over the estimated life of the related assets using credit adjusted risk-free rates which ranged from 1.20% to 4.20%. There was no ARO settled during the three months ended December 31, 2018 and 2017. Accretion expense of \$14,000 and \$17,000 was recorded during the three months ended December 31, 2018 and 2017, respectively.

EMCORE leases its primary facility in Alhambra, California covering six buildings where manufacturing, research and development, and general and administrative work is performed. In September 2017, a new lease for four of the six buildings was signed, which was effective on October 1, 2017. The new lease extends the terms of the lease for three years plus a three year option to extend the lease through September 2023. In connection with the lease agreement, the Company has recorded an ARO liability at December 31, 2018 and September 30, 2018 of \$1.8 million. Leases related to the other two buildings expired in 2011, and these buildings are being occupied on a month-to-month basis.

The Company’s ARO consists of legal requirements to return the existing leased facilities to their original state and certain environmental work to be performed due to the presence of a manufacturing fabrication operation and significant changes to the facilities over the past thirty years.

In May 2016 (and retroactively effective on February 1, 2016) the Company entered into a five year lease agreement for facilities in Beijing, China where some manufacturing work is to be performed. In connection with the lease agreement, the Company has recorded an ARO liability in the amount of \$0.1 million at December 31, 2018 and September 30, 2018.

Indemnifications: We have agreed to indemnify certain customers against claims of infringement of intellectual property rights of others in our sales contracts with these customers. Historically, we have not paid any claims under these indemnification obligations.

**Legal Proceedings:** We are subject to various legal proceedings, claims, and litigation, either asserted or unasserted, that arise in the ordinary course of business. The outcome of these matters is currently not determinable and we are unable to estimate a range of loss, should a loss occur, from these proceedings. The ultimate outcome of legal proceedings involves judgments, estimates and inherent uncertainties and the results of these matters cannot be predicted with certainty. Professional legal fees are expensed when incurred. We accrue for contingent losses when such losses are probable and reasonably estimable. In the event that estimates or assumptions prove to differ from actual results, adjustments are made in subsequent periods to reflect more current information. Should we fail to prevail in any legal matter or should several legal matters be resolved against the Company in the same reporting period, then the financial results of that particular reporting period could be materially affected.

a) Intellectual Property Lawsuits

We protect our proprietary technology by applying for patents where appropriate and, in other cases, by preserving the technology, related know-how and information as trade secrets. The success and competitive position of our product lines are impacted by our ability to obtain intellectual property protection for our research and development efforts. We have, from time to time, exchanged correspondence with third parties regarding the assertion of patent or other intellectual property rights in connection with certain of our products and processes.

b) Phoenix Navigation Components, LLC Legal Proceedings

On June 12, 2018, Phoenix Navigation Components, LLC (“Phoenix”) commenced an arbitration against EMCORE with the American Arbitration Association (“AAA”) in New York. On August 31, 2018, Phoenix filed a First Amended Demand for Arbitration, asserting the following claims: breach of contract, breach of the covenant of good faith and fair dealing, misappropriation of trade secrets (under the Defend Trade Secrets Act, 18 U.S.C. § 1836, and New York law), conversion, unjust enrichment, correction of inventorship relating to U.S. Patent No. 8,773,665, and declaratory relief, relating to EMCORE’s termination of certain agreements entered into between EMCORE and Phoenix related to the purported license of certain intellectual property related to fiber optic gyroscope technology and disputed royalty payments related thereto. On September 14, 2018, EMCORE filed an Answering Statement and Counterclaim, denying all of Phoenix’s claims and asserting counterclaims for breach of the implied covenant of good faith and fair dealing and declaratory relief. An arbitration hearing on all claims with the exception of the patent claims was held on January 8 through 12, 2019, and closing arguments are currently scheduled for March 29, 2019. A second arbitration hearing on the patent claims has been set for July 29, 2019. We believe that the claims asserted by Phoenix are without merit and we intend to vigorously defend ourselves against them.

On June 21, 2018, Phoenix Navigation Components, LLC commenced a special proceeding against EMCORE in the New York Supreme Court, Commercial Division, Index No. 653128/2018. As part of the special proceeding, Phoenix filed an application for a preliminary injunction in aid of arbitration pursuant to CLPR 7502(c), in connection with the AAA arbitration proceeding in New York. On August 6, 2018, Phoenix’s application was resolved pursuant to a stipulation between EMCORE and Phoenix. This special proceeding remains open pending resolution of the AAA arbitration.

On September 18, 2018, EMCORE filed a complaint against Phoenix in the United States District Court for the Central District of California seeking a declaratory judgment with respect to U.S. Patent No. 8,773,665. On October 19, 2018, Phoenix filed a Motion to Stay Pending Arbitration or to Dismiss the Complaint. On December 7, 2018, the United States District Court for the Central District of California issued an order granting Phoenix’s motion to dismiss this action.

**NOTE 13. Equity**

Equity Plans

We provide long-term incentives to eligible officers, directors, and employees in the form of equity-based awards. We maintain three equity incentive compensation plans, collectively described below as our “Equity Plans”:

- the 2000 Stock Option Plan,
- the 2010 Equity Incentive Plan (“2010 Plan”), and
- the 2012 Equity Incentive Plan (“2012 Plan”).

We issue new shares of common stock to satisfy awards issued under our Equity Plans.

Stock Options

Most of our stock options vest and become exercisable over a four to five year period and have a contractual life of 10 years. Certain stock options awarded are intended to qualify as incentive stock options pursuant to Section 422A of the Internal Revenue Code.

The following table summarizes stock option activity under the Equity Plans for the three months ended December 31, 2018:

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (in years)	Aggregate Intrinsic Value (*) (in thousands)
Outstanding as of September 30, 2018	69,980	\$4.74		
Granted	—	—		
Exercised	—	—		—
Forfeited	(52)	\$3.97		
Expired	(1,267)	\$5.21		
Outstanding as of December 31, 2018	<u>68,661</u>	\$4.73	4.93	\$ 11
Exercisable as of December 31, 2018	<u>47,122</u>	\$4.77	4.04	\$ 10
Vested and expected to vest as of December 31, 2018	<u>68,661</u>	\$4.73	4.93	\$ 11

(\*) Intrinsic value for stock options represents the “in-the-money” portion or the positive variance between a stock option’s exercise price and the underlying stock price. For the three months ended December 31, 2017, the intrinsic value of options exercised was \$13,000.

As of December 31, 2018, there was approximately \$44,000 of unrecognized stock-based compensation expense related to non-vested stock options granted under the Equity Plans which is expected to be recognized over an estimated weighted average life of 1.8 years.

Valuation Assumptions

There were no stock option grants for the three months ended December 31, 2018 and 2017.

Time-Based Restricted Stock

Time-based restricted stock units (“RSUs”) and restricted stock awards (“RSAs”) granted to employees under the 2010 Plan and 2012 Plan typically vest over 3 to 4 years and are subject to forfeiture if employment terminates prior to the lapse of the restrictions. RSUs are not considered issued or outstanding common stock until they vest. RSAs are considered issued and outstanding on the grant date and are subject to forfeiture if specified vesting conditions are not satisfied.



The following table summarizes the activity related to RSUs and RSAs subject to time-based vesting requirements for the three months ended December 31, 2018:

Restricted Stock Activity	Restricted Stock Units		Restricted Stock Awards	
	Number of Shares	Weighted Average Grant Date Fair Value	Number of Shares	Weighted Average Grant Date Fair Value
Non-vested as of September 30, 2018	1,011,621	\$6.04	8,154	\$8.20
Granted	10,000	\$4.48	—	\$0.00
Vested	(93,422)	\$6.84	—	\$0.00
Forfeited	(117,108)	\$4.73	—	\$0.00
Non-vested as of December 31, 2018	811,091	\$6.12	8,154	\$8.20

As of December 31, 2018, there was approximately \$4.1 million of remaining unamortized stock-based compensation expense associated with RSUs, which will be expensed over a weighted average remaining service period of approximately 2.7 years. The 0.8 million outstanding non-vested and expected to vest RSUs have an aggregate intrinsic value of approximately \$3.4 million and a weighted average remaining contractual term of 1.6 years. For the three months ended December 31, 2018 and 2017, the intrinsic value of RSUs vested was approximately \$0.4 million and \$0.3 million, respectively. For the three months ended December 31, 2017, the weighted average grant date fair value of RSUs granted was \$6.73 per share.

As of December 31, 2018, there was approximately \$39,000 of remaining unamortized stock-based compensation expense associated with RSAs, which will be expensed over a weighted average remaining service period of approximately 1.8 years.

#### Performance Stock

Performance based restricted stock units (“PSUs”) and performance based shares of restricted stock (“PRSAs”) granted to employees under the 2012 Plan typically vest over 1 to 3 years and are subject to forfeiture in whole, if employment terminates, or in whole or in part, if specified vesting conditions are not satisfied, in each case prior to vesting. PSUs are not considered issued or outstanding common stock until they vest. PRSAs are considered issued and outstanding on the grant date (at 200% of the target number of shares) and are subject to forfeiture if specified vesting conditions are not satisfied. PSUs and PRSAs that are granted to our executive officers and key employees are provided as long-term incentive compensation that is based on relative total shareholder return, which measures our performance against that of our competitors.

The following table summarizes the activity related to PSUs and PRSAs for the three months ended December 31, 2018:

Performance Stock Activity	Performance Stock Units		Performance Stock Awards	
	Number of Shares (at Target)	Weighted Average Grant Date Fair Value	Number of Shares (at Target)	Weighted Average Grant Date Fair Value
Non-vested as of September 30, 2018	397,777	\$8.48	33,333	\$12.25
Granted	—	\$0.00	—	\$0.00
Vested	(30,874)	\$7.14	—	\$0.00
Forfeited	(132,579)	\$7.24	—	\$0.00
Non-vested as of December 31, 2018	234,324	\$9.35	33,333	\$12.25

As of December 31, 2018, there was approximately \$1.2 million of remaining unamortized stock-based compensation expense associated with PSUs, which will be expensed over a weighted average remaining service period of approximately 1.7 years. The 0.2 million outstanding non-vested and expected to vest PSUs have an aggregate intrinsic value of approximately \$1.0 million and a weighted average remaining contractual term of 1.7 years. For the three months ended December 31, 2018 and 2017, the intrinsic value of PSUs vested was approximately \$0.2 million and \$1.4 million, respectively. For the three months ended December 31, 2017, the weighted average grant date fair value of PSUs granted was \$7.62.

As of December 31, 2018, there was approximately \$0.2 million of remaining unamortized stock-based compensation expense associated with PRSAs, which will be expensed over a weighted average remaining service period of approximately 0.8 years.

Stock-based compensation

The effect of recording stock-based compensation expense was as follows:

Stock-based Compensation Expense - by award type	For the three months ended	
	December 31,	
(in thousands)	2018	2017
Employee stock options	\$ 7	\$ 10
Restricted stock units and awards	386	451
Performance stock units and awards	(60)	289
Employee stock purchase plan	40	86
Outside director equity awards and fees in common stock	52	79
Total stock-based compensation expense	\$ 425	\$ 915

Stock-based Compensation Expense - by expense type	For the three months ended	
	December 31,	
(in thousands)	2018	2017
Cost of revenue	\$ 111	\$ 139
Selling, general, and administrative	159	638
Research and development	155	138
Total stock-based compensation expense	\$ 425	\$ 915

Stock-based compensation within selling, general and administrative expense was lower for the three months ended December 31, 2018 due to the reversal of previously recognized expense associated with the forfeiture of unvested RSUs and PSUs of our former CFO Jikun Kim.

401(k) Plan

We have a savings plan that qualifies as a deferred salary arrangement under Section 401(k) of the Internal Revenue Code. Under this savings plan, participating employees may defer a portion of their pretax earnings, up to the Internal Revenue Service annual contribution limit. Since June 2015, all employer contributions are made in cash. Our matching contribution in cash for the each of the three months ended December 31, 2018 and 2017 was approximately \$0.1 million.

Loss Per Share

The following table sets forth the computation of basic and diluted net loss per share:

<b>Basic and Diluted Net Loss Per Share</b> <i>(in thousands, except per share)</i>	<b>For the three months ended December 31,</b>	
	<b>2018</b>	<b>2017</b>
Numerator:		
Loss from continuing operations	\$ (5,538)	\$ (82)
Undistributed earnings allocated to common shareholders for basic and diluted net income per share	(5,538)	(82)
Denominator:		
Denominator for basic and fully diluted net loss per share - weighted average shares outstanding	27,534	27,032
Net loss per basic and fully diluted share	\$ (0.20)	\$ —
Weighted average antidilutive options, unvested restricted stock units and awards, unvested performance stock units and ESPP shares excluded from the computation	664	911
Average market price of common stock	\$ 4.69	\$ 7.50

For diluted loss per share, the denominator includes all outstanding common shares and all potential dilutive common shares to be issued. The anti-dilutive stock options and unvested stock were excluded from the computation of diluted net loss per share for the three months ended December 31, 2018 and 2017 due to the Company incurring a net loss for the period.

Employee Stock Purchase Plan

We maintain an Employee Stock Purchase Plan (“ESPP”) that provides employees an opportunity to purchase common stock through payroll deductions. The ESPP is a 6-month duration plan with new participation periods beginning on approximately February 25 and August 26 of each year. The purchase price is set at 85% of the average high and low market price of our common stock on either the first or last trading day of the participation period, whichever is lower, and annual contributions are limited to the lower of 10% of an employee's compensation or \$25,000.

Future Issuances

As of December 31, 2018, we had common stock reserved for the following future issuances:

<b>Future Issuances</b>	<b>Number of Common Stock Shares Available for Future Issuances</b>
Exercise of outstanding stock options	68,661
Unvested restricted stock units	811,091
Unvested performance stock units and awards (at 200% maximum payout)	535,314
Purchases under the employee stock purchase plan	740,558
Issuance of stock-based awards under the Equity Plans	1,879,160
Purchases under the officer and director share purchase plan	88,741
Total reserved	4,123,525

**NOTE 14. Geographical Information**

We evaluate our reportable segment pursuant to ASC 280, *Segment Reporting*. The Company's Chief Executive Officer is the chief operating decision maker and he assesses the performance of the operating segment and allocates resources to the segment based on its business prospects, competitive factors, net revenue, operating results, and other non-U.S. GAAP financial ratios. Based on this evaluation, the Company operates as a single reportable segment, Fiber Optics.

**Revenue:** The following tables set forth revenue by geographic region with revenue assigned to geographic regions based on our customers' billing address.

Revenue by Geographic Region <i>(in thousands)</i>	For the three months ended December 31,	
	2018	2017
United States and Canada	\$ 18,576	\$ 20,079
Asia	4,045	2,657
Europe	1,266	1,227
Other	114	73
Total revenue	\$ 24,001	\$ 24,036

**Significant Customers:** Significant customers are defined as customers representing greater than 10% of our consolidated revenue. Revenue from four and two of our significant customers represented an aggregate of 74% and 63% of our consolidated revenue for the three months ended December 31, 2018 and 2017, respectively.

**Long-lived Assets:** Long-lived assets consist of property, plant, and equipment. As of December 31, 2018 and September 30, 2018, approximately 65% and 49%, respectively, of our long-lived assets were located in the United States. The remaining long-lived assets are primarily located in China.

**ITEM 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations**

You should read the following discussion of our financial condition and results of operations in conjunction with the financial statements and the notes thereto included in [Financial Statements](#) under [Item 1](#) within this Quarterly Report. The following discussion contains forward-looking statements that reflect our plans, estimates, and beliefs. Our actual results could differ materially from those discussed in the forward-looking statements. See [Cautionary Statement Regarding Forward-Looking Statements](#).

**Business Overview**

EMCORE Corporation (referred to herein, together with its subsidiaries, as the “Company,” “we,” “our,” or “EMCORE”) was established in 1984 as a New Jersey corporation. The Company became publicly traded in 1997 and is listed on the Nasdaq Stock Exchange under the ticker symbol EMKR. EMCORE pioneered the linear fiber optic transmission technology that enabled the world’s first delivery of Cable TV directly on fiber, and today is a leading provider of advanced *Mixed-Signal Optics* products that enable communications systems and service providers to meet growing demand for increased bandwidth and connectivity. The *Mixed-Signal Optics* technology at the heart of our broadband communications products is shared with our fiber optic gyros and inertial sensors to provide the aerospace and defense markets with state-of-the-art navigations systems technology. With both analog and digital circuits on multiple chips, or even a single chip, the value of *Mixed-Signal* device solutions is often far greater than traditional digital applications and requires a specialized expertise held by EMCORE which is unique in the optics industry.

**Results of Operations**

The following table sets forth our consolidated statements of operations data expressed as a percentage of revenue:

	<b>For the three months ended December 31,</b>	
	<b>2018</b>	<b>2017</b>
Revenue	100.0 %	100.0 %
Cost of revenue	75.8	67.1
Gross profit	24.2	32.9
Operating expense:		
Selling, general, and administrative	31.6	20.0
Research and development	16.8	15.8
Loss on sale of assets	—	0.5
Total operating expense	48.4	36.3
Operating loss	(24.2)	(3.4)
Other income:		
Interest income, net	1.1	0.5
Foreign exchange gain	0.1	1.2
Total other income	1.2	1.7
Loss before income tax (expense) benefit	(23.0)	(1.7)
Income tax (expense) benefit	(0.1)	1.4
Net loss	(23.1)%	(0.3)%

**Comparison of Financial Results for the Three Months Ended December 31, 2018 and 2017***(in thousands, except percentages)*

	<b>For the three months ended December 31,</b>			
	<b>2018</b>	<b>2017</b>	<b>\$ Change</b>	<b>% Change</b>
Revenue	\$ 24,001	\$ 24,036	\$ (35)	(0.1)%
Cost of revenue	18,193	16,122	2,071	12.8%
Gross profit	5,808	7,914	(2,106)	(26.6)%
Operating expense:				
Selling, general, and administrative	7,593	4,819	2,774	57.6%
Research and development	4,019	3,800	219	5.8%
Loss on sale of assets	—	107	(107)	(100.0)%
Total operating expense	11,612	8,726	2,886	33.1%
Operating loss	(5,804)	(812)	(4,992)	(614.8)%
Other income (expense):				
Interest income, net	267	111	156	140.5%
Foreign exchange gain	14	286	(272)	(95.1)%
Total other income	281	397	(116)	(29.2)%
Loss before income tax (expense) benefit	(5,523)	(415)	(5,108)	(1,230.8)%
Income tax (expense) benefit	(15)	333	(348)	(104.5)%
Net loss	\$ (5,538)	\$ (82)	\$ (5,456)	(6,653.7)%

**Revenue**

For the three months ended December 31, 2018, revenue slightly decreased 0.1% compared to the same period in the prior year primarily driven by lower sales volume of our CATV systems and components partially offset by an increase in Chip Devices, RFoG products and Navigation Systems product line revenue. The decrease in CATV sales is primarily the result of a significant customer purchasing a large inventory accumulation in the three months ended December 31, 2017.

**Gross Profit**

Our cost of revenue consists of raw materials, compensation expense including non-cash stock-based compensation expense, depreciation expense and other manufacturing overhead costs, expenses associated with excess and obsolete inventories, and product warranty costs. Historically, our cost of revenue as a percentage of revenue, which we refer to as our gross margin, has fluctuated significantly due to product mix, manufacturing yields and sales volumes, and inventory and specific product warranty charges.

Consolidated gross margins were 24.2% and 32.9% for the three months ended December 31, 2018 and 2017, respectively.

Stock-based compensation expense within cost of revenue totaled approximately \$0.1 million during each of the three months ended December 31, 2018 and 2017.

For the three months ended December 31, 2018, gross profit decreased by 26.6% when compared to the same period in the prior year. The decrease in gross profit for the three months ended December 31, 2018 was primarily due to sales of lower margin products and a recorded reserve on non-current inventory. The decrease in gross margin for the three months ended December 31, 2018 was primarily due to product mix. During the three months ended December 31, 2018, we recorded a \$0.4 million reserve on non-current inventory due to the decline in sales and future demand of the inventory.

### **Selling, General and Administrative (“SG&A”)**

SG&A consists primarily of compensation expense including non-cash stock-based compensation expense related to executive, finance, and human resources personnel, as well as sales and marketing expenses, professional fees, legal and patent-related costs, and other corporate-related expenses.

Stock-based compensation expense within SG&A totaled approximately \$0.2 million and \$0.6 million for the three months ended December 31, 2018 and 2017, respectively.

SG&A expense for the three months ended December 31, 2018 was higher than the amount reported in the same period in the prior year primarily due to an increase in expense for professional services as a result of the litigation proceedings with Phoenix Navigation Components, LLC and strategic planning related expenses.

As a percentage of revenue, SG&A expenses were 31.6% and 20.0% for the three months ended December 31, 2018 and 2017, respectively. The increase in SG&A expense as a percentage of revenue in the three months ended December 31, 2018 compared to the prior year was due to the higher SG&A expense during the three months ended December 31, 2018.

### **Research and Development (“R&D”)**

R&D consists primarily of compensation expense including non-cash stock-based compensation expense, as well as engineering and prototype costs, depreciation expense, and other overhead expenses, as they relate to the design, development, and testing of our products. Our R&D costs are expensed as incurred. We believe that in order to remain competitive, we must invest significant financial resources in developing new product features and enhancements and in maintaining customer satisfaction worldwide.

Stock-based compensation expense within R&D totaled approximately \$0.2 million and \$0.1 million during the three months ended December 31, 2018 and 2017, respectively.

R&D expense for the three months ended December 31, 2018 was higher than the amounts reported in the same period in 2017 primarily due to an increase in compensation costs and project spending, primarily in navigation systems.

As a percentage of revenue, R&D expenses were 16.7% and 15.8% for the three months ended December 31, 2018 and 2017, respectively. The increase in R&D expense as a percentage of revenue in the three months ended December 31, 2018 compared to the prior year is due to the higher R&D expense in the three months ended December 31, 2018.

### **Operating Loss**

Operating loss represents revenue less the cost of revenue and direct operating expenses incurred. Operating loss is a measure that executive management uses to assess performance and make decisions. As a percentage of revenue, our operating loss was (24.2)% and (3.4)% for the three months ended December 31, 2018 and 2017, respectively. The increase in operating loss as a percentage of revenue in the three months ended December 31, 2018 compared to the same period in the prior year is primarily due to the decline in gross profit and increase in SG&A expense in the three months ended December 31, 2018.

### **Other Income**

#### Interest Income, net

During the three months ended December 31, 2018 and 2017, we recorded \$0.3 million and \$0.2 million, respectively, of interest income earned on cash and cash equivalents balances, which was partially offset by interest expense and letter of credit fees related to our Credit Facility (as defined below). Interest income for the three months year ended December 31, 2018 was higher than the amount reported in the prior year due to higher interest income earned on cash and cash equivalents balances.

#### Foreign Exchange

Gains or losses from foreign currency transactions denominated in currencies other than the U.S. dollar, both realized and unrealized, are recorded as foreign exchange gain (loss) on our consolidated statements of operations and comprehensive income. The gain (losses) recorded relate to the change in value of the Yuan Renminbi relative to the U.S. dollar.

### **Income Tax Benefit (Expense)**

For the three months ended December 31, 2018, the Company recorded income tax expense of approximately \$15,000. For the three months ended December 31, 2017, the Company recorded income tax benefit of approximately \$0.3 million. Income tax expense for the three months ended December 31, 2018 is primarily comprised of state minimum tax expense. Income tax benefit for three months ended December 31, 2017 is primarily comprised of the effect of the December 22, 2017 Tax Cuts and Jobs Act (the "Tax Act") which eliminated Alternative Minimum Taxes and resulted in a refund to the Company of amounts paid in prior fiscal years, state minimum tax expense, and foreign tax expense.

### **Order Backlog**

EMCORE's product sales are made pursuant to purchase orders, often with short lead times. These orders are subject to revision or cancellation and often are made without deposits. Products typically ship within the same quarter in which a purchase order is received; therefore, our order backlog at any particular date is not necessarily indicative of actual revenue or the level of orders for any succeeding period and may not be comparable to prior periods.

### **Liquidity and Capital Resources**

Other than the fiscal years ended September 30, 2018 and 2017, in recent years we have historically consumed cash from operations and, in most periods, we have incurred operating losses from continuing operations. We have managed our liquidity position through the sale of assets and cost reduction initiatives, as well as, from time to time in prior periods, borrowings from our Credit Facility (defined below) and capital markets transactions.

As of December 31, 2018, cash and cash equivalents totaled \$57.3 million and net working capital totaled approximately \$82.9 million. Net working capital, calculated as current assets minus current liabilities, is a financial metric we use which represents available operating liquidity. With respect to measures related to liquidity:

- **Credit Facility:** On November 11, 2010, we entered into a Credit and Security Agreement ("Credit Facility") with Wells Fargo Bank, N.A. ("Wells Fargo"). The Credit Facility, as amended by its seventh amendment on November 10, 2015, currently provides us with a revolving credit line of up to \$15.0 million. On November 7, 2018 we entered into a Tenth Amendment of the Credit Facility which extended the maturity date of the facility to November 2021 that can be used for working capital requirements, letters of credit, acquisitions, and other general corporate purposes subject to a requirement, for certain specific uses, that the Company have liquidity of at least \$25 million after such use. The Credit Facility is secured by the Company's assets and is subject to a borrowing base formula based on the Company's eligible accounts receivable, inventory, and machinery and equipment accounts. See [Note 10 - Credit Facilities](#) in the notes to the condensed consolidated financial statements for additional disclosures. As of January 31, 2019, there was no outstanding balance under this Credit Facility, \$0.5 million reserved for one outstanding stand-by letter of credit and \$5.5 million available for borrowing.

We believe that our existing balances of cash and cash equivalents, cash flows from operations and amounts expected to be available under our Credit Facility will provide us with sufficient financial resources to meet our cash requirements for operations, working capital, and capital expenditures for at least the next twelve months. At the discretion of our Board of Directors and subject to restrictions in our Credit Facility, we may use our existing balances of cash and cash equivalents to provide liquidity to our shareholders through one or more additional special dividends or the repurchase of additional shares of our outstanding common stock, make investments in our business, pursue acquisitions or a combination thereof. For example, under our Credit Facility, we are restricted from making acquisitions or paying dividends that result in the liquidity of the Company being less than \$25.0 million after making such acquisition or paying such dividend if any amounts are outstanding under our Credit Facility. In addition, should we require more capital than what is generated by our operations, for example to fund significant discretionary activities, such as business acquisitions, we could elect to raise capital in the U.S. through debt or equity issuances. These alternatives could result in higher effective tax rates, increased interest expense, and/or dilution of our earnings. We have borrowed funds in the past and continue to believe we have the ability to do so at reasonable interest rates.



**Cash Flow**Net Cash Used In Operating Activities

<i>Operating Activities</i> <i>(in thousands, except percentages)</i>	<b>For the three months ended December 31,</b>			
	<b>2018</b>	<b>2017</b>	<b>\$ Change</b>	<b>% Change</b>
Net cash used in operating activities	\$ (2,869)	\$ (1,955)	\$ (914)	(46.8)%

Fiscal 2019:

For the three months ended December 31, 2018, our operating activities used cash of \$2.9 million primarily due to our net loss of \$5.5 million partially offset by changes in our operating assets and liabilities (or working capital components, which includes non-current inventory) of \$0.6 million, depreciation and amortization expense of \$1.6 million, stock-based compensation expense of \$0.4 million and warranty provision of \$0.1 million. The change in our operating assets and liabilities was primarily the result of a decrease in accounts receivable of \$0.9 million and inventory of \$0.4 million and an increase in other liabilities of \$1.8 million partially offset by an increase in other assets of \$0.4 million and a decrease in accounts payable of \$2.1 million.

Fiscal 2018:

For the three months ended December 31, 2017, our operating activities used cash of \$2.0 million primarily due to our net loss of \$0.1 million and changes in our operating assets and liabilities (or working capital components, which includes non-current inventory) of \$4.0 million, partially offset by depreciation and accretion expense of \$1.2 million, stock-based compensation expense of \$0.9 million, warranty provision of \$0.1 million and loss on disposal of equipment of \$0.1 million. The change in our operating assets and liabilities was primarily the result of an increase in accounts receivable of \$0.9 million, a decrease in accounts payable of approximately \$4.3 million and accrued expenses and a decrease in other liabilities of \$0.7 million partially offset by a decrease in inventory of \$2.2 million and other assets of \$0.3 million.

Working Capital Components:

**Accounts Receivable:** We generally expect the level of accounts receivable at any given quarter to reflect the level of sales in that quarter. Our accounts receivable balances have fluctuated historically due to the timing of account collections, timing of product shipments, and/or change in customer credit terms.

**Inventory:** We generally expect the level of inventory at any given quarter to reflect the change in our expectations of forecasted sales. Our inventory balances have fluctuated historically due to the timing of customer orders and product shipments, changes in our internal forecasts related to customer demand, as well as adjustments related to excess and obsolete inventory and the purchase of non-current inventory.

**Accounts Payable:** The fluctuation of our accounts payable balances is primarily driven by changes in inventory purchases as well as changes related to the timing of actual payments to vendors.

**Accrued Expenses:** Our largest accrued expense typically relates to compensation. Historically, fluctuations of our accrued expense accounts have primarily related to changes in the timing of actual compensation payments, receipt or application of advanced payments, adjustments to our warranty accrual, and accruals related to professional fees.

Net Cash Used In Investing Activities

<i>Investing Activities</i> <i>(in thousands, except percentages)</i>	For the three months ended December 31,			
	2018	2017	\$ Change	% Change
Net cash used in investing activities	\$ (2,878)	\$ (1,873)	\$ (1,005)	(53.7)%

Fiscal 2019:

For the three months ended December 31, 2018, our investing activities used \$2.9 million of cash for capital-related expenditures of \$2.9 million primarily related to investment in our wafer fabrication facility.

Fiscal 2018:

For the three months ended December 31, 2017, our investing activities used \$1.9 million of cash for capital-related expenditures.

Net Cash Used In Financing Activities

<i>Financing Activities</i> <i>(in thousands, except percentages)</i>	For the three months ended December 31,			
	2018	2017	\$ Change	% Change
Net cash used in financing activities	\$ (150)	\$ (708)	\$ 558	78.8%

Fiscal 2019:

For the three months ended December 31, 2018, our financing activities used cash of \$0.2 million for tax withholding paid on behalf of employees for stock-based awards.

Fiscal 2018:

For the three months ended December 31, 2017, our financing activities used cash of \$0.7 million for tax withholding paid on behalf of employees for stock-based awards.

**Contractual Obligations and Commitments**

Our contractual obligations and commitments for the remainder of fiscal 2019 and over the next five fiscal years are summarized in the table below (and are presented as of December 31, 2018):

	Total	Less than a			
		year	1 to 3 years	4 to 5 years	Over 5 years
Purchase obligations	\$ 30,860	\$ 30,414	\$ 307	\$ 139	\$ —
Asset retirement obligations	2,192	40	—	2,152	—
Operating lease obligations	3,272	587	1,425	1,260	—
Total contractual obligations and commitments	\$ 36,324	\$ 31,041	\$ 1,732	\$ 3,551	\$ —

Interest payments are not included in the contractual obligations and commitments table above since they are insignificant to our consolidated results of operations.

The contractual obligations and commitments table above also excludes unrecognized tax benefits because we are unable to reasonably estimate the period during which this obligation may be incurred, if at all. As of December 31, 2018, we had unrecognized tax benefits of \$0.4 million.

Purchase Obligations

Our purchase obligations represent agreements to purchase goods or services that are enforceable and legally binding, that specify all significant terms, including: fixed or minimum quantities to be purchased; fixed, minimum or variable price provisions; and the approximate timing of the transactions.

Asset Retirement Obligations

We have known conditional ARO conditions, such as certain asset decommissioning and restoration of rented facilities to be performed in the future. Our ARO includes assumptions related to renewal option periods where we expect to extend facility lease terms. Revisions in estimated liabilities can result from revisions of estimated inflation rates, escalating retirement costs, and changes in the estimated timing of settling the ARO. See [Note 12 - Commitments and Contingencies](#) in the notes to the condensed consolidated financial statements for additional information related to our AROs.

Operating Leases

Operating leases include non-cancelable terms and exclude renewal option periods, property taxes, insurance and maintenance expenses on leased properties. See [Note 12 - Commitments and Contingencies](#) in the notes to the condensed consolidated financial statements for additional information related to our operating lease obligations.

**Off-Balance Sheet Arrangements**

We do not have any off-balance sheet arrangements other than our operating leases described above that have or are reasonably likely to have a current or future material effect on our condensed consolidated financial condition, results of operations, liquidity, capital expenditures or capital resources.

**Critical Accounting Policies and Estimates**

The preparation of condensed consolidated financial statements in conformity with U.S. GAAP requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities, as of the date of the financial statements, and the reported amounts of revenue and expenses during the reported period. If these estimates differ significantly from actual results, the impact to the condensed consolidated financial statements may be material. There have been no material changes in our critical accounting policies and estimates from those disclosed in our Annual Report on Form 10-K for the year ended September 30, 2018. Please refer to Part II, Item 7 of our Annual Report on Form 10-K for the fiscal year ended September 30, 2018 for a discussion of our critical accounting policies and estimates.

### **ITEM 3. Quantitative and Qualitative Disclosures about Market Risks**

We are exposed to financial market risks, including changes in currency exchange rates and interest rates. We do not use derivative financial instruments for speculative purposes.

#### **Foreign Currency Exchange Risks**

The United States dollar is the reporting currency for our condensed consolidated financial statements. The functional currency for our China subsidiary is the Yuan Renminbi.

We recognize translation adjustments due to the effect of changes in the value of the Yuan Renminbi relative to the U.S. dollar associated with our operations in China. The assets and liabilities of our foreign operations are translated from their respective functional currencies into U.S. dollars at the rates in effect at the consolidated balance sheet dates, and the revenue and expense amounts are translated at the average rate during the applicable periods reflected on the consolidated statements of operations and comprehensive income. Foreign currency translation adjustments are recorded as accumulated other comprehensive income.

Gains and losses from foreign currency transactions denominated in currencies other than the U.S. dollar, both realized and unrealized, are recorded as foreign exchange gain (loss) on our consolidated statements of operations and comprehensive income.

During the normal course of business, we are exposed to market risks associated with fluctuations in foreign currency exchange rates due to the Yuan Renminbi. To reduce the impact of these risks on our earnings and to increase the predictability of cash flows, we use natural offsets in receipts and disbursements within the applicable currency as the primary means of reducing the risk.

Some of our foreign suppliers may adjust their prices (in US dollars) from time to time to reflect currency exchange fluctuations, and such price changes could impact our future financial condition or results of operations. We do not currently hedge our foreign currency exposure.

#### **Interest Rate Risks**

We monitor our interest rate risk on cash balances primarily through cash flow forecasting. Cash that is surplus to immediate requirements is invested in short-term deposits with banks accessible with short notice and invested in money market accounts. We believe our current interest rate risk is immaterial.

#### **Inflation Risks**

Inflationary factors, such as increases in material costs and operating expenses, may adversely affect our results of operations and cash flows. Although we do not believe that inflation has had a material impact on our financial position or results of operations to date, an increase in the rate of inflation in the future may have an adverse effect on the levels of gross profit and operating expenses as a percentage of revenue if the sales prices for our products do not proportionately increase with these increases in expenses.

#### **Credit Market Conditions**

The U.S. and global capital markets have periodically experienced turbulent conditions, particularly in the credit markets, as evidenced by tightening of lending standards, reduced availability of credit, and reductions in certain asset values. This could impact our ability to obtain additional funding through financing or asset sales.

**ITEM 4. Controls and Procedures**

**a. Evaluation of Disclosure Controls and Procedures**

Our management, with the participation of its Chief Executive Officer (Principal Executive Officer) and Chief Financial Officer (Principal Financial Officer and Accounting Officer), evaluated the effectiveness of the Company's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) promulgated under the Exchange Act) as of December 31, 2018. Based upon this evaluation, our Chief Executive Officer and our Chief Financial Officer concluded that our disclosure controls and procedures were effective as of the end of the period covered by this report.

**b. Changes in Internal Control over Financial Reporting**

There were no changes in the Company's internal control over financial reporting (as defined in Rule 13a-15(f) and 15d-15(f) promulgated under the Exchange Act) during the quarter ended December 31, 2018 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

## PART II. Other Information

### ITEM 1. Legal Proceedings

See the disclosures under the caption “Legal Proceedings” in [Note 12 - Commitments and Contingencies](#) in the notes to our condensed consolidated financial statements for disclosures related to our legal proceedings, which disclosures are incorporated herein by reference.

### ITEM 1A. Risk Factors

In addition to the other information set forth in this report, you should carefully consider the risk factors discussed in Part I, Item 1A. “Risk Factors” in our Annual Report on Form 10-K for the year ended September 30, 2018, which could materially affect our business, financial condition or future results. We do not believe the Company's risks have changed materially since we filed our Annual Report on Form 10-K on December 4, 2018. The risks described in our Annual Report on Form 10-K are not the only risks facing our Company. Additional risks and uncertainties not currently known to us or that we currently deem immaterial also may materially adversely affect our business, financial condition and/or operating results.

### ITEM 6. Exhibits and Financial Statement Schedules

Exhibits 2.1 through 10.17 listed in the table below were included in the Exhibits Index in Part IV of the Company's Annual Report on Form 10-K for the year ended September 30, 2018. We are including these exhibits to correct non-functioning hyperlinks pursuant to Instruction 2 of Rule 105 (d) of Regulation S-T.

- 2.1 [Asset Purchase Agreement, dated as of September 17, 2014, by and between EMCORE Corporation and SolAero Technologies Corp. \(f/k/a Photon Acquisition Corporation\) \(incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed on September 18, 2014\).](#)
- 2.2 [Amendment No. 1, dated as of November 26, 2014, to that certain Asset Purchase Agreement, dated as of September 17, 2014, by and between EMCORE Corporation and SolAero Technologies Corp. \(f/k/a Photon Acquisition Corporation\) \(incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed by the Registrant on November 26, 2014\).](#)
- 2.3 [Asset Purchase Agreement, dated October 22, 2014, by and between EMCORE Corporation and NeoPhotonics Corporation \(incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed on October 24, 2014\).](#)
- 2.4 [Amendment No. 1, dated January 2, 2015, to that certain Asset Purchase Agreement, dated as of October 22, 2014, by and between EMCORE Corporation and NeoPhotonics Corporation \(incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed on January 5, 2015\).](#)
- 3.1 [Restated Certificate of Incorporation, dated April 4, 2008, \(incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on April 4, 2008\).](#)
- 3.2 [Certificate of Amendment of Restated Certificate of Incorporation, dated February 15, 2012 \(incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on February 16, 2012\).](#)
- 3.3 [Certificate of Amendment of Restated Certificate of Incorporation of EMCORE Corporation, dated September 18, 2014 \(incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on September 18, 2014\).](#)
- 3.4 [Certificate of Designation Establishing the Series A Junior Participating Preferred Stock and Fixing the Powers, Designations, Preferences and Relative, Participating, Optional and Other Special Rights, and the Qualifications, Limitations and Restrictions, of the Series A Junior Participating Preferred Stock, dated September 18, 2014 \(incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on September 18, 2014\).](#)
- 3.5 [Certificate of Amendment to the Restated Certificate of Incorporation \(incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed with the SEC on March 20, 2018\).](#)
- 3.6 [By-Laws of EMCORE Corporation, as amended through March 19, 2018 \(incorporated by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K filed with the SEC on March 20, 2018\).](#)
- 4.1 [Specimen Certificate for Shares of Common Stock \(incorporated by reference to Exhibit 4.1 to the Company's Annual Report on Form 10-K filed on December 6, 2017\).](#)
- 10.1 [Stipulation of Compromise and Settlement, dated as of November 28, 2007, executed by the Company and the other defendants and the plaintiffs in the Federal Court Action and the State Court Actions \(incorporated by reference to Exhibit 10.19 to the Company's Annual Report on Form 10-K filed on December 31, 2007\).](#)

10.2†	<a href="#">Directors Compensation Policy (Effective March 17, 2017) (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q filed on May 4, 2017).</a>
10.3†	<a href="#">Officer and Director Share Purchase Plan (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on January 27, 2011).</a>
10.4†	<a href="#">2010 Equity Incentive Plan, as amended and restated on June 14, 2011 (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on June 16, 2011).</a>
10.5†	<a href="#">Form of award agreement under 2010 Equity Incentive Plan (Incorporated by reference to Exhibit 10.7 to the Company's Annual Report on Form 10-K filed on December 14, 2015).</a>
10.6†	<a href="#">2012 Equity Incentive Plan, as amended and restated on January 19, 2017 (incorporated by reference to Exhibit 10.7 to the Company's Annual Report on Form 10-K filed on December 6, 2017).</a>
10.7†	<a href="#">Form of Restricted Stock Unit Award Agreement under the 2012 Equity Incentive Plan (incorporated by reference to Exhibit 10.9 to the Company's Annual Report on Form 10-K filed on December 14, 2015).</a>
10.8†	<a href="#">Form of time-based Restricted Stock Unit Award Agreement under the 2012 Equity Incentive Plan (as of October 2016) (incorporated by reference to Exhibit 10.9 to the Company's Annual Report on Form 10-K filed on December 7, 2016).</a>
10.9†	<a href="#">Form of Performance-Based Restricted Stock Award Agreement under the 2012 Equity Incentive Plan (for executive officers) (as of December 2017) (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed on February 6, 2018).</a>
10.10†	<a href="#">Form of Performance-Based Restricted Stock Award Agreement under the 2012 Equity Incentive Plan (for non-executive officers) (as of October 2016) (incorporated by reference to Exhibit 10.11 to the Company's Annual Report on Form 10-K filed on December 6, 2017).</a>
10.11†	<a href="#">Restricted Stock and Restricted Stock Unit Award Agreement under the 2012 Equity Incentive Plan entered into between the Company and Jeffrey Rittichier, with a grant date of October 18, 2016 (incorporated by reference to Exhibit 10.12 to the Company's Annual Report on Form 10-K filed on December 6, 2017).</a>
10.12†	<a href="#">Performance-Based Restricted Stock and Restricted Stock Unit Award Agreement under the 2012 Equity Incentive Plan entered into between the Company and Jeffrey Rittichier, with a grant date of October 18, 2016 (incorporated by reference to Exhibit 10.13 to the Company's Annual Report on Form 10-K filed on December 6, 2017).</a>
10.13†	<a href="#">EMCORE Corporation 2000 Employee Stock Purchase Plan, as amended March 5, 2014 (incorporated by reference to Exhibit B to the Company's Proxy Statement filed on January 28, 2014).</a>
10.14†	<a href="#">Form of Indemnification Agreement entered into with directors and executive officers (incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K filed on December 14, 2012).</a>
10.15†	<a href="#">Employment Agreement, dated December 10, 2014, by and between EMCORE Corporation and Jeff Rittichier (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on December 11, 2014).</a>
10.16†	<a href="#">Employment Agreement, dated June 6, 2016, by and between EMCORE Corporation and Jikun Kim (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on June 8, 2016).</a>
10.17†	<a href="#">EMCORE Corporation Fiscal 2018 Bonus Plan (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on October 17, 2017).</a>
10.18†	<a href="#">Separation and General Release Agreement, dated December 4, 2018, by and between EMCORE Corporation and Jikun Kim (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on December 4, 2018).</a>
10.19†	<a href="#">EMCORE Corporation Fiscal 2019 Bonus Plan (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on December 19, 2018).</a>
31.1**	<a href="#">Certificate of Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</a>
31.2**	<a href="#">Certificate of Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</a>
32.1***	<a href="#">Certificate of Chief Executive Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002</a>
32.2***	<a href="#">Certificate of Chief Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002</a>
101.INS**	XBRL Instance Document.
101.SCH**	XBRL Taxonomy Extension Schema Document.
101.CAL**	XBRL Taxonomy Extension Calculation Linkbase Document.
101.LAB**	XBRL Taxonomy Extension Label Linkbase Document.





101.PRE\*\* XBRL Taxonomy Extension Presentation Linkbase Document.

101.DEF\*\* XBRL Taxonomy Extension Definition Linkbase Document.

† Management contract or compensatory plan

\*\* *Filed herewith*

\*\*\* *Furnished herewith*

**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

**EMCORE CORPORATION**

Date: **February 6, 2019**

By: **/s/ Jeffrey Rittichier**  
Jeffrey Rittichier  
Chief Executive Officer  
(Principal Executive Officer)

Date: **February 6, 2019**

By: **/s/ Mark A. Gordon**  
Mark A. Gordon  
Interim Principal Financial and Accounting Officer  
(Principal Financial and Accounting Officer)

**EMCORE CORPORATION**  
**CERTIFICATION PURSUANT TO SECTION 302**  
**OF THE SARBANES-OXLEY ACT OF 2002**

I, Jeffrey Rittichier, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of EMCORE Corporation ("Report");
2. Based on my knowledge, this Report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this Report;
3. Based on my knowledge, the financial statements, and other financial information included in this Report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this Report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this Report is being prepared;
  - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this Report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this Report based on such evaluation; and
  - d. Disclosed in this Report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 6, 2019

By: /s/ Jeffrey Rittichier  
Jeffrey Rittichier  
Chief Executive Officer  
(Principal Executive Officer)

**EMCORE CORPORATION**  
**CERTIFICATION PURSUANT TO SECTION 302**  
**OF THE SARBANES-OXLEY ACT OF 2002**

I, Mark A. Gordon, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of EMCORE Corporation ("Report");
2. Based on my knowledge, this Report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this Report;
3. Based on my knowledge, the financial statements, and other financial information included in this Report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this Report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this Report is being prepared;
  - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this Report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this Report based on such evaluation; and
  - d. Disclosed in this Report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 6, 2019

By: /s/ Mark A. Gordon

Mark A. Gordon

Interim Principal Financial and Accounting Officer

(Principal Financial and Accounting Officer)

**STATEMENT REQUIRED BY 18 U.S.C. §1350, AS ADOPTED  
PURSUANT TO §906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report on Form 10-Q of EMCORE Corporation (the "Company") for the quarterly period ended December 31, 2018, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Jeffrey Rittichier, Chief Executive Officer (Principal Executive Officer) of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- 1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- 2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: **February 6, 2019**

By: **/s/ Jeffrey Rittichier**  
Jeffrey Rittichier  
Chief Executive Officer  
(Principal Executive Officer)

*The foregoing certification is being furnished pursuant to 18 U.S.C. Section 1350. It is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and it is not to be incorporated by reference into any filing of the Company, regardless of any general incorporation language in such filings.*

**STATEMENT REQUIRED BY 18 U.S.C. §1350, AS ADOPTED  
PURSUANT TO §906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report on Form 10-Q of EMCORE Corporation (the "Company") for the quarterly period ended December 31, 2018, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Mark A. Gordon, Interim Principal Financial and Accounting Officer (Principal Financial and Accounting Officer) of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- 1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- 2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: **February 6, 2019**

By: **/s/ Mark A. Gordon**

Mark A. Gordon

Interim Principal Financial and Accounting Officer

(Principal Financial and Accounting Officer)

*The foregoing certification is being furnished pursuant to 18 U.S.C. Section 1350. It is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and it is not to be incorporated by reference into any filing of the Company, regardless of any general incorporation language in such filings.*