

FORM 10-K

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended September 30, 2017

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 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**

Securities registered pursuant to Section 12(B) of the Act:

<u>Title of Each Class</u>	<u>Name of Each Exchange on Which Registered</u>
Common stock, no par value	The Nasdaq Stock Market LLC (Nasdaq Global Market)
Rights to Purchase Series A Junior Participating Preferred Stock	The Nasdaq Stock Market LLC (Nasdaq Global Market)

Securities registered pursuant to Section 12(g) of the Act: **None**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act ☐ Yes ☒ **No**

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. ☐ Yes ☒ **No**

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. ☒ Yes ☐ **No**

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate website, if any, every Interactive Data File required to be submitted and posted 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 if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting 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 Act). ☐ Yes ☒ **No**

The aggregate market value of our common stock held by non-affiliates as of March 31, 2017 (the last business day of our most recently completed second fiscal quarter) was approximately \$239.0 million, based on the closing sale price of \$9.00 per share of common stock as reported on the Nasdaq Global Market. For purposes of this disclosure, shares of common stock held by officers and directors and by each person known by us to own 5% or more of our outstanding common stock have been excluded.

As of November 30, 2017, the number of shares outstanding of our no par value common stock totaled 27,128,382.

DOCUMENTS INCORPORATED BY REFERENCE

In accordance with General Instruction G(3) of Form 10-K, certain information required by Part III hereof will either be incorporated into this Form 10-K by reference to our Definitive Proxy Statement for our Annual Meeting of Shareholders filed within 120 days of September 30, 2017 or will be included in an amendment to this Form 10-K filed within 120 days of September 30, 2017.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K includes forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the Securities Act), and Section 21E of the Securities Exchange Act of 1934, as amended. 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; and (g) other risks and uncertainties discussed in Part I, Item 1A, Risk Factors in this Annual Report as well as those discussed elsewhere in this Annual Report., as such risk factors may be amended, supplemented or superseded from time to time by other reports we file with the Securities and Exchange Commission (“SEC”). These cautionary statements apply to all forward-looking statements wherever they appear in this Annual 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 Annual 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 Annual Report on Form 10-K. Certain information included in this Annual 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-K
For The Fiscal Year Ended September 30, 2017

TABLE OF CONTENTS

	<u>Page</u>
<u>Part I:</u>	
Item 1. Business	<u>4</u>
Item 1A. Risk Factors	<u>14</u>
Item 1B. Unresolved Staff Comments	<u>38</u>
Item 2. Properties	<u>38</u>
Item 3. Legal Proceedings	<u>38</u>
Item 4. Mine Safety Disclosures	<u>38</u>
<u>Part II:</u>	
Item 5. Market for Registrant's Common Equity, Related Stockholder Matters, and Issuer Purchases of Equity Securities	<u>39</u>
Item 6. Selected Financial Data	<u>41</u>
Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operation	<u>45</u>
Item 7A. Quantitative and Qualitative Disclosures about Market Risk	<u>65</u>
Item 8. Financial Statements and Supplementary Data	<u>66</u>
Consolidated Statements of Operations and Comprehensive Income for the fiscal years ended September 30, 2017, 2016 and 2015	<u>66</u>
Consolidated Balance Sheets as of September 30, 2017 and September 30, 2016	<u>67</u>
Consolidated Statements of Shareholders' Equity for the fiscal years ended September 30, 2017, 2016 and 2015	<u>68</u>
Consolidated Statements of Cash Flows for the fiscal years ended September 30, 2017, 2016 and 2015	<u>69</u>
Notes to our Consolidated Financial Statements	<u>70</u>
Report of Independent Registered Public Accounting Firm - KPMG LLP	<u>99</u>
Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	<u>100</u>
Item 9A. Controls and Procedures	<u>100</u>
<u>Part III:</u>	
Item 10. Directors, Executive Officers and Corporate Governance	<u>102</u>
Item 11. Executive Compensation	<u>102</u>
Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	<u>102</u>
Item 13. Certain Relationships, Related Transactions and Director Governance	<u>102</u>
Item 14. Principal Accounting Fees and Services	<u>102</u>
<u>Part IV:</u>	
Item 15. Exhibits and Financial Statement Schedules	<u>103</u>
Item 16. Form 10-K Summary	<u>105</u>
SIGNATURES	<u>106</u>

PART I.

[Item 1.](#) Business

Company Overview

EMCORE Corporation, together with its subsidiaries (referred to herein 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.

EMCORE has fully vertically-integrated manufacturing capability through our Indium Phosphide (“InP”) compound semiconductor wafer fabrication facility at our headquarters in Alhambra, CA. The facility supports EMCORE’s vertically-integrated manufacturing for our laser, transmitter and receiver products for Cable TV and other broadband applications, fiber optic gyro sensors for Navigation Systems, and chip devices for Telecom and Datacom applications.

We currently have one reporting segment: Fiber Optics. This segment is comprised of three product lines: Broadband, Chip Devices and Navigation Systems. Please see our consolidated financial statements and footnotes included in this Annual Report for financial information regarding this segment. Until the quarter ended December 31, 2014, we operated as two segments: Fiber Optics and Photovoltaics. EMCORE’s former Solar Photovoltaics business, which was sold in December 2014, provided products for space power applications including high-efficiency multi-junction solar cells, covered interconnect cells and complete satellite solar panels. In addition, as further described below, EMCORE sold certain assets, and transferred certain liabilities, of the Company’s telecommunications business, including the ITLA (Integrable Tunable Laser Assembly) micro-ITLA, T-TOSA (Tunable Transmitter Optical Subassembly) and T-XFP (Tunable 10 Gigabit Form Factor Pluggable) product lines within the Company’s telecommunications business, in January 2015. See Note 2 - Summary of Significant Accounting Policies in the notes to our consolidated financial statements for disclosures related to the reclassification of prior period amounts related to discontinued operations as a result of the sale of these businesses to conform to the current period financial statement presentation.

EMCORE’s headquarters and principal executive offices are located at 2015 W. Chestnut Avenue, Alhambra, California, 91803 and our main telephone number is (626) 293-3400. For specific information about us, our products or the markets we serve, please visit our website at <http://www.emcore.com>. The information contained in or linked to our website is not a part of, nor incorporated by reference into, this Annual Report on Form 10-K or a part of any other report or filing with the Securities and Exchange Commission (the “SEC”).

We are subject to the information requirements of the Securities Exchange Act of 1934 (the “Exchange Act”). We file periodic reports, current reports, proxy statements, and other information with the SEC. The SEC maintains a website at <http://www.sec.gov> that contains all of our information that has been filed or furnished electronically with the SEC. We make available free of charge on our website a link to our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act, as soon as reasonably practicable, after such material is electronically filed with, or furnished to, the SEC.

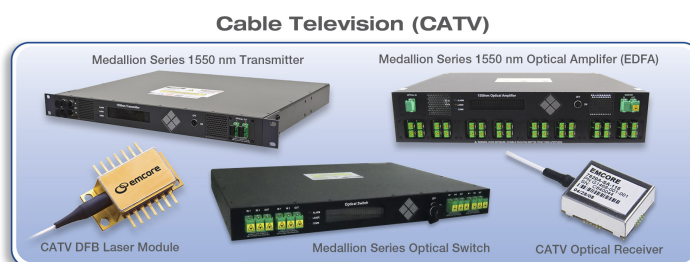
Overview of Our Industry and Markets We Serve

InP compound semiconductor-based products provide the foundation of components, subsystems, and systems used in a broad range of technology markets. Compound semiconductor materials can provide electrical or electro-optical functions, such as emitting optical communications signals and detecting optical communications signals.

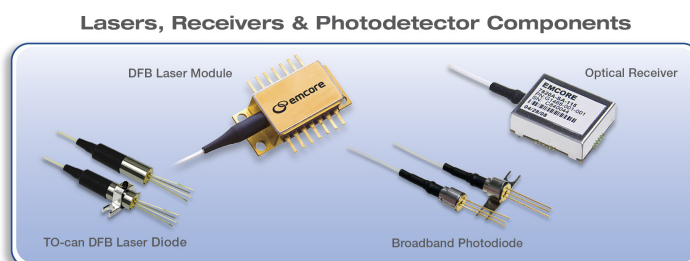
Specifically, within our Fiber Optics reporting segment, our Broadband products serve the Cable TV (“CATV”), Satellite Communications and Wireless markets; our Chip products serve the Telecommunications, Fiber-To-The-Premises (“FTTP”), Long-Term Evolution (“LTE”) and Data Center markets; and our Navigation Systems products primarily serve the Aerospace and Defense markets.

Broadband Product Line

Our broadband fiber optic products enable information that is modulated on light signals to be transmitted, routed (switched) and received in communication systems and networks. Our products in this area include:



- **CATV Products** - EMCORE is an established market leader in providing Radio Frequency (“RF”) over fiber products for the CATV industry. Our products enable cable systems providers to increase data transmission distance, speed and bandwidth in Hybrid Fiber Coaxial (HFC) networks, with lower noise and power consumption. This empowers cable service operators to meet the growing demand for high-speed Internet, HDTV, Ultra HDTV, video streaming and other advanced services. Our CATV products include forward and return-path analog lasers, receivers, photodetectors and subassembly components; analog and digital fiber-optic transmitters, Quadrature Amplitude Modulation (QAM) transmitters, optical switches and CATV fiber amplifiers. EMCORE’s latest series of CATV transmitters feature the Company’s breakthrough Linear Externally Modulated Laser (L-EML) technology that enables long distance optical link performance approaching traditional lithium niobate-based externally-modulated transmitters, but is more cost-effective and far exceeds the performance of DFB laser-based systems. EMCORE’s CATV transmitter products are offered on an OEM and ODM basis for integration into complete CATV transmission systems, and the Company also offers its own branded line of EMCORE Medallion series rack-mount CATV transmitters, optical switches and fiber amplifiers. EMCORE’s Medallion series products include DOCSIS 3.1, 1550 nm externally-modulated transmitters, 1550 nm directly-modulated transmitters, optical A/B switches, and 1RU and 2RU rack-mount CATV fiber amplifiers. EMCORE’s Medallion series transmitters, optical switches and fiber amplifiers, in conjunction with EMCORE’s components and Radio Frequency over Glass (“RFoG”) products, comprise a complete end-to-end CATV system.



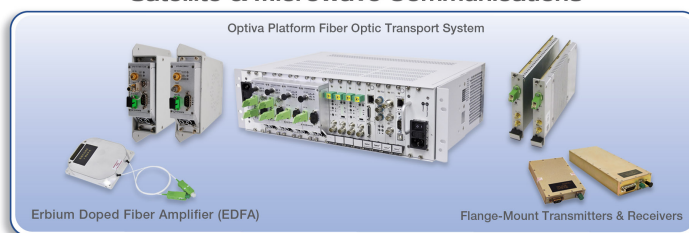
- **Laser, Receiver and Photodetector Component Products** - We are a leading provider of optical components including lasers, receivers and photodetectors (also called photodiodes). Our products include CWDM (Coarse Wavelength Division Multiplexing) and DWDM (Dense Wavelength Division Multiplexing), 1310 nm and 1550 nm Distributed Feedback (“DFB”) lasers and optical receivers optimized for CATV, DOCSIS (Data Over Cable Service Interface Specification) 3.1 and wireless applications. Form-factors for laser products include 14-pin butterfly and coaxial TO-Can. In addition, we offer broadband photodiodes used in forward-and return-path broadband and FTTP applications. EMCORE’s component products to the global fiber optics industry leverage the benefits of our vertically-integrated infrastructure, low-cost manufacturing and early access to newly developed internally-produced components.

Radio Frequency over Glass (RFOG) FTTP

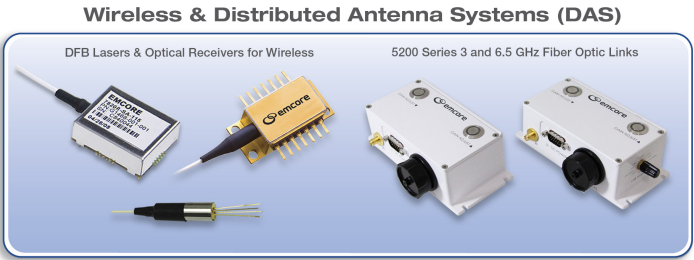


- **Radio Frequency over Glass (RFOG) FTTP Products** - EMCORE supports deployments of RFOG access networks for homes and businesses worldwide with customer qualified FTTP products for video, voice and data services. Our products include an RFOG Optical Networking Unit (ONU) transceiver that features breakthrough OBI (Optical Beat Interference) mitigation technology to significantly improve RFOG network performance in high-density customer environments. Additional products for RFOG networks include analog fiber optic transmitters for video overlay, high-power Erbium-Doped Fiber Amplifiers (“EDFA”), analog and digital lasers, photodetectors and subassembly components. Our RFOG-FTTP products provide our customers with higher performance designs and support exceptional network performance capabilities for service providers.

Satellite & Microwave Communications

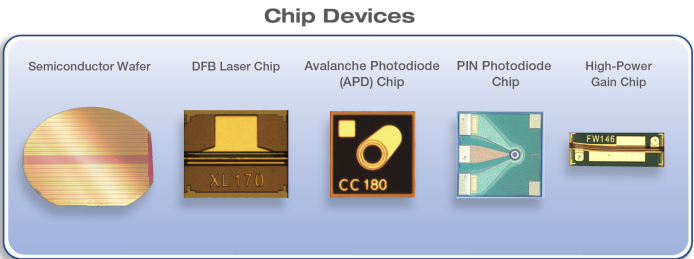


- **Satellite/Microwave Communications Products** - EMCORE has an established history as a pioneer of innovative RF over fiber solutions for high-performance fiber optic links in the terrestrial portion of satellite communications networks. EMCORE's satellite/microwave band components and complete systems transport an ultra-broadband frequency range including IF, L, S, C, X, DBS, Ku, K, Ka, and Ultra-Wideband signal transport. A wide range of high-dynamic-range applications are supported including satellite antenna remoting and signal distribution, inter- and intra-facility links, site diversity systems, high-performance supertrunking links, electronic warfare systems and radar testing. EMCORE's complete line of satellite and microwave components, subassemblies and systems eliminate the distance limitations of copper-based coaxial systems. Our rack-mount Optiva Platform RF & Microwave Fiber Optic Transport System features a wide range of SNMP (Simple Network Management Protocol) managed fiber optic transmitters, receivers, optical amplifiers, RF and optical switches, passive devices and Ethernet products that provide high-performance fiber optic transmission between satellite hub equipment and antenna dishes. EMCORE also offers a series of ruggedized microwave flange-mount transmitters, receivers and optical delay line products that meet the reliability and durability requirements of the U.S. government and defense markets. These products are tailored to the requirements of higher frequency applications such as microwave antenna signal distribution, electronic warfare systems and radar system calibration and testing. They provide our customers with high frequency, dynamic range, compact form-factors, and extreme temperature, shock and vibration tolerance. To the extent sales of our satellite/microwave communications products are related to U.S. government contracts or subcontracts, this portion of the business may be subject to renegotiation of profits or termination of contracts or subcontracts at the election of the U.S. government or an agency thereof.



- **Wireless Communications Products** - The increasing dependence on wireless access for social media, text, email, uploading and downloading of apps, music, videos and photos has created greater demand for deployment of cost-effective, high-performance, integrated wireless Distributed Antenna System ("DAS") networks. Wireless systems providers are building systems in subway tunnels, stadiums, hotels, high-speed trains and cruise ships. EMCORE's has developed highly linear fiber optic products that are optimized for wireless applications which we believe integrate extremely well into these systems. They enhance bandwidth and linearity to enable the delivery of consistent, reliable signals in areas where interference is high, or signals are weak. EMCORE's products for wireless applications include DFB lasers and optical receivers specifically designed for wireless networks, 3 GHz and 6.5 GHz fiber optic links for cellular backhaul, 4G LTE and DAS.

Chip Devices Product Line



Telecommunications companies throughout the world have been extending their Passive Optical Network (“PON”) infrastructure to business, enterprise and residential customers for several years. Since the sale of the Company’s telecom module products in 2015, EMCORE has supported this market through commercialization of products developed in our InP wafer fab to become a merchant supplier of high-performance chip devices to the Telecom industry. EMCORE’s semiconductor wafer fabrication facility features MOCVD (Metal-Organic Chemical Vapor Deposition) reactors for 2” or 3” wafer processing for InP-based devices including high-power gain chips, laser chips, Avalanche Photodiode (“APD”) and P-type Intrinsic N-type (“PIN”) photodetector chips. Our technical team has expertise in device design, epitaxial growth, wafer processing, device characterization, and Chip-On-Block (“COB”), TO-Can and Optical Sub-Assembly (“OSA”) from development through manufacturing.

- **High-Power Gain Chips Products** - EMCORE, through our previous experience in the Telecom tunable module market, has design and engineering expertise in development and manufacturing of high-power gain chips for tunable lasers and transceivers utilized in coherent DWDM optical transmission systems.
- **GPON Fiber-To-The-Premises (FTTP) and Data Center Chip Products** - EMCORE’s chip devices portfolio is continually developing to support the latest advances in PON including GPON, 10G-EPON, XG-PON, XGS-PON, along with 4G LTE and data center applications. The Company’s laser chip devices offering includes 2.5G and 10G PON DFB and 10G Fabry-Perot laser chips. Wavelengths supported include 1270, 1290, 1310, 1330, 1490, 1550 and 1610 nm. In addition, EMCORE offers 2.5G and 10G APD top and bottom illuminated chips and COB, along with 10G PIN photodiode chips, with additional products in development.

Navigation Systems Product Line



EMCORE, through our vertically-integrated infrastructure, has been able to adapt the same technologies, chip designs and production assets applicable to our CATV products to the development of state-of-the-art Fiber Optic Gyroscopes (“FOG”) that have broad application within the aerospace and defense markets for land, sea, air and space navigation. This gives EMCORE the ability to leverage our high-volume infrastructure for lower volume, higher value-added product. EMCORE has expanded its FOG-based product line to include Inertial Measurement Units (“IMU or IMUs”) and Inertial Navigation Systems (“INS”) that provide superior Size, Weight and Power (“SWaP”) compared to competing or legacy systems. To the extent sales of our navigation system products are related to U.S. government contracts or subcontracts, this portion of the business may be subject to renegotiation of profits or termination of contracts or subcontracts at the election of the U.S. government or an agency thereof.

- **Fiber Optic Gyroscope Products** - EMCORE’s FOG program has received multiple U.S. patents and has been qualified for several key military programs for applications including Unmanned Aerial Systems (“UAS”), line-of-site stabilization, aviation and aeronautics. All EMCORE FOGs feature advanced optics with only three components for simplified assembly along with Digital Signal Processing (“DSP”) for much higher accuracy, lower noise and greater efficiency. The integrated DSP also improves optical drift stability, enables higher linearity and greater environmental flexibility. EMCORE’s FOG products range from tactical to navigational grade gyros where the critical specifications for fiber length, ARW (Angle Random Walk) and drift rate improves through the product line to provide customers greater flexibility in choosing the performance level that best meets their application.

- ***Inertial Measurement Units and Navigation Systems Products*** - EMCORE's Inertial Measurement Units and Inertial Navigation Systems, based on our advanced FOG technology, provide superior SWaP compared to competing systems. Our products provide customers the flexibility to choose options from straightforward IMU operation to full navigation and are higher performance form, fit and function replacements for other IMUs and legacy systems. EMCORE's IMUs and INS products deliver high-precision with up to five-times better performance than competing units in compact, portable form-factors that provide standalone aircraft grade navigator performance at one-third the size of competing systems. Recently EMCORE launched its new EMCORE-Orion™ series of high-precision Micro Inertial Navigation (MINAV) systems designed primarily for applications where navigation aids such as GPS are unavailable or denied. The advanced technology incorporated enables these systems to provide performance close to that of traditional RLG (Ring Laser) INS with one-third the SWaP. We believe the EMCORE MINAV's low SWaP makes it an ideal inertial navigation system for unmanned aerial vehicle and dismounted soldier applications, and the units can operate as navigators or very precise IMUs with lower noise and greater stability than competing systems.

Customers

Our major customers include: ARRIS International plc, BUPT-GuoAn Broadband, Cisco Systems Inc. and Commscope and their respective affiliates, who each at times have represented greater than 10% of our consolidated revenue in the fiscal years ended September 30, 2017, 2016 and 2015. In the fiscal year ended September 30, 2017, Arris International plc, Cisco Systems Inc. and Commscope and their respective affiliates each represented greater than 10% of our consolidated revenue. See [Note 15 - Geographical Information](#) in the notes to our consolidated financial statements for additional information about our significant customers.

Geographical Information

See [Note 15 - Geographical Information](#) in the notes to our consolidated financial statements for disclosures related to geographic revenue and long-lived assets.

Strategic Plan

Strategy and Alternatives Committee of the Board of Directors

In addition to organic growth and development of our existing Fiber Optics business, we intend to pursue other strategies to enhance shareholder value. The Strategy and Alternatives Committee of the Company's Board of Directors (the "Strategy Committee"), which was established in December 2013, is charged with overseeing the Company's strategic plan and evaluating strategic opportunities and alternatives available to the Company, including potential mergers, acquisitions, divestitures and other key strategic transactions outside the ordinary course of the Company's business. Accordingly, the Strategy Committee may from time to time consider strategic opportunities to enhance shareholder value, which may include acquisitions, investments in joint ventures, partnerships, and other strategic alternatives, such as dispositions, reorganizations, recapitalizations or other similar transactions, the repurchase of shares of our outstanding common stock or payment of dividends to our shareholders. The Strategy Committee may engage financial and other advisors to assist it in doing so. Accordingly, the Strategy Committee and our management may from time to time be engaged in evaluating potential strategic opportunities and may enter into definitive agreements with respect to such transactions or other strategic alternatives. However, there is no assurance that the Strategy Committee will identify further strategic opportunities that the Company will determine to pursue, or that the consideration of any such opportunity would result in the completion of a strategic transaction.

Sale of Photovoltaics and Digital Products Businesses

On September 17, 2014, EMCORE entered into an Asset Purchase Agreement (the "Photovoltaics Agreement") with SolAero Acquisition Corporation ("SolAero"), a Delaware corporation and an affiliate of private equity firm Veritas Capital, pursuant to which SolAero acquired substantially all of the assets, and assume substantially all of the liabilities, primarily related to or used in connection with the Company's photovoltaics business, including EMCORE's subsidiaries EMCORE Solar Power, Inc. and EMCORE IRB Company, LLC (collectively, the "Photovoltaics Business", and the sale of the Photovoltaics Business, the "Photovoltaics Asset Sale") for \$150.0 million in cash, prior to a \$0.1 million working capital adjustment pursuant to the Photovoltaics Agreement finalized and paid by EMCORE during the fiscal year ended September 30, 2015. On December 10, 2014, EMCORE completed the Photovoltaics Asset Sale.

On October 22, 2014, EMCORE entered into an Asset Purchase Agreement (the "Digital Products Agreement") with NeoPhotonics Corporation, a Delaware corporation ("NeoPhotonics"), pursuant to which the Company sold certain assets and transfer certain liabilities of the Company's telecommunications business (collectively, the "Digital Products Business", and the sale of the Digital Products Business, the "Digital Products Assets Sale") to NeoPhotonics for an aggregate purchase price of \$17.5 million, subject to certain purchase price adjustments, consisting of \$1.5 million in cash at closing and a promissory note in the principal amount of \$16.0 million (the "Promissory Note"). The Promissory Note provided that it would bear interest of 5.0% per annum for the first year and 13.0% per annum for the second year, payable semi-annually in cash, and would mature two years from the closing of the transaction. In addition, the Promissory Note was subject to prepayments under certain circumstances, and was secured by certain of the assets sold to NeoPhotonics in the transaction.

On January 2, 2015, EMCORE and NeoPhotonics entered into Amendment No. 1 (the "APA Amendment") to the Digital Products Agreement. Among other things, the APA Amendment revised the nature and timing of the financial deliverable requirements of the Company to NeoPhotonics under the original Digital Products Agreement. The assets sold pursuant to the Digital Products Agreement included certain fixed assets, inventory, accounts receivable and intellectual property for the ITLA, micro-ITLA, T-TOSA and T-XFP product lines within the Company's telecommunications business. On January 2, 2015, EMCORE completed the sale of the Digital Products Business. On April 16, 2015, EMCORE and NeoPhotonics entered into an agreement to adjust the purchase price for the Digital Products Business, resulting in an adjusted balance of the Promissory Note of \$15.5 million. On April 17, 2015, NeoPhotonics paid in full the balance outstanding of the Promissory Note of \$15.5 million, plus accrued interest of \$0.2 million.

We used a portion of the proceeds from the Photovoltaics Asset Sale and the Digital Products Assets Sale (collectively, the "Asset Sales") to pay for transaction costs associated with the Asset Sales, make payments required pursuant to existing retention award agreements, repay certain indebtedness, and for general working capital purposes. In June 2015, we also used a portion of the proceeds from the Asset Sales to repurchase 6.9 million shares of our common stock for an aggregate cost of \$45.0 million (excluding fees and expenses) pursuant to a modified "Dutch auction" tender offer we commenced in May 2015. In addition, in July 2016, we used a portion of the proceeds from the Asset Sales to pay a special cash dividend to our shareholders of \$1.50 per share, or a total of \$39.2 million. The dividend was paid on July 29, 2016 to shareholders of record as of July 18, 2016. See [Note 14 - Equity](#) for additional information.

Sources of Raw Materials

We depend on a limited number of suppliers for certain raw materials, components, and equipment used in our products. We continually review our supplier relationships to mitigate risks and lower costs, especially where we depend on one or two suppliers for critical components or raw materials. While maintaining inventories that we believe are sufficient to meet our near-term needs, we strive not to carry significant inventories of raw materials. Accordingly, we maintain ongoing communications with our suppliers in order to prevent any interruptions in supply, and have implemented a supply-chain management program to maintain quality and lower purchase prices through standardized purchasing efficiencies and design requirements. To date, we generally have been able to obtain sufficient quantities of critical supplies in a timely manner.

We are subject to rules promulgated by the SEC pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act regarding the use of "conflict minerals". These rules have imposed and will continue to impose additional costs and may introduce new risks related to our ability to verify the origin of any "conflict minerals" used in our products.

Manufacturing

We utilize MOCVD (metal-organic chemical vapor deposition) systems that are capable of processing virtually all compound semiconductor-based materials. Our operations include wafer fabrication, device design and production and fiber optic module, subsystem and system design and manufacture. Many of our manufacturing operations are computer monitored or controlled to enhance production output and statistical control. We employ a strategy of minimizing ongoing capital investments, while maximizing the variable nature of our cost structure. We maintain supply agreements with key suppliers. Where we can gain cost advantages while maintaining quality and intellectual property control, we outsource the production of certain products, subsystems, components, and subassemblies to contract manufacturers located overseas. Our contract manufacturers maintain comprehensive quality assurance and delivery systems, and we continuously monitor them for compliance.

Our various manufacturing processes involve extensive quality assurance systems and performance testing. Our facilities have acquired and maintain certification status for their quality management systems. Our manufacturing facilities located in Alhambra, California; Ivyland, Pennsylvania; and Beijing, China are registered to ISO 9001 standards.

Sales and Marketing

We sell our products worldwide through our direct sales force, application engineers, third party sales representatives and distributors. Our sales force communicates with our customers' engineering, manufacturing, and purchasing personnel to provide optimized customer solutions through product design, qualifications, performance, and price. Our strategy is to use our direct sales force to sell to original equipment manufacturers and key accounts and to expand our use of distribution partners for increased coverage in both international markets and certain domestic segments.

Throughout our sales cycle, we work closely with our customers to qualify our products into their product lines and platforms. As a result, we develop strategic and long-lasting customer relationships with products and services that are tailored to our customers' requirements. We focus our marketing communication efforts on increasing brand awareness, communicating our technologies' advantages, and generating leads for our sales force. We use a variety of marketing methods, including our website, participation at trade shows, and selective advertising to achieve these goals.

Externally, our marketing group works with customers to define requirements, characterize market trends, define new product development activities, identify cost reduction initiatives, and manage new product introductions. Internally, our marketing group communicates and manages customer requirements with the goal of ensuring that our product development activities are aligned with our customers' needs. These product development activities allow our marketing group to manage new product introductions and market trends. See [Note 15 - Geographical Information](#) in the notes to the consolidated financial statements for disclosures related to geographic revenue and significant customers.

Research and Development

Our research and development efforts have been focused on maintaining our technological competitive edge by working to improve the quality and features of our product lines. We are also making investments to expand our existing technology and infrastructure in an effort to develop new products and production technology that we can use to expand into new markets. Our industry is characterized by rapid changes in process technologies with increasing levels of functional integration. Our efforts are focused on designing new proprietary processes and products, on improving the performance of our existing materials, components, and subsystems, and on reducing costs in the product manufacturing process.

As part of the ongoing effort to cut costs, many of our projects have focused on developing lower cost versions of our existing products. In view of the high cost of development, we solicit research contracts that provide opportunities to enhance our core technology base and promote the commercialization of targeted products. Generally, internal research and development funding is used for the development of products that will be released within twelve months and external funding is used for long-term research and development efforts.

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. Research and development expense was \$12.5 million, \$9.9 million and \$9.1 million for the fiscal years ended September 30, 2017, 2016 and 2015, respectively. As a percentage of revenue, research and development expenses were 10.2%, 10.8% and 11.2% for the fiscal years ended September 30, 2017, 2016 and 2015, respectively. Our research and development expense 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. These costs are expensed as incurred.

Intellectual Property and Licensing

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 advantage enjoyed by our product lines depends heavily on our ability to obtain intellectual property protection for our proprietary technologies. We also acquire, through license grants or assignments, rights to patents on inventions originally developed by others. As of September 30, 2017, we held approximately 60 U.S. patents and approximately 30 foreign patents and had over 10 additional patent applications pending. The issued patents cover various products in the major markets we serve. Our U.S. patents will expire on varying dates between 2018 and 2035. These patents and patent applications claim protection for various aspects of current or planned commercial versions of our materials, components, subsystems, and systems.

We also have entered into license agreements with other organizations, under which we have obtained exclusive or non-exclusive rights to practice inventions claimed in various patents and applications issued or pending in the U.S. or other foreign jurisdictions. We do not believe our financial obligations under any of these agreements adversely affects our business, financial condition, or results of operations.

We rely on trade secrets to protect our intellectual property when we believe that publishing patents would make it easier for others to reverse engineer our proprietary processes. We also rely on other intellectual property rights such as trademarks and copyrights where appropriate.

Environmental Regulations

We are subject to U.S. federal, state, and local laws and regulations concerning the use, storage, handling, generation, treatment, emission, release, discharge, and disposal of certain materials used in our research and development and production operations, as well as laws and regulations concerning environmental remediation, homeland security, and employee health and safety. The production of wafers and devices involves the use of certain hazardous raw materials, including, but not limited to, ammonia, phosphine, and arsine. We have in-house professionals to address compliance with applicable environmental, homeland security, and health and safety laws and regulations. We believe that we are currently in compliance with all applicable federal, state, and local environmental protection laws and regulations.

Competition

The markets for our products are extremely competitive and are characterized by rapid technological change, frequent introduction of new products, short product life cycles, and with respect to certain of our product lines, significant price erosion. We face actual and potential competition from numerous domestic and international companies. Many of these companies have significant engineering, manufacturing, marketing, and financial resources.

Partial lists of our competitors in the markets in which we participate include:

Broadband

CATV Systems - Our primary competitors include BK Tel, Hangzhou-Prevail, Oplink and Furukawa

Lasers & Components - Our primary competitors include Applied Optoelectronics, Finisar, Sumitomo Electric and Fujitsu

Satellite & Microwave Communications - Our primary competitors include Foxcom, MITEQ, Inc., Glenair, Microwave Photonic Systems and Vialite

Chip Level Devices - Our primary competitors include MACOM, Broadcom, Mitsubishi, GCS and Renesas

Navigation Systems - Our primary competitors include Northrup Grumman, Honeywell, iXblue and KVH Industries

In addition to the companies listed above, we compete with many research institutions and universities for research funding. We also sell our products to current competitors and companies with the capability of becoming competitors. As the markets for our products grow, new competitors are likely to emerge and current competitors may increase their market share. In the European Union (“EU”), political and legal arrangements encourage the purchase of EU-produced goods, which places us at a disadvantage against European competitors.

There are substantial barriers to entry by new competitors across our product lines. These barriers include the large number of existing patents, the time and costs required to develop products, the technical difficulty in manufacturing semiconductor-based products, the lengthy sales and qualification cycles, and the difficulties in hiring and retaining skilled employees with the required scientific and technical backgrounds. We believe that the primary competitive factors within our current markets are product cost, yield, throughput, performance and reliability, breadth of product line, product heritage, customer satisfaction, and customer commitment to competing technologies. Competitors may develop enhancements to or future generations of competitive products that offer superior price and performance characteristics. 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.

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.

Seasonality

In certain of our previous fiscal years, we have experienced an increase in revenues in our third and fourth fiscal quarters due to increased sales of our CATV products resulting from an increased build of cable networks during seasons with warmer weather.

Employees

As of September 30, 2017, we had approximately 364 employees, including approximately 133 international employees that are located primarily in China. This represents a decrease of approximately 225 employees when compared to September 30, 2016, primarily as a result of a decrease in international employees. None of our employees are covered by a collective bargaining agreement. We have never experienced any labor-related work stoppage and believe that our employee relations are good.

Competition is intense in the recruiting of personnel in the semiconductor industry and fiber optics industries. Our ability to attract and retain qualified personnel is essential to our continued success. We are focused on retaining key contributors, developing our staff, and cultivating their commitment to our Company.

ITEM 1A. Risk Factors

We are a small company and dependent on a few products for our success.

We are a small company with a narrow, focused portfolio of products. Our small size could cause our cash flow and growth prospects to be more volatile and makes us more vulnerable to focused competition. As a small company, we will be subject to greater revenue fluctuations if our older product lines' sales were to decline faster than we anticipate. In addition, we may not be able to appropriately restructure or maintain our supporting functions to fit the needs of a small company, which could adversely affect our business, financial condition, results of operations, and cash flows.

We are substantially dependent on revenues from our cable television ("CATV") business and from a small number of customers. A substantial decrease in sales in our CATV business or the loss of or decrease in sales from any one of these customers could adversely affect our business, financial condition, results of operations, and cash flows.

We are substantially dependent on revenues from sales of our CATV products. Sales of our CATV products may decline or fluctuate significantly in the future, and we may not be able to offset any decline in sales of our CATV products with sales of other products. Any decrease in sales of our CATV products without a corresponding increase in sales of our other products would harm our business, operating results, financial condition and cash flows.

Also, a small number of customers account for a significant portion of our revenue, and our dependence on orders from a relatively small number of customers makes our relationship with each customer critically important to our business. For example, for the fiscal year ended September 30, 2017, sales to three customers accounted for an aggregate of 71% of our total consolidated revenues, for the fiscal year ended September 30, 2016, sales to three customers accounted for an aggregate of 61% of our total consolidated revenues and for the fiscal year ended September 30, 2015, sales to four customers accounted for an aggregate of 61% of our total consolidated revenues. Sales from any of our major customers may decline or fluctuate significantly in the future. We may not be able to offset any decline in sales from our existing major customers with sales from new customers or other existing customers. Because of our reliance on a limited number of customers, any decrease in sales from, or loss of, one or more of these customers without a corresponding increase in sales from other customers would harm our business, operating results, financial condition and cash flows.

In addition, any negative developments in the business of existing significant customers could result in significantly decreased sales to these customers, which could seriously harm our business, operating results, financial condition and cash flows, and if there is consolidation among our customer base, our customers may be able to command increased leverage in negotiating prices and other terms of sale, which could adversely affect our profitability. If we are required to reduce our pricing, our revenue and gross margins would be adversely impacted. Consolidation among our customer base may also lead to reduced demand for our products, replacement of our products by the combined entity with those of our competitors and cancellations of orders, each of which could adversely affect our business, financial condition, results of operations, and cash flows.

Although we are attempting to expand our customer base, the markets in which we sell our products are dominated by a relatively small number of companies, thereby limiting the number of potential customers. Accordingly, our success will depend on our continued ability to develop and manage relationships with significant customers, and we expect that the majority of our sales will continue to depend on sales of our products to a limited number of customers for the foreseeable future.

If spending for CATV and optical communications networks declines, our business may suffer.

Our future success depends on continued capital investment in CATV and global communications networks infrastructure and on continued demand for high-bandwidth, high-speed communications networks and the ability of original equipment manufacturers to meet this demand. Spending on CATV and communications networks is limited by several factors, including limited investment resources, uncertainty regarding the long-term evolution and sustainability of service provider business models, and a changing regulatory environment. We cannot be certain that demand for bandwidth-intensive content will continue to grow at the same pace in the future or that communications service providers will continue to increase spending to meet such demand. If expectations for growth of CATV and communications networks and bandwidth consumption are not realized and investment in CATV and communications networks does not grow as anticipated, our business, results of operations, and gross margins could be harmed.

We have incurred losses from continuing operations and our future profitability is not certain.

For the fiscal years ended September 30, 2017, and 2016, income from continuing operations was \$8.2 million and \$2.6 million, respectively, and we had a loss from continuing operations of \$2.3 million for the fiscal year ended September 30, 2015. Our operating results for future periods are subject to numerous uncertainties and we cannot be certain that we will continue to be profitable or that we will not experience substantial losses in the future. If we are not able to increase revenue and reduce our costs, we may not be able to achieve profitability in future periods and our business, financial condition, results of operations and cash flows may be adversely affected.

We are subject to the cyclical nature of the markets in which we compete and any future downturn may reduce demand for our products and revenue.

In the past, the markets in which we compete have experienced significant downturns, often connected with, or in anticipation of, the maturation of product cycles, for both manufacturers' and their customers' products, and declining general economic conditions. These downturns have been characterized by diminished product demand, production overcapacity, high inventory levels, and accelerated erosion of average selling prices. These markets are impacted by the aggregate capital expenditures of service providers and enterprises as they build out and upgrade their network infrastructure. These markets are highly cyclical and characterized by constant and rapid technological change, pricing pressures, evolving standards, and wide fluctuations in product supply and demand.

We may experience substantial period-to-period fluctuations in future results of operations. Any future downturn in the markets in which we compete, or changes in demand for our products from our customers, could result in a significant reduction in our revenue and may also increase the volatility of the price of our common stock.

In addition, the communication networks industry from time to time has experienced and may again experience a pronounced downturn. To respond to a downturn, many service providers and enterprises may slow their capital expenditures, cancel or delay new developments, reduce their workforces and inventories, and take a cautious approach to acquiring new equipment and technologies, any of which could cause our results of operations to fluctuate from period to period and harm our business.

Our future revenue is inherently unpredictable. As a result, our operating results are likely to fluctuate from period to period, and we may fail to meet the expectations of our analysts and/or investors, which may cause volatility in our stock price and may cause our stock price to decline.

Our quarterly and annual operating results have fluctuated substantially in the past and are likely to fluctuate significantly in the future due to a variety of factors, some of which are outside of our control. Factors that could cause our quarterly or annual operating results to fluctuate include:

- a downturn in the markets for our customers' products;
- discontinuation by our vendors of, or unavailability of, components or services used in our products;
- disruptions or delays in our manufacturing processes or in our supply of raw materials or product components;
- a failure to anticipate changing customer product requirements;
- market acceptance of our products;
- cancellations or postponements of previously placed orders;
- increased financing costs or any inability to obtain necessary financing;
- the impact on our business of current or future cost reduction measures;
- a loss of key personnel or the shortage of available skilled workers;

- economic conditions in various geographic areas where we or our customers do business;
- the impact of political uncertainties, such as government sequestration and uncertainties surrounding the federal budget, customer spending and demand for our products;
- significant warranty claims, including those not covered by our suppliers;
- product liability claims;
- other conditions affecting the timing of customer orders;
- reductions in prices for our products or increases in the costs of our raw materials;
- effects of competitive pricing pressures, including decreases in average selling prices of our products;
- fluctuations in manufacturing yields;
- obsolescence of products;
- research and development expenses incurred associated with new product introductions;
- natural disasters, such as hurricanes, earthquakes, fires, and floods;
- the emergence of new industry standards;
- the loss or gain of significant customers;
- the introduction of new products and manufacturing processes;
- changes in technology;
- intellectual property disputes;
- customs, import/export, and other regulations of the countries in which we do business;
- the occurrence of M&A activities;
- and acts of terrorism or violence and international conflicts or crises.

In addition, the limited lead times with which several of our customers order our products restrict our ability to forecast revenue. We may also experience a delay in generating or recognizing revenue for a number of reasons. For example, orders at the beginning of each quarter typically represent a small percentage of expected revenue for that quarter. We depend on obtaining orders during each quarter for shipment in that quarter to achieve our revenue objectives. Failure to ship these products by the end of a quarter may adversely affect our results of operations and cash flows.

As a result of the foregoing factors, we believe that period-to-period comparisons of our results of operations should not be solely relied upon as indicators of future performance.

We have substantial operations in China, which exposes us to risks inherent in doing business in China.

In an effort to keep manufacturing costs down, we operate a manufacturing facility in China. Our China-based activities are subject to greater political, legal, and economic risks than those faced by our other operations. In particular, the political, legal, and economic climate in China (both at the national and regional levels) is extremely volatile and unpredictable. Our ability to operate in China may be adversely affected by changes in, or our failure to comply with, Chinese laws and regulations, such as those relating to taxation, import and export tariffs, environmental regulations, land use rights, intellectual property, labor and employment laws and other matters, which laws and regulations remain highly underdeveloped and subject to change for political or other reasons, with little or no prior notice. Moreover, the enforceability of applicable existing Chinese laws and regulations is uncertain. For example, since Chinese administrative and court authorities have significant discretion in interpreting and implementing statutory and contract terms, it may be more difficult to evaluate the outcome of administrative and court proceedings and the level of legal protection we would receive compared to more developed legal systems. These uncertainties may impede our ability to enforce the contracts we have entered into with our distributors, business partners, customers and suppliers. In addition, protections of intellectual property rights and confidentiality in China may not be as effective as in the U.S. or other countries or regions with more developed legal systems. All of these uncertainties could limit the legal protections available to us and could materially and adversely affect our business, financial condition, cash flows and results of operations.

Also, if we are found to be, or to have been, in violation of Chinese laws or regulations governing technology import and export, the relevant regulatory authorities have broad discretion in dealing with such violations, including, but not limited to, issuing a warning, levying fines, restricting us from benefiting from these technologies inside or outside of China, confiscating our earnings generated from the import or export of such technology or even restricting our future import and export of any technology.

In addition, we may not obtain the requisite legal permits to continue to operate in China and costs or operational limitations may be imposed in connection with obtaining and complying with such permits. Our business could be adversely harmed by any changes in the political, legal, or economic climate in China, our failure to comply with applicable laws and regulations or our inability to enforce applicable Chinese laws and regulations.

While under certain circumstances we previously were not subject to certain Chinese taxes and were exempt from customs duty assessment on imported components or materials when our finished products were exported from China, we are no longer eligible for such exemptions due to our current Beijing facility being located in a non-economic zone. In addition, we are required to pay income taxes in China, subject to certain tax relief. We may become subject to other forms of taxation and duty assessments in China or may be required to pay for export license fees in the future. In the event that we become subject to any increased taxes or new forms of taxation imposed by authorities in China, our results of operations and cash flows could be adversely affected.

Employee turnover of direct labor in the manufacturing sector in China is high and retention of such personnel is a challenge to companies located in or with operations in China. Although direct labor costs do not represent a high proportion of our overall manufacturing costs, direct labor is required for the manufacture of our products. If our direct labor turnover rates are higher than we expect, or we otherwise fail to adequately manage our direct labor turnover rates, then our business and results of operations could be adversely affected.

We may have difficulty establishing and maintaining adequate management and financial controls over our China operations.

Businesses in China have historically not adopted a western style of management and financial reporting concepts and practices, which includes strong corporate governance, internal controls and computer, financial and other control systems. Moreover, familiarity with accounting principles generally accepted in the United States of America (“U.S. GAAP”) principles and reporting procedures is less common in China. As a consequence and due to our significant operations in China, we may have difficulty finding accounting personnel experienced with U.S. GAAP, and we may have difficulty training and integrating our China-based accounting staff with our U.S.-based finance organization. As a result of these factors, we may experience difficulty in establishing management and financial controls over our China operations. These difficulties include collecting financial data and preparing financial statements, books of account and corporate records and instituting business practices that meet U.S. public-company reporting requirements. We may, in turn, experience difficulties in implementing and maintaining adequate internal controls as required under Section 404 of the Sarbanes-Oxley Act. If we cannot provide reliable and timely financial reports, our brand, operating results, and the market value of our equity securities could be harmed.

We have a large amount of intercompany balances with our China entities, which may be subject to taxes and penalties when we try to pay them down or collect them.

Payments for goods and services into and out of China are subject to numerous and over-lapping government regulation with respect to foreign exchange controls, banking controls, import and export controls, and taxes. We have been operating in China for an extended period of time and have accumulated significant intercompany balances with our related entities. Our ability to repay or collect these balances may be restricted by Chinese laws and, as a result, we may be unable to successfully pay down or collect on these balances. As a consequence, we may be assessed additional taxes in China if we are unable to claim bad debt deductions or incur debt forgiveness income from the cancellation of these intercompany balances. Additionally, if we are found not to have complied with the various local laws surrounding cross border payments, we may incur penalties and fines for non-compliance. Any such taxes, penalties and/or fines could be significant in amount and, as a result, could have an adverse effect on our financial condition and results of operations, including our cash and cash equivalent balances.

We expect to consider from time to time further strategic opportunities that may involve acquisitions, dispositions, investments in joint ventures, partnerships, and other strategic alternatives that may enhance shareholder value, any of which may result in the use of a significant amount of our management resources or significant costs, and we may not be able to fully realize the potential benefit of such transactions.

We expect to continue to consider acquisitions, dispositions, investments in joint ventures, partnerships, and other strategic alternatives that may enhance shareholder value. The Strategy and Alternatives Committee of the Board and our management may from time to time be engaged in evaluating potential transactions and other strategic alternatives. In addition, from time to time, we may engage financial advisors, enter into non-disclosure agreements, conduct discussions, and undertake other actions that may result in one or more transactions. Although there would be uncertainty that any of these activities or discussions would result in definitive agreements or the completion of any transaction, we may devote a significant amount of our management resources to analyzing and pursuing such a transaction, which could negatively impact our operations. In addition, we may incur significant costs in connection with seeking such transactions or other strategic alternatives regardless of whether the transaction is completed. In the event that we consummate an acquisition, disposition, partnership, or other or strategic alternative in the future, we cannot be certain that we would fully realize the potential benefit of such a transaction and cannot predict the impact that such strategic transaction might have on our operations or stock price. We do not undertake to provide updates or make further comments regarding the evaluation of strategic alternatives, unless otherwise required by law.

Acquisitions of other companies or investments in joint ventures with other companies could adversely affect our operating results, dilute our shareholders' equity, or cause us to incur additional debt or assume contingent liabilities.

To increase our business, maintain our competitive position or for other business or strategic reasons, we may acquire other companies or engage in joint ventures or similar transactions in the future. Acquisitions, joint ventures and similar transactions involve a number of risks that could harm our business and result in the acquired business or joint venture not performing as expected, including:

- insufficient experience with technologies and markets in which the acquired business is involved, which may be necessary to successfully operate and integrate the business;
- problems integrating the acquired operations, personnel, technologies, or products with the existing business and products;
- diversion of management's time and attention from our core business to the acquired business or joint venture;
- potential failure to retain key technical, management, sales, and other personnel of the acquired business or joint venture;
- difficulties in retaining relationships with suppliers and customers of the acquired business, particularly where such customers or suppliers compete with us;
- reliance upon joint ventures which we do not control;

- subsequent impairment of goodwill and acquired long-lived assets, including intangible assets; and
- assumption of liabilities including, but not limited to, lawsuits, tax examinations and warranty issues.

We may decide that it is in our best interests to enter into acquisitions, joint ventures or similar transactions that are dilutive to earnings per share or that adversely impact margins as a whole. In addition, acquisitions or joint ventures could require investment of significant financial resources and require us to obtain additional equity financing, which may dilute our shareholders' equity, or require us to incur indebtedness.

Our ability to achieve operational and material cost reductions and to realize production efficiencies for our operations is critical to our ability to achieve long-term profitability.

We have implemented a number of operational and material cost reductions and productivity improvement initiatives, which are intended to reduce our cost structure at both the cost of revenue and the operating expense levels. Cost reduction initiatives often involve the re-design of our products, which requires our customers to accept and qualify the new designs, potentially creating a competitive disadvantage for our products. These initiatives can be time-consuming, disruptive to our operations, and costly in the short-term. Successfully implementing these and other cost-reduction initiatives throughout our operations is critical to our future competitiveness and ability to achieve long-term profitability. However, we cannot be certain that these initiatives will be successful in creating profit margins sufficient to sustain our current operating structure and business.

Customer demand is difficult to forecast and, as a result, we may be unable to optimally match production with customer demand.

We make planning and spending decisions, including determining the levels of business that we will seek and accept, production schedules, component procurement commitments, personnel needs and other resource requirements, based on our estimates of customer demand. While our customers generally provide us with their demand forecasts, they are typically not contractually committed to buy any quantity of products beyond firm purchase orders. The short-term nature of our customer commitments and the possibility of unexpected changes in demand for their products limit our ability to accurately predict future customer demand. On occasion, customers have required rapid increases in production, which has strained our resources. We may not have sufficient capacity at any given time to meet the volume demands of our customers, or one or more of our suppliers may not have sufficient capacity at any given time to meet our volume demands. Conversely, a downturn in the markets in which our customers compete can cause, and in the past has caused, our customers to significantly reduce the amount of products ordered from us or to cancel existing orders, leading to lower utilization of our facilities. Because many of our costs and operating expenses are relatively fixed, reduction in customer demand would have an adverse effect on our gross margin, results of operations, and cash flow. During an industry downturn, there is also a higher risk that a larger portion of our trade receivables would be uncollectible. In addition, certain of our arrangements with component vendors require us to purchase minimum quantities of components within specific time periods, which could cause us to hold excess inventories of these components during periods concurrent with a decrease in customer demand for our products.

We have limited operating history in the fiber to the home (“FTTH”) market, and our business could be harmed if this market does not develop as we expect and we do not grow our business in this market to the level we expect.

We have only recently begun offering products to the FTTH market, and our radio frequency over glass (“RFoG”) products designed for this market have not yet, and may never, gain widespread acceptance by large multiple system operators (“MSOs”). Our business in this market is dependent on the deployment of our optical components, modules and subassemblies. We are relying on increasing demand for bandwidth-intensive services and telecommunications service providers’ acceptance and deployment of RFoG as a technology supporting service to the home. Without network and bandwidth growth and adoption of our solutions by operators in these markets, we will not be able to sell our products in these markets in high volume or at our targeted margins, which would adversely affect our business, financial condition, results of operations and cash flows. For example, RFoG technology may not be adopted by equipment and service providers in the FTTH market as rapidly as we expect or in the volumes we need to achieve acceptable margins. Network and bandwidth growth may be limited by several factors, including an uncertain regulatory environment, high infrastructure costs to purchase and install equipment and uncertainty as to which competing content delivery solution, such as CATV, will gain the most widespread acceptance. In addition, as we enter new markets for RFoG or expand our RFoG product offerings in existing markets, our margins may be adversely affected due to competition in those markets and commoditization of competing products. We may also face limitations due to sole or limited sources for components of our RFoG products. If our expectations for the growth of these markets are not realized, our business, financial condition, results of operations and cash flows may be adversely affected.

Our operating results could be harmed if we are unable to obtain timely deliveries of sufficient components of acceptable quality from sole or limited sources of materials, components, or services, or if the prices of components for which we do not have alternative sources increase.

We currently obtain materials, components, and services used in our products from limited or sole sources. We generally do not carry significant inventories of any raw materials. The reliance on a sole supplier, single qualified vendor or limited number of suppliers could result in delivery or quality problems or reduced control over product pricing, reliability and performance. Because we often do not account for a significant part of our suppliers’ businesses, we may not have access to sufficient capacity from these suppliers in periods of high demand. In addition, since we generally do not have guaranteed supply arrangements with our suppliers, we risk serious disruption to our operations if an important supplier terminates product lines, changes business focus, or goes out of business, and we may need large end of life purchases when a sole source supplier is ceasing manufacturing of required components. Because some of these suppliers are located overseas, we may be faced with higher costs of purchasing these materials if the U.S. dollar weakens against other currencies. If we were to change any of our limited or sole source suppliers, we would be required to re-qualify each new supplier. Re-qualification could prevent or delay product shipments that could adversely affect our results of operations and cash flows. In addition, our reliance on these suppliers may adversely affect our production if the components vary in quality or quantity. If we are unable to obtain timely deliveries of sufficient components of acceptable quality or if the prices of components for which we do not have alternative sources increase, our business, financial condition, results of operations, and cash flows could be materially adversely affected.

If our contract manufacturers fail to deliver qualified quality products at reasonable prices and on a timely basis, our business, financial condition, results of operations, and cash flows could be adversely affected.

We primarily use contract manufacturers located outside of the U.S. as a less-expensive alternative to our performing manufacturing of certain products. Contract manufacturers in Asia currently manufacture a significant portion of our high-volume fiber optics products. We supply inventory to our contract manufacturers, and we bear the risk of loss, theft, or damage to our inventory while it is held in their facilities.

If these contract manufacturers do not fulfill their obligations to us, or if we do not properly manage these relationships and the transition of production to these contract manufacturers, our existing customer relationships may suffer. In addition, by undertaking these activities, we run the risk that the reputation and competitiveness of our products and services may deteriorate as a result of the reduction of our ability to oversee and control the assembly process, quality and delivery schedules. If we fail to manage our relationship with our contract manufacturers, or if any of the contract manufacturers experience financial difficulty, delays, disruptions, capacity constraints or quality control problems in their operations, our ability to ship products to our customers could be impaired and our competitive position and reputation could be harmed.

The use of contract manufacturers located outside of the U.S. also subjects us to the following additional risks that could significantly impair our ability to source our contract manufacturing requirements internationally, including:

- unexpected changes in regulatory requirements;
- legal uncertainties regarding liability, tariffs, and other trade barriers;
- inadequate protection of intellectual property in some countries;
- greater incidence of shipping delays;
- greater difficulty in overseeing manufacturing operations;
- greater difficulty in hiring talent needed to oversee manufacturing operations;
- potential political and economic instability and natural disasters;
- potential adverse actions by the U.S. government pursuant to its stated intention to reduce the loss of U.S. jobs;
- natural disasters;
- trade and travel restrictions; and
- the outbreak of infectious diseases which could result in travel restrictions or the closure of the facilities of our contract manufacturers.

Any of these factors could significantly impair our ability to source our contract manufacturing requirements internationally. Prior to our customers accepting products manufactured at our contract manufacturers, they must qualify the product and manufacturing processes. The qualification process can be lengthy and expensive, with no guarantee that any particular product qualification process will lead to profitable product sales. The qualification process determines whether the product manufactured at our contract manufacturer achieves our customers' quality, performance, and reliability standards. Our expectations as to the time periods required to qualify a product line and ship products in volumes to our customers may be erroneous. Delays in qualification can impair our expected timing of the transfer of a product line to our contract manufacturer and may impair our expected amount of sales of the affected products. Any of these uncertainties could adversely affect our operating results and customer relationships.

In addition, our contract manufacturers may terminate our agreements with them upon prior notice to us or immediately for reasons such as if we become insolvent, or if we fail to perform a material obligation under the agreements. If we are required to change contract manufacturers or assume internal manufacturing operations for any reason, including the termination of one of our contracts, we will likely suffer manufacturing and shipping delays, lost revenue, increased costs and damage to our customer relationships, any of which could harm our business, financial condition, results of operations and cash flows.

We participate in vendor managed inventory programs for the benefit of certain of our customers, which could result in increased inventory levels and/or decreased visibility into the timing of sales.

Certain of our more significant customers have implemented a supply chain management tool called vendor managed inventory (“VMI”) that requires suppliers, such as EMCORE, to assume responsibility for maintaining an agreed upon level of consigned inventory at the customer’s location or at a third-party logistics provider, based on the customer’s demand forecast. Notwithstanding the fact that the supplier builds and ships the inventory, the customer does not purchase the consigned inventory until the inventory is drawn or pulled from the customer or third-party location to be used in the manufacture of the customer’s product. Though the consigned inventory may be at the customer’s or third-party logistics provider’s physical location, it remains inventory owned by the supplier until the inventory is drawn or pulled, which is the time at which the sale takes place. In addition, certain of our customers require us to maintain certain agreed levels of product inventory at our own locations. Our participation in VMI programs and our commitment to other product inventory requirements at our own locations has resulted in our experiencing higher levels of inventory than we might otherwise and has decreased our visibility into the timing of when our finished goods will ultimately result in revenue-generating sales.

Such VMI programs and other inventory requirements increase the likelihood that estimates of our customers’ requirements that prove to be greater than our customers’ actual purchases could result in surplus inventory and we could be required to record charges for obsolete or excess inventories. If we are unable to effectively manage our customers’ VMI programs or other inventory requirements, our business, financial condition, results of operations and cash flows may be adversely affected.

If we do not keep pace with rapid technological change, our products may not be competitive.

We compete in markets that are characterized by rapid technological change, frequent new product introductions, changes in customer requirements, evolving industry standards, continuous improvement in products and the use of our existing products in new applications, such as remote physical layer (“remote PHY”). We may not be able to develop the underlying core technologies necessary to create new products and enhancements to our existing products at the same rate as or faster than our competitors, or to license the technology from third parties that is necessary for our products. Product development delays may result from numerous factors, including:

- changing product specifications and customer requirements;
- unanticipated engineering complexities;
- expense reduction measures we have implemented and others we may implement;
- difficulties in hiring and retaining necessary technical personnel; and
- difficulties in allocating engineering resources and overcoming resource limitations.

We cannot be certain that we will be able to identify, develop, manufacture, market, or support new or enhanced products successfully, if at all, or on a timely, cost effective, or repeatable basis. Our future performance will depend on our successful development and introduction of, as well as market acceptance of, new and enhanced products that address market changes, as well as current and potential customer requirements and our ability to respond effectively to product announcements by competitors, technological changes, or emerging industry standards. Because it is generally not possible to predict the amount of time required and the costs involved in achieving certain research, development and engineering objectives, actual development costs may exceed budgeted amounts and estimated product development schedules may be extended. If we are unable to develop, manufacture, market, or support new or enhanced products successfully, or incur budget overruns or delays in our research and development efforts, our business, financial condition, results of operations, and cash flows may be adversely affected.

Spending to develop and improve our technology may adversely impact our financial results.

We may need to increase our research and development and/or capital expenditures and expenses above our historical run-rate model in order to attempt to improve our existing technology and develop new technology. Increasing our investments in research and development of technology could cause our cost structure to fall out of alignment with demand for our products, which would have a negative impact on our financial results. If we are unable to fund these types of expenditures, we may be unable to improve our technology or develop new technologies, which may adversely affect our business, financial condition, results of operations and cash flows. Further, our research and development programs may not produce successful results, and our new products and services may not achieve market acceptance, create additional revenue or become profitable, which could materially harm our business, prospects, financial results and liquidity.

The competitive and rapidly evolving nature of our industries and pressure from competitors with greater resources has in the past resulted in and is likely in the future to result in reductions in our product prices and periods of reduced demand for our products.

We face substantial competition from a number of companies, many of which have greater financial, marketing, manufacturing, and technical resources than we do. Larger-sized competitors often spend more on research and development, which could give those competitors an advantage in meeting customer demands and introducing technologically innovative products before we do. We expect that existing and new competitors will continue to improve the design of their existing products and will introduce new products with enhanced performance characteristics.

The introduction of new products and more efficient production of existing products by our competitors have resulted and are likely in the future to result in price reductions, increases in expenses, and reduced demand for our products. In addition, some of our competitors may be willing to provide their products at lower prices, accept a lower profit margin, or spend more capital in order to obtain or retain business. Competitive pressures have required us to reduce the prices of some of our products. These competitive forces could diminish our market share and gross margins, resulting in an adverse effect on our business, financial condition, results of operations, and cash flows.

New competitors may also enter our markets, including some of our current and potential customers who may attempt to integrate their operations by producing their own components and subsystems or acquiring one of our competitors, thereby reducing demand for our products. In addition, rapid product development cycles, increasing price competition due to maturation of technologies, the emergence of new competitors in Asia with lower cost structures, and industry consolidation resulting in competitors with greater financial, marketing, and technical resources could result in lower prices or reduced demand for our products, which could have an adverse effect on our business, financial condition, results of operations, and cash flows.

Expected and actual introductions of new and enhanced products may cause our customers to defer or cancel orders for existing products and may cause our products to become obsolete. A slowdown in demand for existing products ahead of a new product introduction could result in a write-down in the value of inventory on hand related to existing products. We have in the past experienced a slowdown in demand for existing products and delays in new product development and such delays may occur in the future. To the extent customers defer or cancel orders for existing products due to a slowdown in demand or in anticipation of a new product release, or if there is any delay in development or introduction of our new products or enhancements of our products, our business, financial condition, results of operations, and cash flows could be adversely affected.

Our products are difficult to manufacture. Our production could be disrupted and our results of operations and cash flows could suffer if our production yields are low as a result of manufacturing difficulties.

We manufacture many of our wafers and products in our own production facilities. Difficulties in the production process, such as contamination, raw material quality issues, human error, or equipment failure, could cause a substantial percentage of wafers and devices to be nonfunctional. These problems may be difficult to detect at an early stage of the manufacturing process and often are time-consuming and expensive to correct. Lower-than-expected production yields may delay shipments or result in unexpected levels of warranty claims, either of which could adversely affect our results of operations and cash flows. We have experienced difficulties in achieving planned yields in the past, particularly in pre-production and upon initial commencement of full production volumes, which have adversely affected our gross margins. Because the majority of our manufacturing costs are fixed, achieving planned production yields is critical to our results of operations and cash flows. Changes in manufacturing processes required as a result of changes in product specifications, changing customer needs and the introduction of new product lines could significantly reduce our manufacturing yields, resulting in low or negative margins on those products. In addition, transitioning to automation in certain manufacturing processes could result in manufacturing delays or significantly reduce our manufacturing yields.

Manufacturing yields depend on a number of factors, including the stability and manufacturability of the product design, manufacturing improvements gained over cumulative production volumes, the quality and consistency of component parts and the nature and extent of customization requirements by customers. Higher volume demand for more mature designs requiring less customization generally results in higher manufacturing yields than products with lower volumes, less mature designs and requiring extensive customization. Capacity constraints, raw materials shortages, logistics issues, the introduction of new product lines and changes in our customer requirements, manufacturing facilities or processes or those of our third-party contract manufacturers and component suppliers have historically caused, and may in the future cause, significantly reduced manufacturing yields, negatively impacting the gross margins on, and our production capacity for, those products. Our ability to maintain sufficient manufacturing yields is particularly important with respect to certain products we manufacture, as a result of the long manufacturing process. Moreover, an increase in the rejection and rework rate of products during the quality control process before, during or after manufacture would result in lower yields, gross margins and production capacity. Finally, manufacturing yields and margins can also be lower if we receive and inadvertently use defective or contaminated materials from our suppliers.

Also, we have substantial risk of interruption in manufacturing resulting from fire, natural disaster, equipment failures, or similar events, because we manufacture most of our products using a few facilities, and do not have back-up facilities available for manufacturing these products. We could also incur significant costs to repair and/or replace products that are defective and in some cases costly product redesigns and/or rework may be required to correct a defect. Additionally, any defect could adversely affect our reputation and result in the loss of future orders.

Some of the capital equipment used in the manufacture of our products have been developed and made specifically for us, is not readily available from multiple vendors, and would be difficult to repair or replace if it were to become damaged or stop working. If any of these suppliers were to experience financial difficulties or go out of business, or if there were any damage to, or a breakdown of our manufacturing equipment at a time when we are manufacturing commercial quantities of our products, our business, financial condition, results of operations, and cash flows could be adversely affected.

It could be discovered that our products contain defects that may cause us to incur significant costs, divert management's attention, result in a loss of customers, and result in product liability claims.

Our products are complex and undergo quality testing and formal qualification by our customers and us. However, defects may occur from time to time. Our customers' testing procedures involve evaluating our products under likely and foreseeable failure scenarios and over varying amounts of time. For various reasons, such as the occurrence of performance problems that are unforeseeable in testing or that are detected only when products age or are operated under peak stress conditions, our products may fail to perform as expected long after customer acceptance. Failures could result from faulty components or design, problems in manufacturing, or other unforeseen reasons. For the majority of our products, we provide a product warranty of one year or less from date of shipment. For select customers, we provide extended warranties beyond our normal product warranty period for specified failures on a case-by-case basis. As a result, we could incur significant costs to repair or replace defective products under warranty, particularly when such failures occur in installed systems. We have experienced failures in the past and will continue to face this risk going forward, as our products are widely deployed throughout the world in multiple demanding environments and applications. In addition, we may in certain circumstances honor warranty claims after the warranty has expired or for problems not covered by warranty in order to maintain customer relationships. Any significant product failure could result in product recalls, product liability claims, lost future sales of the affected product and other products, as well as customer relations problems, litigation, and damage to our reputation.

In addition, our products are typically embedded in, or deployed in conjunction with, our customers' products, which incorporate a variety of components, modules and subsystems and may be expected to interpolate with modules and subsystems produced by third parties. As a result, not all defects are immediately detectable and when problems occur, it may be difficult to identify the source of the problem. These problems may cause us to incur significant damages or warranty and repair costs, divert the attention of our engineering personnel from our product development efforts, and cause significant customer relations problems or loss of customers, all of which would harm our business. The occurrence of any defects in our products could also give rise to liability for damages caused by such defects. Although we carry product liability insurance to mitigate this risk, insurance may not adequately cover costs that may arise from defects in our products or otherwise, nor will it protect us from reputational harm that may result from such defects. Costs incurred in connection with product recalls or warranty or product liability claims may adversely affect our business, financial condition, results of operations, and cash flows.

Our products are complex and may take longer to develop and qualify than anticipated and we face lengthy sales and qualification cycles for our new products and, in many cases, must invest a substantial amount of time and money before we receive orders.

We are constantly developing new products and using new technologies in these products. These products often take substantial time to develop because of their complexity, rigorous testing and qualification requirements and because customer and market requirements can change during the product development or qualification process. Most of our products are tested by current and potential customers to determine whether they meet customer or industry specifications. The length of the qualification process, which can span a year or more, varies substantially by product and customer and, thus, can cause our results of operations and cash flows to be unpredictable. During a given qualification period, we invest significant resources and allocate substantial production capacity to manufacture these new products prior to any commitment to purchase by customers. In addition, it is difficult to obtain new customers during the qualification period as customers are reluctant to expend the resources necessary to qualify a new supplier if they have one or more existing qualified sources. If we are unable to meet applicable specifications or do not receive sufficient orders to profitably use our allocated production capacity, our business, financial condition, results of operations, and cash flows may be adversely affected.

Our historical and future budgets for operating expenses, capital expenditures, operating leases, and service contracts are based upon our assumptions as to the future market acceptance of our products. Because of the lengthy lead times required for product development and the changes in technology that typically occur while a product is being developed, it is difficult to accurately estimate customer demand for any given product. If our products do not achieve an adequate level of customer demand, our business, financial condition, results of operations, and cash flows may be adversely affected.

Shifts in industry-wide demands and inventories could result in significant inventory write-downs.

The life cycles of some of our products depend heavily upon the life cycles of the end products into which our products are designed. Products with short life cycles require us to manage production and inventory levels closely. We evaluate our ending inventories on a quarterly basis for excess quantities, impairment of value, and obsolescence. This evaluation includes analysis of sales levels by product and projections of future demand based upon input received from our customers, sales team, and management. If inventories on hand are in excess of demand, or if they are generally greater than 12-months old, appropriate write-downs may be recorded. In addition, we write off inventories that are considered obsolete based upon changes in customer demand, manufacturing process changes that result in existing inventory obsolescence, or new product introductions, which eliminate demand for existing products. Remaining inventory balances are adjusted to approximate the lower of our manufacturing cost or market value.

If future demand or market conditions are less favorable than our estimates, inventory write-downs may be required. We cannot be certain that obsolete or excess inventories, which may result from unanticipated changes in the estimated total demand for our products and/or the estimated life cycles of the end products into which our products are designed, will not affect us beyond the inventory charges that we have already taken.

The types of sales contracts we use in the markets we serve subject us to unique risks in each of those markets.

We generally do not have long-term supply contracts with our customers, we typically sell our products pursuant to purchase orders with short lead times, and even where we do have supply contracts, our customers are not obligated to purchase any minimum amount of our products. As a result, our customers could stop purchasing our products at any time, and we must fulfill orders in a timely manner to keep our customers satisfied.

Risks associated with the absence of long-term purchase commitments with our customers include the following:

- our customers can stop purchasing our products at any time without penalty;
- our customers may purchase products from our competitors; and
- our customers are not required to make minimum purchases.

These risks are increased by the fact that our customers in this market are large sophisticated companies which have considerable purchasing power and control over their suppliers. If we are unable to fulfill these orders in a timely manner, it is likely that we will lose sales and customers.

Fixed-price development work inherently has more uncertainty than production contracts and, therefore, entails more variability in estimates of the cost to complete the work. Many of these development programs have very complex designs. As technical or quality issues arise, we may experience schedule delays and adverse cost impacts, which could increase our estimated cost to perform the work, either of which could adversely affect our results of operations. Some fixed-price development contracts include initial production units in their scope of work. Successful performance of these contracts depends on our ability to meet production specifications and delivery rates. If we are unable to perform and deliver to contract requirements, our contract price could be reduced through the incorporation of liquidated damages, termination of the contract for default, or other financially significant consequences. Management uses its best judgment to estimate the cost to perform the work and the price we will eventually be paid on fixed-price development programs. While we believe the cost and price estimates incorporated in the financial statements are appropriate, future events could result in either favorable or unfavorable adjustments to those estimates.

If we fail to remediate deficiencies in our current system of internal controls, we may not be able to accurately report our financial results or prevent fraud. As a result, our business could be harmed and current and potential investors could lose confidence in our financial reporting, which could have an adverse effect on the trading price of our equity securities.

We are subject to the ongoing internal control provisions of Section 404 of the Sarbanes-Oxley Act of 2002. These provisions provide for the identification of material weaknesses or other lesser deficiencies in internal control over financial reporting, which is a process to provide reasonable assurance regarding the reliability of financial reporting for external purposes in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP"). If we cannot provide reliable and timely financial reports, our brand, operating results, and the market value of our equity securities could be harmed. We have in the past discovered, and may in the future discover, areas of our internal controls that need improvement.

We have devoted significant resources to remediate and improve our internal controls. We have also been monitoring the effectiveness of these remediated measures. We cannot be certain that these measures will ensure adequate controls over our financial processes and reporting in the future. Any failure to implement required new or improved controls, or difficulties encountered in their implementation, could harm our operating results or cause us to fail to meet our reporting obligations.

Inadequate internal controls could also cause investors to lose confidence in our reported financial information, which could have an adverse effect on the trading price of our equity securities. Further, the impact of these events could also make it more difficult for us to attract and retain qualified persons to serve on our Board of Directors (the "Board") or as executive officers, which could harm our business.

We could be required to record an impairment charge as a result of changes to assumptions used in our impairment testing.

We have substantial long-lived assets recorded on our balance sheet. As of September 30, 2017, we had \$16.6 million of property and equipment, net, on our consolidated balance sheet. If we make changes in our business strategy or if market or other conditions adversely affect our business operations, we may be forced to record an impairment charge related to these assets, which would adversely impact our results of operations. Impairment assessment inherently involves judgment as to assumptions about expected future cash flows and the impact of market conditions on those assumptions. Future events and changes in market conditions, underlying business operations, competition or technologies may impact our assumptions as to prices, costs, holding periods, or other factors that may result in changes in our estimates of future cash flows. Although we believe the assumptions we used in testing for impairment are reasonable, we will continue to evaluate the recoverability of the carrying amount of our property, plant and equipment on an ongoing basis, and significant changes in any one of our assumptions could produce a significantly different result. In such a circumstance, we may incur substantial impairment charges, which would adversely affect our financial results. In any period where our stock price, as determined by our market capitalization, is less than our book value, this too could indicate a potential impairment and we may be required to record an impairment charge in that period.

Changes in accounting standards issued by the Financial Accounting Standards Board ("FASB") could have a material effect on our balance sheet, revenue and result of operations, and could require a significant expenditure of time, attention and resources, especially by senior management.

Our accounting and financial reporting policies conform to U.S. GAAP, which are periodically revised and/or expanded. The application of accounting principles is also subject to varying interpretations over time. Accordingly, we are required to adopt new or revised accounting standards or comply with revised interpretations that are issued from time to time by various parties, including accounting standard setters and those who interpret the standards, such as the FASB and the SEC and our independent registered public accounting firm. Such new financial accounting standards may result in significant changes that could adversely affect our financial condition and results of operations.

In May 2014, the FASB issued Accounting Standards Update ("ASU") 2014-09, Revenue from Contracts with Customers, which supersedes nearly all existing U.S. GAAP regarding revenue recognition. In February 2016, the FASB issued ASU 2016-02, Leases, which requires all operating leases with lease terms longer than twelve months be recorded as lease assets and lease liabilities on our consolidated balance sheets. Implementing changes required by new standards, requirements or laws likely will require a significant expenditure of time, attention and resources. It is impossible to completely predict the impact, if any, on us of future changes to accounting standards and financial reporting and corporate governance requirements.

Refer to [Note 1 - Description of Business](#) and [Note 2 - Summary of Significant Accounting Policies](#) of the Notes to the Consolidated Financial Statements for further discussion of these new accounting standards, including the implementation status and potential impact to our consolidated financial statements.

We have significant international sales, which expose us to additional risks and uncertainties.

For the fiscal years ended September 30, 2017, 2016 and 2015, sales to customers located outside the U.S. accounted for approximately 20%, 28% and 32%, respectively, of our annual consolidated revenue, with revenue assigned to geographic regions based on our customers' billing address. Sales to customers in Asia represent the majority of our international sales. We believe that international sales will continue to account for a significant percentage of our revenue as we seek international expansion opportunities. Our international sales and operations are subject to a number of material risks, including, but not limited to:

- political and economic instability or changes in U.S. government policy with respect to these foreign countries may inhibit export of our products and limit potential customers' access to U.S. dollars in a country or region in which those potential customers are located;
- we may experience difficulties in enforcing our legal contracts or the collecting of foreign accounts receivable in a timely manner and we may be forced to write off these receivables;
- tariffs and other barriers may make our products less cost competitive;
- the laws of certain foreign countries may not adequately protect our trade secrets and intellectual property or may be burdensome to comply with;
- potentially adverse tax consequences to our customers may damage our cost competitiveness;
- customs, import/export, and other regulations of the countries in which we do business may adversely affect our business;
- different technical standards or requirements, such as country or region-specific requirements to eliminate the use of lead
- currency fluctuations may make our products less cost competitive, affecting overseas demand for our products or otherwise adversely affecting our business; and
- language and other cultural barriers may require us to expend additional resources competing in foreign markets or hinder our ability to effectively compete.

Negative developments in one or more countries or regions in which we operate or sell our products could result in a reduction in demand for our products, the cancellation or delay of orders already placed, difficulties in producing and delivering our products, threats to our intellectual property, difficulty in collecting receivables, or a higher cost of doing business, any of which could negatively impact our business, financial condition, cash flows and results of operations. In addition, we may be exposed to legal risks under the laws of the countries outside the U.S. in which we do business, as well as the laws of the U.S. governing our business activities in those other countries, such as the U. S. Foreign Corrupt Practices Act ("FCPA").

Our failure to successfully manage the transition of certain of our manufacturing operations from our Langfang facility to our new Beijing location could harm our business, financial condition, results of operations and cash flows.

In February 2016, we leased a new manufacturing facility near Beijing, China. We have relocated the manufacture of our existing product lines and sub-assemblies previously manufactured at our Langfang facility to our Beijing facility and have closed our Langfang facility. This transition has and may continue to cause us to incur costs associated with some duplication of facilities, equipment and personnel, the amount of which could vary materially from our projections, and require us to install and/or transplant complex manufacturing equipment and processes and to hire and train a new workforce. In addition, we are subject to the requirements of a different regional government than we were subject to at our Langfang facility, which creates additional uncertainty. If we are unable to manage this transfer and training smoothly and comprehensively, or if we are unable to complete the re-qualification of products in a timely manner, we could suffer delays in recognizing efficiencies, manufacturing and supply chain delays, adverse impacts on our product quality and delivery schedules, harm to our reputation with our customers, and loss of customers. If we are unable to successfully manage the relocation or initiation of the manufacture of these products, our business, financial condition, results of operations and cash flows could be harmed.

We could be subject to legal and regulatory consequences if we fail to comply with applicable export control laws and regulations.

Exports of certain of our products are subject to export controls imposed by the U.S. government and administered by the United States Departments of State and Commerce. In certain instances, these regulations may require pre-shipment authorization from the administering department. For products subject to the Export Administration Regulations, or EAR, administered by the Department of Commerce's Bureau of Industry and Security, the requirement for a license is dependent on the type and end use of the product, the final destination, the identity of the end user and whether a license exception might apply. Virtually all exports of products subject to the International Traffic in Arms Regulations, or ITAR, administered by the Department of State's Directorate of Defense Trade Controls, require a license.

Obtaining necessary export licenses can be difficult and time-consuming. Failure to obtain necessary export licenses could significantly reduce our revenue and adversely affect our business, financial condition, results of operations and cash flows. We could be subject to investigation and potential regulatory consequences, including, but not limited to, a no-action letter, monetary penalties, debarment from government contracting or denial of export privileges and criminal sanctions, any of which would adversely affect our business, financial condition, results of operations and cash flows. Compliance with U.S. government regulations may also subject us to significant fees and expenses, including legal expenses, and require us to expend significant time and resources. Finally, the absence of comparable restrictions on competitors in other countries may adversely affect our competitive position.

For a portion of our business, we are subject to extensive government regulation, and our failure to comply with applicable regulations could subject us to penalties that may restrict our ability to conduct our business.

As a contractor to the U.S. government, we are subject to and must comply with various government regulations that impact our revenue, operating costs, profit margins and the internal organization and operation of our business. The most significant regulations and regulatory authorities affecting the portion of our business related to U.S. government contracts include the following:

- the Federal Acquisition Regulations, Defense Federal Acquisition Regulation Supplement and other supplemental agency regulations, which comprehensively regulate the formation and administration of, and performance under, U.S. government contracts;
- the Truth in Negotiations Act, which requires certification and disclosure of all factual cost and pricing data in connection with contract negotiations;
- the False Claims Act and the False Statements Act, which impose penalties for payments made on the basis of false facts provided to the government and on the basis of false statements made to the government, respectively; and
- the Foreign Corrupt Practices Act, which prohibits U.S. companies from providing anything of value to a foreign official to help obtain, retain or direct business, or obtain any unfair advantage.

Our failure to comply with applicable regulations, rules and approvals or misconduct by any of our employees could result in the imposition of fines and penalties, the loss of our government contracts or our suspension or debarment from contracting with the U.S. government generally, any of which could harm our business, financial condition, results of operations and cash flows. We are also subject to certain regulations of comparable government agencies in other countries, and our failure to comply with these non-U.S. regulations could also harm our business, financial condition, results of operations and cash flows.

Our business related to government contracts subjects us to additional risks.

We believe that the growth of our navigation business for the foreseeable future will depend to a certain degree on our ability to win government contracts and subcontracts, in particular from the Department of Defense. Many of our government customers are subject to budgetary constraints and our continued performance under these contracts or subcontracts, or award of additional contracts or subcontracts from these agencies, could be jeopardized by spending reductions, including constraints on government spending imposed by the Budget Control Act of 2011 and its subsequent amendments, or budget cutbacks at these agencies. The funding of U.S. government programs is uncertain and dependent on continued congressional appropriations and administrative allotment of funds based on an annual budgeting process. We cannot be certain that current levels of congressional funding for our products and services will continue and that our business related to these products will not decline or increase at currently anticipated levels, or that we will not be subject to delays in the negotiation of contracts or increased costs due to changes in the funding of U.S. government programs. A significant decline in government expenditures generally, or with respect to programs for which we provide products, could adversely affect our business and prospects.

In addition, our business could be adversely affected by a negative audit or investigation by the U.S. government. U.S. government agencies, primarily the Defense Contract Audit Agency and the Defense Contract Management Agency, routinely audit and investigate government contractors. These agencies review a contractor's performance under its contracts, cost structure and compliance with applicable laws, regulations and standards. These agencies also may review the adequacy of, and a contractor's compliance with, its internal control systems and policies, including the contractor's purchasing, quality, accounting, property, estimating, compensation and management information systems. Any costs found to be improperly allocated to a specific cost reimbursement contract will not be reimbursed, while such costs already reimbursed must be refunded. If an audit or investigation of our business were to uncover improper or illegal activities, then we could be subject to civil and criminal penalties and administrative sanctions, including termination of contracts, suspension of payments, fines and suspension or debarment from doing business with the U.S. government. We could experience serious harm to our reputation if allegations of impropriety or illegal acts were made against us, even if the allegations were inaccurate. In addition, responding to governmental audits or investigations may involve significant expense and divert management attention. Moreover, if any of our administrative processes and business systems are found not to comply with the applicable requirements, we may be subjected to increased government scrutiny or required to obtain additional governmental approvals that could delay or otherwise adversely affect our ability to compete for or perform contracts. If any of the foregoing were to occur, our business, financial condition, operating results and cash flows may be adversely affected.

Our failure to obtain or maintain the right to use certain intellectual property may adversely affect our business, financial condition, results of operations, and cash flows.

Our industries are characterized by frequent litigation regarding patent and other intellectual property rights. From time to time we have received, and may receive in the future, notice of claims of infringement of other parties' proprietary rights and licensing offers to commercialize third party patent rights. Numerous patents in our industry are held by others, including our competitors and certain academic institutions. Our competitors may seek to gain a competitive advantage or other third parties may seek an economic return on their intellectual property portfolios by making infringement claims against us. We cannot be certain that:

- infringement claims (or claims for indemnification resulting from infringement claims) will not be asserted against us or that such claims will not be successful;
- future assertions will not result in an injunction against the sale of infringing products, which could require us to cease the manufacture, use or sale of the infringing products, processes or technology and expend significant resources to develop non-infringing technology, adversely affecting our business, results of operations, and cash flows;
- any patent owned or licensed by us will not be invalidated, circumvented, or challenged; or

- we will not be required to obtain licenses or pay substantial damages for past, present and future use of the infringing technology, the expense of which may adversely affect our results of operations, and cash flows.

In addition, effective copyright and trade secret protection may be unavailable or limited in certain foreign jurisdictions. Litigation, which could result in substantial cost and diversion of our resources, may be necessary to defend our rights or defend us against claimed infringement of the rights of others. In certain circumstances, our intellectual property rights associated with government contracts may be limited.

If we fail to protect, or incur significant costs in defending, our intellectual property and other proprietary rights, our business and results of operations could be materially harmed.

Our success depends to a significant degree on our ability to protect our intellectual property and other proprietary rights. We rely on a combination of patent, trademark, trade secret and unfair competition laws, as well as license agreements and other contractual provisions, to establish and protect our intellectual property and other proprietary rights. We have applied for patent registrations in the United States and selected international jurisdictions, most of which have been issued. We cannot guarantee that our pending applications will be approved by the applicable governmental authorities. Moreover, our existing and future patents and trademarks may not be sufficiently broad to protect our proprietary rights or may be held invalid or unenforceable in court. Failure to obtain patent registrations or a successful challenge to our registrations in the United States or other foreign countries may limit our ability to protect the intellectual property rights that these applications and registrations are intended to cover.

We also attempt to protect our intellectual property, including our trade secrets and know-how, through the use of trade secret and other intellectual property laws, and contractual provisions. We enter into confidentiality and invention assignment agreements with our employees and independent consultants. We also use non-disclosure agreements with other third parties who may have access to our proprietary technologies and information. Such measures, however, provide only limited protection, and we cannot be certain that our confidentiality and non-disclosure agreements will not be breached, especially after our employees or those of our third-party contract manufacturers end their employment or engagement, and that our trade secrets will not otherwise become known by competitors or that we will have adequate remedies in the event of unauthorized use or disclosure of proprietary information. Unauthorized third parties may try to copy or reverse engineer our products or portions of our products, otherwise obtain and use our intellectual property, or may independently develop similar or equivalent trade secrets or know-how. If we fail to protect our intellectual property and other proprietary rights, or if such intellectual property and proprietary rights are infringed or misappropriated, we could lose our competitive advantage and our business, results of operations, financial condition and cash flows could be materially harmed.

Policing unauthorized use of our technology is difficult, and we cannot be certain that the steps we have taken will prevent the misappropriation, unauthorized use, or other infringement of our intellectual property rights. Further, we may not be able to effectively protect our intellectual property rights from misappropriation or other infringement in foreign countries where we have not applied for patent protections, and where effective patent, trademark, trade secret, and other intellectual property laws may be unavailable, or may not protect our proprietary rights as fully as U.S. law.

In the future, we may need to take legal actions to prevent third parties from infringing upon or misappropriating our intellectual property or from otherwise gaining access to our technology. Protecting and enforcing our intellectual property rights and determining their validity and scope could result in significant litigation costs and require significant time and attention from our technical and management personnel, which could significantly harm our business. The availability of financial resources may limit our ability to commence or defend such litigation. In addition, we may not prevail in such proceedings. An adverse outcome of such proceedings may reduce our competitive advantage or otherwise harm our business, financial condition, results of operations and cash flows.

We may be obligated to indemnify our customers and vendors for claims that our intellectual property infringes the rights of others, which may result in substantial expenses to us.

We may be required to indemnify our customers or vendors for intellectual property claims made against them for products incorporating our technology. As such, claims against our customers and vendors may require us to incur substantial expenses, such as legal expenses, damages for past infringement or royalties for future use. Future indemnity claims could adversely affect our business relationships and result in substantial costs to us.

We face certain litigation risks that could harm our business.

We are and may become subject to various legal proceedings and claims that arise in or outside the ordinary course of business. The results of complex legal proceedings are difficult to predict. Moreover, many of the complaints filed against us do not specify the amount of damages that plaintiffs seek, and we therefore are unable to estimate the possible range of damages that might be incurred should these lawsuits be resolved against us. However, certain of these lawsuits assert types of claims that, if resolved against us, could give rise to substantial damages. Thus, an unfavorable outcome or settlement of one or more of these lawsuits may have an adverse effect on our business, financial condition, results of operations and cash flows. Even if these lawsuits are not resolved against us, the uncertainty and expense associated with unresolved lawsuits could seriously harm our business, financial condition, and reputation. Litigation is costly, time-consuming and disruptive to normal business operations. The costs of defending these lawsuits, particularly the securities class actions and shareholder derivative actions, have been significant, will continue to be costly, and may not be covered by our insurance policies. The defense of these lawsuits could also result in continued diversion of our management's time and attention away from business operations, which could harm our business. For additional discussion regarding litigation in which we are involved, see [Note 13 - Commitments and Contingencies](#) in the notes to our consolidated financial statements.

The costs of compliance with state, federal and international legal and regulatory requirements, such as environmental, labor, trade and tax regulations, and customers' standards of corporate citizenship could cause an increase in our operating costs.

We are subject to environmental and health and safety laws and regulations and must obtain certain permits and licenses relating to the use of hazardous materials in our production activities. If our control systems are unsuccessful in preventing a release of these materials into the environment or other adverse environmental conditions or human exposure occurs, we could experience interruptions in our operations and incur substantial remediation and other costs or liabilities. In addition, certain foreign laws and regulations place restrictions on the concentration of certain hazardous materials, including, but not limited to, lead, mercury, and cadmium, in our products. Failure to comply with such laws and regulations could subject us to future liabilities or result in the limitation or suspension of the sale or production of our products. These regulations include the European Union's (EU) Restrictions on Hazardous Substances and Directive on Waste Electrical and Electronic Equipment. Failure to comply with environmental and health and safety laws and regulations may limit our ability to export products to the EU and could adversely affect our business, financial condition, results of operations, and cash flows. In addition, the Department of Homeland Security has commenced a program to evaluate the security of certain chemicals which may be of interest to terrorists, including chemicals utilized by us. This evaluation may lead to regulations or restrictions affecting our ability to utilize these chemicals or the costs of doing so.

In connection with our compliance with such environmental laws and regulations, as well as our compliance with industry environmental initiatives, the standards of business conduct required by some of our customers, and our commitment to sound corporate citizenship in all aspects of our business, we could incur substantial compliance and operating costs and be subject to disruptions to our operations. In addition, in the last few years, there has been increased media scrutiny and associated reports focusing on a potential link between working in semiconductor manufacturing clean room environments and certain illnesses, primarily different types of cancers. Regulatory agencies and industry associations have begun to study the issue to see if any actual correlation exists. Because we utilize clean rooms, we may become subject to liability claims. These reports may also affect our ability to recruit and retain employees. If we were found to be in violation of environmental and safety regulations laws or noncompliance with industry initiatives or standards of conduct, we could be subject to government fines or liabilities owed to our customers, which could have an adverse effect on our business, financial condition, results of operations, and cash flows.

In addition, climate change is a significant topic of discussion and potential regulatory activity and has generated and may continue to generate federal or other regulatory responses in the near future. If we or our component suppliers fail to timely comply with applicable legislation, our customers may refuse to purchase our products or we may face increased operating costs as a result of taxes, fines or penalties, which may have an adverse effect on our business, financial condition, results of operations and cash flows.

In connection with our compliance with such environmental laws and regulations, as well as our compliance with industry environmental initiatives, the standards of business conduct required by some of our customers, and our commitment to sound corporate citizenship in all aspects of our business, we could incur substantial compliance and operating costs and be subject to disruptions to our operations and logistics. In addition, if we were found to be in violation of these laws or noncompliant with these initiatives or standards of conduct, we could be subject to governmental fines, liability to our customers and damage to our reputation and corporate brand which could cause our business, financial condition, results of operations and cash flows to suffer.

We are subject to anti-corruption laws in the jurisdictions in which we operate, including the FCPA. Our failure to comply with these laws could result in penalties which could harm our reputation and have an adverse effect on our business, results of operations and financial condition.

We are subject to the FCPA, which generally prohibits companies and their intermediaries from making improper payments to foreign officials for the purpose of obtaining or keeping business and/or other benefits, along with various other anticorruption laws. Although we have implemented policies and procedures designed to ensure that we, our employees and other intermediaries comply with the FCPA and other anticorruption laws to which we are subject, we cannot be certain that such policies or procedures will work effectively all of the time or protect us against liability under the FCPA or other laws for actions taken by our employees and other intermediaries with respect to our business or any businesses that we may acquire.

We have manufacturing operations in China and other jurisdictions, many of which pose elevated risks of anti-corruption violations, and we export our products for sale internationally. This puts us in frequent contact with persons who may be considered “foreign officials” under the FCPA, resulting in an elevated risk of potential FCPA violations. If we are not in compliance with the FCPA and other laws governing the conduct of business with government entities (including local laws), we may be subject to criminal and civil penalties and other remedial measures, which could have an adverse impact on our business, financial condition, results of operations and cash flows. Any investigation of any potential violations of the FCPA or other anticorruption laws by U.S. or foreign authorities could harm our reputation and have an adverse impact on our business, financial condition, results of operations and cash flows.

Compliance with regulations related to conflict minerals could increase costs and affect the manufacturing and sale of our products.

Public companies are required to disclose the use of tin, tantalum, tungsten and gold (collectively, “conflict minerals”) mined from the Democratic Republic of the Congo and adjoining countries (the “covered countries”) if a conflict mineral(s) is necessary to the functionality of a product manufactured, or contracted to be manufactured, by the company. We may determine, as part of our compliance efforts, that certain products or components we obtain from our suppliers contain conflict minerals. If we are unable to conclude that all our products are free from conflict minerals originating from covered countries, this could have a negative impact on our business, reputation and/or results of operations. We may also encounter challenges to satisfy customers who require that our products be certified as conflict free, which could place us at a competitive disadvantage if we are unable to substantiate such a claim. Compliance with these rules could also affect the sourcing and availability of some of the minerals used in the manufacture of products or components we obtain from our suppliers, including our ability to obtain products or components in sufficient quantities and/or at competitive prices. Certain of our customers are requiring additional information from us regarding the origin of our raw materials, and complying with these customer requirements may cause us to incur additional costs, such as costs related to determining the origin of any minerals used in our products. Our supply chain is complex and we may be unable to verify the origins for all metals used in our products.

A failure to attract and retain managerial, technical, and other key personnel could reduce our revenue and our operational effectiveness.

Our future success depends, in part, on our ability to attract and retain certain key personnel, including scientific, operational, financial, and managerial personnel. In addition, our technical personnel represent a significant asset and serve as the source of our technological and product innovations. The competition for attracting and retaining key employees (especially scientists, technical personnel, and senior managers and executives) is intense. Because of this competition for skilled employees, we may be unable to retain our existing personnel or attract additional qualified employees in the future to keep up with our business demands and changes, and our business, financial condition, results of operations, and cash flows could be adversely affected. The risks involved in recruiting and retaining these key personnel may be increased by our historical lack of profitability, the volatility of our stock price, and the perceived effect of previously implemented reductions in force and other cost reduction efforts.

Our business and results of operations may continue to be negatively impacted by general economic and financial market conditions and market conditions in the industries in which we operate, and such conditions may increase the other risks that affect our business.

In recent years, the world’s financial markets have experienced significant turmoil, resulting in reductions in available credit, increased costs of credit, extreme volatility in security prices, potential changes to existing credit terms, and rating downgrades of investments. These conditions materially and adversely affected the market conditions in the industries in which we operate and caused many of our customers to reduce their spending plans, leading them to draw down their existing inventory and reduce orders for our products, which, in turn, had an adverse impact on our revenues. We cannot predict the timing, strength or duration of any economic slowdown or subsequent economic recovery, worldwide or within our industry. It is possible that economic conditions could result in further setbacks, and that these customers, or others, could as a result significantly reduce their capital expenditures, draw down their inventories, reduce production levels of existing products, defer introduction of new products or place orders and accept delivery for products for which they do not pay us due to their economic difficulties or other reasons. If any of these events occur, our business, financial condition, results of operations and cash flows may be adversely affected.

Natural disasters or other catastrophic events could have an adverse effect on our business.

Natural disasters, such as hurricanes, earthquakes, fires, and floods, could adversely affect our operations and financial performance. Such events could result in physical damage to one or more of our facilities, the temporary closure of one or more of our facilities or those of our suppliers, a temporary lack of an adequate work force in a market, a temporary or long-term disruption in the supply of products from some local and overseas suppliers, a temporary disruption in the transport of goods from overseas, and delays in the delivery of goods. Public health issues, whether occurring in the United States or abroad, could disrupt our operations, disrupt the operations of suppliers or customers, or have an adverse impact on customer demand. As a result of any of these events, we may be required to suspend operations in some or all of our locations, which could have an adverse effect on our business, financial condition, results of operations, and cash flows. These events could also reduce demand for our products or make it difficult or impossible to receive products from suppliers. Although we maintain business interruption insurance and other insurance intended to cover some or all of these risks, such insurance may be inadequate, whether because of coverage amount, policy limitations, the financial viability of the insurance companies issuing such policies, or other reasons.

We are subject to risks associated with the availability and coverage of insurance.

For certain risks, we do not maintain insurance coverage because of cost or availability. Because we retain some portion of our insurable risks, and in some cases self-insure completely, unforeseen or catastrophic losses in excess of insured limits may have an adverse effect on our business, financial condition, results of operations and cash flows.

Our business and operations could be adversely impacted in the event of a failure or security breach of our information technology infrastructure.

We rely upon the capacity, reliability, and security of our information technology hardware and software infrastructure and our ability to expand and update this infrastructure in response to our changing needs. We are constantly updating our information technology infrastructure. Although we have a disaster recovery plan, any failure to manage, expand, and update our information technology infrastructure or any failure in the operation of this infrastructure could harm our business.

Despite our implementation of security measures, our systems are vulnerable to damages from computer viruses, computer denial-of-service attacks, worms, and other malicious software programs or other attacks, covert introduction of malware to computers and networks, unauthorized access, including impersonation of unauthorized users, efforts to discover and exploit any security vulnerabilities or securities weaknesses, and other similar disruptions. Our business is also subject to break-ins, sabotage, and intentional acts of vandalism by third parties as well as intentional and unintentional acts by employees or other insiders with access privileges. Any system failure, accident, or security breach could result in disruptions to our operations. In addition, our technology infrastructure and systems are vulnerable to damage or interruption from natural disasters, power loss and telecommunications failures. Further, our products contain sophisticated hardware and operating system software and applications that may contain security problems, security vulnerabilities, or defects in design or manufacture, including “bugs” and other problems that could interfere with the intended operation of our products. To the extent that any disruption or security breach results in a loss or damage to our technology infrastructure, systems or data, or inappropriate disclosure of confidential information or sensitive or personal information, it could harm our relationships with customers and other third parties and damage our brand and reputation and our business. In addition, we may be required to incur significant costs to protect against damage caused by these disruptions or security breaches in the future.

We may be subject to theft, loss, or misuse of personal data about our employees, customers, or other third parties, which could increase our expenses, damage our reputation, or result in legal or regulatory proceedings.

The theft, loss, or misuse of personal data collected, used, stored, or transferred by us to run our business could result in significantly increased security costs or costs related to defending legal claims. Global privacy legislation, enforcement, and policy activity in this area are rapidly expanding and creating a complex compliance regulatory environment. Costs to comply with and implement these privacy-related and data protection measures could be significant. In addition, our even inadvertent failure to comply with federal, state, or international privacy-related or data protection laws and regulations could result in proceedings against us by governmental entities or others or cause us to incur penalties or other significant legal liability or change our business practices.

The market price for our common stock has experienced significant price and volume volatility and is likely to continue to experience significant volatility in the future. This volatility may impair our ability to finance strategic transactions with our stock and otherwise harm our business.

Our stock price has experienced significant price and volume volatility for the past several years, and our stock price is likely to experience significant volatility in the future. The trading price of our common stock may be influenced by factors beyond our control, such as the volatility of the financial markets, uncertainty surrounding domestic and foreign economies, conditions and trends in the markets we serve, changes in the estimation of the future size and growth rate of our markets, publication of research reports and recommendations by financial analysts relating to our business, the business of our competitors or the industry in which we operate and compete, changes in market valuation or earnings of our competitors, legislation or regulatory policies, practices, or actions, sales of our common stock by our principal shareholders, and the trading volume of our common stock. The historical market prices of our common stock may not be indicative of future market prices and we may be unable to sustain or increase the value of our common stock. We have historically used equity incentive compensation as part of our overall compensation arrangements. The effectiveness of equity incentive compensation in retaining key employees may be adversely impacted by volatility in our stock price. Significant declines in our stock price may also interfere with our ability, if needed, to raise additional funds through equity financing or to finance strategic transactions with our stock. In addition, there may be increased risk of securities litigation following periods of fluctuations in our stock price. Securities class action lawsuits are often brought against companies after periods of volatility in the market price of their securities. These and other consequences of volatility in our stock price which could be exacerbated by macroeconomic conditions that affect the market generally, or our industry in particular could have the effect of diverting management's attention and could materially harm our business.

We may not pay additional dividends on our common stock and, consequently, your only opportunity to achieve a return on your investment may be an increase in the price of our common stock.

Although we paid a special dividend in 2016, we cannot guarantee that that we will pay additional dividends in the future. In addition, the terms of our loan and security agreement with our financial institution restrict our ability to pay dividends. Consequently, your only opportunity to achieve a return on any shares of our common stock may be for you to sell your shares at a profit. There is no guarantee that the market price of our common stock will increase or ever exceed the price that you paid for the shares.

We may undergo an "ownership change" within the meaning of Section 382 of the Code, which could affect our ability to offset U.S. federal income tax against our net operating losses and certain of our tax credit carryovers.

Section 382 of the Internal Revenue Code, as amended (the "Code") contains rules that limit the ability of a company that undergoes an ownership change to utilize its net operating losses and tax credits (the "Tax Benefits") existing as of the date of such ownership change. Under the rules, such an ownership change is generally any change in ownership of more than 50% of a company's stock within a rolling three-year period. The rules generally operate by focusing on changes in ownership among shareholders considered by the rules as owning, directly or indirectly, 5% or more of the stock of a company and any change in ownership arising from new issuances of stock by the company.

If we were to undergo one or more "ownership changes" within the meaning of Section 382 of the Code, our net operating losses and certain of our tax credits existing as of the date of each ownership change may be unavailable, in whole or in part, to offset U.S. federal income tax resulting from our operations or any gains from the disposition of any of our assets and/or business, which could result in increased U.S. federal income tax liability.

On September 17, 2014, our Board of Directors adopted a Tax Benefits Preservation Plan (the "Rights Plan") to help preserve the value of our Tax Benefits by reducing the risk of limitation of our Tax Benefits. On September 26, 2017, the Company extended the final expiration date of the rights contained therein from October 3, 2017 to October 3, 2018 (subject to earlier expiration as described in the Rights Plan). The Company expects to submit the extension of the Rights Plan to shareholders for approval at the Company's 2018 annual meeting of shareholders. The Rights Plan is intended to reduce the likelihood that we will experience an ownership change by discouraging any person or group from becoming a "5% shareholder" or increasing their ownership of our common stock if they are already a "5% shareholder." Although the Rights Plan is intended to reduce the likelihood of an "ownership change" that could adversely affect us, we cannot be certain that the Rights Plan will prevent all transfers of our common stock that could result in such an "ownership change".

Certain provisions of New Jersey law and our governing documents may make a takeover of our Company difficult even if such takeover could be beneficial to some of our shareholders.

Certain provisions of our organizational documents and New Jersey law could discourage potential acquisition proposals, delay or prevent a change in control of the Company or limit the price that investors may be willing to pay in the future for shares of our common stock. For example, our amended and restated certificate of incorporation and amended and restated bylaws:

- divide our Board of Directors into three classes, with directors elected to serve staggered three-year terms and not subject to removal except for cause by the vote of the holders of at least 80% of our capital stock;
- provide that a supermajority vote of our shareholders is required to amend some portions of our amended and restated certificate of incorporation and amended and restated bylaws, including requiring approval by the holders of 80% of our voting stock for certain business combinations unless these transactions meet certain fair price criteria and procedural requirements or are approved by two-thirds of our continuing directors;
- authorize the issuance of preferred stock that can be created and issued by our board of directors without prior shareholder approval, commonly referred to as "blank check" preferred stock, with rights senior to those of our common stock;
- limit the persons who can call special shareholder meetings;

- establish advance notice requirements to nominate persons for election to our board of directors or to propose matters that can be acted on by shareholders at shareholder meetings;
- do not provide for cumulative voting in the election of directors; and
- provide for the filling of vacancies on our board of directors by action of 66 2/3% of the directors and not by the shareholders.

These and other provisions in our organizational documents could allow our board of directors to affect the rights of our shareholders in a number of ways, including making it difficult for shareholders to replace members of the board of directors. Because our board of directors is responsible for approving the appointment of members of our management team, these provisions could in turn affect any attempt to replace the current management team. These provisions could also limit the price that investors would be willing to pay in the future for shares of our common stock. We may in the future adopt other measures that may have the effect of delaying or discouraging an unsolicited takeover, even if the takeover were at a premium price or favored by a majority of unaffiliated shareholders. Certain of these measures may be adopted without any further vote or action by our shareholders and this could depress the price of our common stock.

In addition, the Rights Plan could make it more difficult for a third party to acquire, or could discourage a third party from acquiring, the Company or a large block of our common stock. A third party that acquires 5% or more of our common stock could suffer substantial dilution of its ownership interest under the terms of the Rights Plan through the issuance of common stock or common stock equivalents to all shareholders other than such acquiring person.

We may not be able to obtain capital when desired on favorable terms, if at all, or without dilution to our shareholders.

We believe that our existing cash and cash equivalents, and cash flows from our operating activities and funds available under our credit facilities, will be sufficient to meet our anticipated cash needs for at least the next 12 months. We operate in an industry, however, that makes our prospects difficult to evaluate. It is possible that we may not generate sufficient cash flow from operations or otherwise have the capital resources to meet our future capital needs. If this occurs, we may need additional financing to continue operations or execute on our current or future business strategies, including to:

- invest in our research and development efforts, including by hiring additional technical and other personnel;
- maintain and expand our operating or manufacturing infrastructure;
- acquire complementary businesses, products, services or technologies; or
- otherwise pursue our strategic plans and respond to competitive pressures.

If we raise additional funds through the issuance of equity or convertible debt securities, the percentage ownership of our shareholders could be significantly diluted, and these newly-issued securities may have rights, preferences or privileges senior to those of existing shareholders. We cannot be certain that additional financing will be available on terms favorable to us, or at all. If adequate funds are not available or are not available on acceptable terms, if and when needed, our ability to fund our operations, take advantage of unanticipated opportunities, develop or enhance our products, or otherwise respond to competitive pressures could be significantly limited. Furthermore, in the event adequate capital is not available to us as required, or is not available on favorable terms, our business, financial condition, results of operations, and cash flows may be adversely affected.

The risks above are not the only risks we face. If any of the events described in our risk factors actually occur, or if additional risks and uncertainties not presently known to us or that we currently deem immaterial, materialize, then our business, financial condition, results of operations, and cash flows could be materially affected.

ITEM 1B. Unresolved Staff Comments

Not Applicable.

ITEM 2. Properties

The following chart contains certain information regarding each of our principal facilities.

<u>Location</u>	<u>Function</u>	<u>Approximate Square Footage</u>	<u>Term (in calendar year)</u>
Alhambra, California	Corporate Headquarters Manufacturing and research and development facilities	75,000	Leases covering two of six buildings expired in 2011; another lease covering four of six buildings expires in 2020 ⁽¹⁾ and ⁽²⁾
Langfang, China	Manufacturing facility	52,000	Multiple leases, which expired in 2017
Beijing, China	Manufacturing facility	23,200	Lease expires in 2021 ⁽¹⁾
Ivyland, Pennsylvania	Manufacturing and research and development facility	9,000	Lease expires in 2019 ⁽¹⁾

Footnotes

(1) Leases have the option to be renewed by us at fixed terms.

(2) Certain facility leases in Alhambra, California which have expired are being maintained on a month-to-month basis.

ITEM 3. Legal Proceedings

See the disclosures under the caption “Legal Proceedings” in [Note 13- Commitments and Contingencies](#) in the notes to our consolidated financial statements for disclosures related to our legal proceedings, which disclosures are incorporated herein by reference.

ITEM 4. Mine Safety Disclosures

Not Applicable.

PART II. Other Information

ITEM 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Our common stock is traded on the Nasdaq Global Market and is quoted under the symbol "EMKR". As of November 30, 2017, we had approximately 90 shareholders of record. Many of our shares of common stock are held by brokers and other institutions on behalf of shareholders, and we are unable to estimate the number of these shareholders.

Price Range of Common Stock

The price ranges presented below represent the highest and lowest sales prices for our common stock on the Nasdaq Global Market during each quarter over the two most recent fiscal years.

High and Low Sales Price Ranges of EMCORE Corporation's Common Stock	<u>First Quarter</u>	<u>Second Quarter</u>	<u>Third Quarter</u>	<u>Fourth Quarter</u>
Fiscal 2017	\$5.15 - \$9.50	\$8.15 - \$10.50	\$8.10 - \$11.95	\$8.20 - \$12.20
Fiscal 2016	\$5.81 - \$8.52	\$4.96 - \$6.15	\$4.95 - \$6.25	\$4.90 - \$6.71*

* As described below, on July 29, 2016 we paid a special cash dividend of \$1.50 per share of the Company’s common stock. The sales prices for our common stock reflected the payment of this special dividend as of August 1, 2016, the ex-dividend date for the special dividend.

Dividend Policy

On July 5, 2016, we declared a special cash dividend of \$1.50 per share of the Company's common stock, or a total of \$39.2 million. The dividend was paid on July 29, 2016 to shareholders of record as of the close of business on July 18, 2016. No other dividends have been declared during the two most recent fiscal years. Under the terms of our credit facility with Wells Fargo Bank, N. A., we are restricted from paying dividends that result in the liquidity of the Company being less than \$25.0 million after paying the dividend if any amounts are outstanding under our credit facility. The payment of dividends, if any, in the future is at the discretion of the Board of Directors.

Unregistered Sales of Equity Securities and Use of Proceeds

Not Applicable.

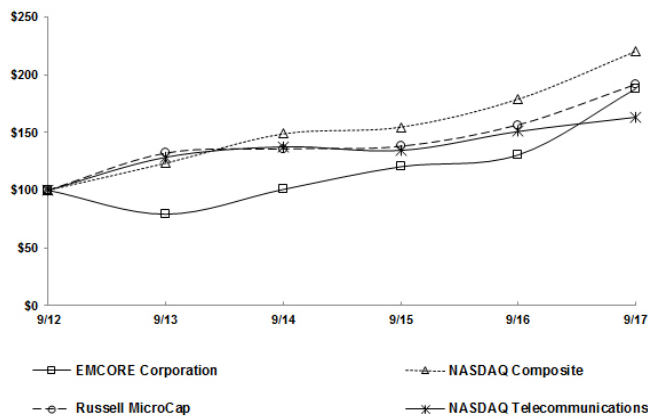
Performance Graph

The following table and graph compares the yearly percentage change in the cumulative total shareholders' return on our common stock for the five-year period from October 1, 2012 through September 30, 2017 with the cumulative total return on the Nasdaq Composite Index, Russell MicroCap Index Fund and the Nasdaq Telecommunications Stock Index. The comparison assumes \$100 was invested at the market close on September 30, 2012 in our common stock, the Nasdaq Composite Index, the Russell MicroCap Index Fund and the Nasdaq Telecommunications Stock Index and that any dividends were reinvested. The stock price performance on the following graph is not necessarily indicative of future stock price performance.

The following stock performance graph does not constitute soliciting material, and should not be deemed filed or incorporated by reference into any of our filings under the Securities Act of 1933 or the Exchange Act, except to the extent we specifically incorporate this stock performance graph by reference therein.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN*

Among EMCORE Corporation, the NASDAQ Composite Index,
the Russell MicroCap Index and the NASDAQ Telecommunications Index



*\$100 invested on 9/30/12 in stock or index, including reinvestment of dividends.
Fiscal year ending September 30.

Copyright© 2017 Russell Investment Group. All rights reserved.

Data Table

	As of September 30,					
	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
EMCORE Corporation	\$100.00	\$79.29	\$100.71	\$120.35	\$130.56	\$187.82
Nasdaq Composite	\$100.00	\$123.38	\$148.79	\$154.52	\$178.82	\$220.25
Russell MicroCap	\$100.00	\$132.12	\$135.80	\$138.04	\$156.63	\$191.61
Nasdaq Telecommunications	\$100.00	\$128.52	\$137.63	\$134.44	\$150.88	\$163.16

ITEM 6. Selected Financial Data

In the tables below, we have provided you with consolidated financial data. We derived the statement of operations data for the fiscal years ended September 30, 2017, 2016, and 2015 and the balance sheet data as of September 30, 2017 and 2016 from our audited consolidated financial statements included in [Financial Statements and Supplementary Data](#) under [Item 8](#) within this Annual Report, after giving effect to the discontinued operations of the Photovoltaics and Digital Products Businesses.

We derived the statement of operations data for the years ended September 30, 2014 and 2013 and the selected balance sheet data as of September 30, 2015, 2014, and 2013 from audited consolidated financial statements that are not included in this Annual Report after giving effect to the discontinued operations of the Photovoltaics and Digital Products Businesses. You should read this financial data together with our [Management's Discussion and Analysis of Financial Condition and Results of Operations](#) under [Item 7](#) and [Financial Statements and Supplementary Data](#) under [Item 8](#) within this Annual Report. Our historic results are not necessarily indicative of the results that may be expected in the future.

Selected Financial Data

Statements of Operations Data (in thousands, except loss per share)

	For the Fiscal Years Ended September 30,				
	2017	2016	2015	2014	2013
Revenue	\$ 122,895	\$ 91,998	\$ 81,685	\$ 55,514	\$ 60,971
Gross profit	42,534	30,954	28,691	12,114	12,266
Operating income (loss)	7,741	2,939	(4,522)	(20,331)	(8,945)
Income (loss) from continuing operations	8,221	2,619	(2,272)	4,082	(5,554)
Income from discontinued operations	14	5,647	65,372	770	10,542
Net income	8,235	8,266	63,100	4,852	4,988
Net income (loss) per basic share					
Continuing operations	\$ 0.31	\$ 0.10	\$ (0.08)	\$ 0.13	\$ (0.21)
Discontinued operations	—	0.22	2.18	0.03	0.40
Net income per basic share	\$ 0.31	\$ 0.32	\$ 2.10	\$ 0.16	\$ 0.19
Net income (loss) per diluted share					
Continuing operations	\$ 0.30	\$ 0.10	\$ (0.08)	\$ 0.13	\$ (0.21)
Discontinued operations	—	0.21	2.18	0.03	0.40
Net income per diluted share	\$ 0.30	\$ 0.31	\$ 2.10	\$ 0.16	\$ 0.19

Balance Sheet Data (in thousands)

	As of September 30,				
	2017	2016	2015	2014	2013
Cash, cash equivalents and restricted cash	\$ 68,754	\$ 64,870	\$ 112,260	\$ 22,169	\$ 16,919
Working capital	103,042	92,957	127,994	30,914	37,196
Total assets	144,084	127,211	160,907	191,342	173,714
Long-term liabilities	1,667	1,635	1,774	6,018	9,434
Shareholders' equity	120,774	107,317	135,442	112,347	101,179

Working capital, calculated as current assets minus current liabilities, is a financial metric we use that represents available operating liquidity.

Significant Transactions

Significant transactions that affect the comparability of our operating results and financial condition include:

Fiscal 2017

Continuing Operations:

- We recorded a charge to impairments of approximately \$0.5 million in the fiscal year ended September 30, 2017 in connection with the transition of our manufacturing operations in China to a new manufacturing facility. See [Note 9 - Property, Plant, and Equipment, net](#) for additional information.
- During the fiscal year ended September 30, 2017, the Company recorded charges of \$2.0 million related to various reductions in workforce primarily related to the outsourcing of our wafer fabrication lab and operations assembly and the opening of our new manufacturing facility in China. See [Note 10 - Accrued Expenses and Other Current Liabilities](#) for additional information.

Fiscal 2016

Continuing Operations:

- On July 5, 2016, the Company declared a special cash dividend of \$1.50 per share of the Company's common stock, or a total of \$39.2 million. The dividend was paid on July 29, 2016 to shareholders of record as of the close of business on July 18, 2016. See [Note 14 - Equity](#) for additional information.
- On September 23, 2014, Sumitomo Electric Industries, Ltd. ("SEI") filed for arbitration against EMCORE, in accordance with the terms of the Master Purchase Agreement between the parties. SEI was seeking \$47.5 million from EMCORE, relating to numerous claims. On April 12, 2016, the International Court of Arbitration tribunal rejected SEI's claims. The panel ruled that EMCORE owed SEI none of the amounts SEI sought in the arbitration and that the Company was entitled to collect the \$1.9 million held in escrow, which was received in June 2016 and was included in cash at September 30, 2016. The Company was also entitled to recover \$2.6 million in legal fees and costs from SEI, which was received in June 2016 and has been recorded by EMCORE within operating income. See [Note 13 - Commitments and Contingencies](#) for additional information.
- In September 2016, the Company paid \$2.9 million previously accrued related to a termination fee for terminating a prior joint venture agreement. See [Note 13 - Commitments and Contingencies](#) for additional information.
- During fiscal year 2016, the Company paid \$6.1 million for the purchase of long-term inventory as a result of the vendor announcing it would cease manufacturing a part.

Discontinued Operations:

- As a result of the SEI arbitration tribunal ruling above, during the fiscal year ended September 30, 2016, we recognized a gain associated with the release of \$3.4 million of previously deferred gain associated with the sale of assets and reversal of other liabilities of \$0.4 million, resulting in a credit of \$3.8 million to recognition of previously deferred gain on sale of assets within discontinued operations of the Digital Products Business. See [Note 5 - Discontinued Operations](#) and [Note 13 - Commitments and Contingencies](#) for additional information.

Fiscal 2015

Continuing Operations:

- **Common Stock Repurchase:** In April 2015, EMCORE's Board of Directors authorized the Company to repurchase \$45.0 million of shares of its common stock. On May 15, 2015, we announced the commencement of a modified "Dutch auction" tender offer to purchase for cash shares of our common stock (the "Tender Offer"). On June 15, 2015, we completed the Tender Offer and purchased 6.9 million shares of our common stock at a purchase price of \$6.55 per share, for an aggregate cost of \$45.0 million excluding fees and expenses. Repurchased common stock was recorded to treasury stock. The Company incurred costs of \$0.7 million in connection with the Tender Offer, which were recorded to treasury stock.
- **Asset Retirement Obligations ("AROs" or "ARO"):** As a result of the revision in the estimated amount and timing of cash flows for AROs during the fiscal year ended September 30, 2015, the Company reduced ARO liability by \$2.9 million with an offsetting reduction to property, plant, and equipment, net of \$2.1 million, and recorded a gain from change in estimate on ARO obligation of \$0.8 million. The Company first reduced the net leasehold improvement asset to the extent of the carrying amount of the related asset initially recorded when the ARO was established. The amount of the remaining reduction to the ARO liability was recorded as a reduction to operating expenses. See [Note 13 - Commitments and Contingencies](#) in the notes to the consolidated financial statements for additional information.

Discontinued Operations:

- **Photovoltaic and Digital Products Asset Sales:** On December 10, 2014, we sold our Photovoltaics Business to SolAero for \$150.0 million in cash. On January 2, 2015, we sold our Digital Products Business to NeoPhotonics for \$17.0 million in cash and a notes receivable that was paid in April 2015. These Asset Sales are reported as discontinued operations, which require retrospective restatement of prior periods to classify the results of operations for the businesses sold as discontinued operations. No assets or liabilities that were sold from either the Photovoltaic Business or Digital Products Business remain on the consolidated balance sheet as of September 30, 2017, 2016 and 2015. See [Note 5 - Discontinued Operations](#) in the notes to the consolidated financial statements for additional information.

Fiscal 2014

Continuing Operations:

- We recorded a net deferred tax valuation allowance release of \$24.1 million as an income tax benefit during fiscal year 2014. All of the \$24.1 million in deferred tax assets were used in fiscal year 2015 when income tax expense was recorded as a result of the sale of the Photovoltaics Business, thus no cash was received for the deferred tax assets.

Fiscal 2013

Continuing Operations:

- **Stock Sales:** During August 2012, we filed a shelf registration statement on Form S-3 with the SEC pursuant to which we could, from time to time, sell up to an aggregate of \$50.0 million of our common or preferred stock, warrants or debt securities. On August 23, 2012, the registration statement was declared effective by the SEC, which allowed us to access the capital markets for the three year period following this effective date as long as we continued to meet the eligibility requirements for the use of Form S-3. On October 3, 2012, we sold 1,832,410 shares of common stock for net proceeds of \$9.5 million. In addition, on September 18, 2013, we sold 2,875,000 shares of common stock for net proceeds of \$11.7 million.
- **Impact from Thailand Flood:** During the fiscal year ended September 30, 2013, we recorded flood-related insurance proceeds of \$7.8 million in the form of forgiveness of \$0.2 million of outstanding capital lease

obligations, \$1.0 million of outstanding payables and \$6.6 million in the form of a receivable, which was paid in cash. No additional flood-related insurance proceeds associated with this event are anticipated.

Discontinued Operations:

- Impact from Thailand Flood: During the fiscal year ended September 30, 2013, we recorded flood-related insurance proceeds of \$11.2 million in the form of forgiveness of \$5.4 million of outstanding capital lease obligations, \$4.2 million of outstanding payables and \$1.6 million in the form of a receivable, which was paid in cash. In addition, we capitalized \$1.2 million of new manufacturing lines and recorded a corresponding amount to capital lease obligation.
- Joint Venture: In March 2013, we sold certain solar assets and our ownership interest in Emcore Solar New Mexico to Suncore Photovoltaic Technology Co., Ltd. ("Suncore") for \$1.5 million. In June 2013, we entered into an agreement to transfer our 40% registered ownership interest in Suncore to San'an Optoelectronics Co., Ltd. ("San'an") for a purchase price of \$4.8 million. The carrying value of our registered ownership interest in Suncore was \$0 as of June 30, 2013. Upon completion of the share transfer, the Company recognized \$3.3 million of deferred revenue from Suncore as well as the resulting gain of \$4.8 million on our registered ownership interest which was recorded within discontinued operations.

ITEM 7. 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 8](#) within this Annual 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 together with its subsidiaries (referred to herein 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.

Sumitomo Electric Industries Ltd. (“SEI”)

In March 2012, we entered into a Master Purchase Agreement with SEI, pursuant to which we agreed to sell certain assets and transfer certain obligations. Under the terms of the Master Purchase Agreement, we agreed to indemnify SEI for up to \$3.4 million of potential claims and expenses for the two-year period following the sale and we recorded this amount as a deferred gain on our balance sheet as a result of these contingencies.

On September 23, 2014, SEI filed for arbitration against EMCORE, as required under the Master Purchase Agreement between the parties. SEI was seeking \$47.5 million from EMCORE, relating to numerous claims. On April 12, 2016, the International Court of Arbitration tribunal rejected SEI’s claims. The panel ruled that EMCORE owed SEI none of the amounts SEI sought in the arbitration and that the Company was entitled to collect the \$1.9 million held in escrow, which was received in June 2016 and was included in cash at September 30, 2016. The Company was also entitled to recover \$2.6 million in fees and costs from SEI, which was received in June 2016. During the fiscal year ended September 30, 2016, we recognized a gain associated with the release of \$3.4 million of previously deferred gain associated with the sale of assets and reversal of other liabilities of \$0.4 million, resulting in a credit of \$3.8 million to recognition of previously deferred gain on sale of assets within discontinued operations of the Digital Products Business. During the fiscal year ended September 30, 2016, we recognized the \$2.6 million recovery of fees and costs incurred by EMCORE within operating income as such represented the recovery of previously incurred legal expenses. See [Note 5 - Discontinued Operations](#) in the notes to the consolidated financial statements for more information.

Sale of Photovoltaics and Digital Products Businesses

On September 17, 2014, EMCORE entered into an Asset Purchase Agreement (the “Photovoltaics Agreement”) with SolAero Technologies Corporation (“SolAero”) (formerly known as Photon Acquisition Corporation) under which SolAero acquired substantially all of the assets, and assumed substantially all of the liabilities, primarily related to or used in connection with the Company’s photovoltaics business, including EMCORE’s subsidiaries EMCORE Solar Power, Inc. and EMCORE IRB Company, LLC (collectively, the “Photovoltaics Business” and, the sale of the Photovoltaics Business, the “Photovoltaics Asset Sale”) for \$149.9 million in cash, after giving effect to a \$0.1 million working capital adjustment pursuant to the Photovoltaics Agreement finalized and paid by EMCORE during the fiscal year ended September 30, 2015. On December 10, 2014, EMCORE completed the Photovoltaics Asset Sale.

On October 22, 2014, EMCORE entered into an Asset Purchase Agreement (the “Digital Products Agreement”) with NeoPhotonics Corporation, a Delaware corporation (“NeoPhotonics”), under which the Company sold certain assets, and transferred certain liabilities, of the Company’s telecommunications business (the “Digital Products Business”) to NeoPhotonics for an aggregate purchase price of \$17.5 million, subject to certain adjustments.

On January 2, 2015, EMCORE completed the sale of the Digital Products Business for \$1.5 million in cash and a promissory note in the principal amount of \$16.0 million (the "Promissory Note"). On April 16, 2015, EMCORE and NeoPhotonics entered into an agreement to adjust the purchase price for the Digital Products Business, resulting in an adjusted balance of the Promissory Note of \$15.5 million. On April 17, 2015, NeoPhotonics paid in full the balance outstanding of the Promissory Note of \$15.5 million, plus accrued interest of \$0.2 million.

The Photovoltaics Asset Sale and Digital Products Asset Sale are reported as discontinued operations. See [Note 5 - Discontinued Operations](#) in the notes to the consolidated financial statements for additional disclosures.

Strategic Plan

In addition to organic growth and development of our existing Fiber Optics business, we intend to pursue other strategies to enhance shareholder value. The Strategy and Alternatives Committee of the Company's Board of Directors (the "Strategy and Alternatives Committee"), which was established in December 2013, is charged with overseeing the Company's strategic plan and evaluating strategic opportunities and alternatives available to the Company, including potential mergers, acquisitions, divestitures and other key strategic transactions outside the ordinary course of the Company's business. Accordingly, the Strategy and Alternatives Committee may from time to time consider strategic opportunities to enhance shareholder value, which may include acquisitions, investments in joint ventures, partnerships, and other strategic alternatives such as dispositions, reorganizations, recapitalizations or other similar transactions, the repurchase of shares of our outstanding common stock or payment of dividends to our shareholders, and may engage financial and other advisers to assist it in these efforts. Accordingly, the Strategy and Alternatives Committee of the Board of Directors and our management may from time to time be engaged in evaluating potential strategic opportunities and we may enter into definitive agreements with respect to such transactions or other strategic alternatives. However, there is no assurance that the Strategy and Alternatives Committee will identify further strategic opportunities that the Company will determine to pursue, or that the consideration of any such opportunity would result in the completion of a strategic transaction.

Critical Accounting Policies

The preparation of 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. The accounting estimates that require our most significant, difficult, and/or subjective judgments include:

- the valuation of inventory and stock-based compensation;
- the useful lives of assets and assessment of recovery of long-lived assets;
- asset retirement obligations and contingencies including litigation and indemnification;
- the allowance for doubtful accounts and warranty accruals; and,
- the valuation allowance for deferred tax assets.

We develop estimates based on historical experience and on various assumptions about the future that are believed to be reasonable based on the best information available to us. Our reported financial position or results of operations may be materially different under changed conditions or when using different estimates and assumptions, particularly with respect to significant accounting policies. In the event that estimates or assumptions prove to differ from actual results, adjustments are made in subsequent periods to reflect more current information. A listing and description of our critical accounting policies includes the following:

Accounts Receivable

We regularly evaluate the collectability of our accounts receivable and maintain allowances for doubtful accounts for estimated losses resulting from the inability of our customers to meet their financial obligations to us. The allowance is based on the age of receivables and a specific identification of receivables considered at risk of collection. We classify charges associated with the allowance for doubtful accounts as sales, general, and administrative expense. If the financial condition of our customers were to deteriorate, impacting their ability to pay us, additional allowances may be required. See [Note 7 - Accounts Receivable](#) in the notes to the consolidated financial statements for additional information related to our receivables.

Inventory

Inventory is stated at the lower of cost or market (first-in, first-out). Inventory that is expected to be used within the next 12 months is classified as current inventory. We write-down inventory once it has been determined that conditions exist that may not allow the inventory to be sold for its intended purpose or the inventory is determined to be excess or obsolete based on assumptions about future demand and market conditions. The charge related to inventory write-downs is recorded as a cost of revenue. We evaluate inventory levels at least quarterly against sales forecasts on a significant part-by-part basis, in addition to determining its overall inventory risk. We have incurred, and may in the future incur charges to write-down our inventory. See [Note 8 - Inventory](#), in the notes to the consolidated financial statements for additional information related to our inventory.

Valuation of Long-lived Assets

Long-lived assets consist primarily of property, plant, and equipment, net. Because most of our long-lived assets are subject to amortization, we review these assets for impairment in accordance with the provisions of Accounting Standards Codification ("ASC") 360, *Property, Plant, and Equipment*. We review long-lived assets for impairment whenever events or changes in circumstances indicate that its carrying amount may not be recoverable. Our impairment testing of long-lived assets consists of determining whether the carrying amount of the long-lived asset (asset group) is recoverable, in other words, whether the sum of the future undiscounted cash flows expected to result from the use and eventual disposition of the asset (asset group) exceeds its carrying amount. The determination of the existence of impairment involves judgments that are subjective in nature and may require the use of estimates in forecasting future results and cash flows related to an asset or group of assets. In making this determination, we use certain assumptions, including estimates of future cash flows expected to be generated by these assets, which are based on additional assumptions such as asset utilization, the length of service that assets will be used in our operations, and estimated salvage values. See [Note 9 - Property, Plant, and Equipment, net](#) in the notes to the consolidated financial statements for additional disclosures related to our long-lived assets.

Income Taxes

In accordance with the authoritative guidance on accounting for income taxes, we recognize income taxes using an asset and liability approach. This approach requires the recognition of taxes payable or refundable for the current year and deferred tax liabilities and assets for the future tax consequences of events that have been recognized in our consolidated financial statements or tax returns. The measurement of current and deferred taxes is based on provisions of the enacted tax law and the effects of future changes in tax laws or rates are not anticipated.

The authoritative guidance provides for recognition of deferred tax assets if the realization of such deferred tax assets is more likely than not to occur based on an evaluation of all available evidence, both positive and negative, and the relative weight of the evidence. With the exception of the gains resulting from the completed Photovoltaics Asset Sale, we have determined that at this time it is more likely than not that deferred tax assets attributable to all other items will not be realized, primarily due to uncertainties related to our ability to utilize our net operating loss carryforwards before they expire. Accordingly, we have established a valuation allowance for such deferred tax assets which we do not expect to realize. If there is a change in our ability to realize our deferred tax assets for which a valuation allowance has been established, then our tax valuation allowance may decrease in the period in which we determine that realization is more likely than not. Likewise, if we determine that it is not more likely than not that deferred tax assets will be realized, then a valuation allowance may be established for such deferred tax assets and our tax provision may increase in the period in which we make the determination. See [Note 12 - Income and other Taxes](#) in the notes to the consolidated financial statements for additional information related to our income taxes.

Revenue Recognition

Revenue is recognized upon shipment, provided persuasive evidence of a contract exists, the price is fixed, the product meets our customer's specifications, title and ownership have transferred to the customer, and there is reasonable assurance of collection of the sales proceeds. The majority of our products have shipping terms that are free on board or free carrier alongside ("FCA") shipping point, which means that we fulfill our delivery obligation when the goods are handed over to the freight carrier at our shipping dock. This means the customer typically bears all costs and risks of loss or damage to the goods from that point. We account for shipping and related transportation costs by recording the charges that are invoiced to customers as revenue, with the corresponding cost recorded as cost of revenue. In those instances where inventory is maintained at a consigned location, revenue is recognized only when our customer pulls product for use and after title and ownership has transferred to the customer. Any warranty cost and remaining obligations that are inconsequential or perfunctory are accrued when the corresponding revenue is recognized.

Distributors. We use a number of distributors around the world and recognize revenue upon shipment of product to these distributors. Title and risk of loss pass to the distributors upon shipment, and our distributors are contractually obligated to pay us on standard commercial terms, just like our other direct customers. We do not sell to our distributors on consignment and, except in the event of product discontinuance, do not give distributors a right of return.

Contract Manufacturers. Prior to certain 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. 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. As part of the manufacturing process at our contract manufacturers, the finished product is tested prior to shipment to the customer using the same criteria that our customer uses to test product it receives. Revenue is recognized upon shipment of customer-qualified product, provided persuasive evidence of a contract exists, the price is fixed, the product meets our customer's specifications, title and ownership have transferred to the customer, and there is reasonable assurance of collection of the sales proceeds.

Product Warranty Reserves

We provide our customers with limited rights of return for non-conforming shipments and warranty claims for certain products. Pursuant to ASC 450, *Contingencies*, we make estimates of product warranty expense using historical experience rates as a percentage of revenue 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 product issues. In addition, from time to time, specific warranty accruals may be made if unforeseen technical problems arise. Should our actual experience relative to these factors differ from our estimates, we may be required to record additional warranty reserves. Alternatively, if we provide more reserves than needed, we may reverse a portion of such provisions in future periods. See [Note 10 - Accrued Expenses and Other Current Liabilities](#) in the notes to the consolidated financial statements for additional disclosures related to our product warranty reserves.

Stock-Based Compensation

Stock-based compensation expense related to employee stock-based awards is measured and recognized in the consolidated financial statements based on the fair value of the awards granted and is recorded to cost of revenue; sales, general and administrative; and research and development expense based on the employee's responsibility and function over the requisite service period. The Company has granted awards to employees that vest based solely on continued service, or service conditions, and awards that vest based on the achievement of performance targets based on the Company's stock price appreciation exceeding a peer index. The fair value of each option award containing service is estimated on the grant date using the Black-Scholes option-pricing model. The fair value of awards containing performance target conditions is estimated using a Monte-Carlo lattice model. For all awards, stock-based compensation expense is recognized on a straight-line basis over the requisite service periods of the awards, which is generally from three to five years. For performance condition awards, expense recognized is not subsequently reversed if the market conditions are not achieved. Stock-based compensation expense is reduced for forfeitures.

Determining the fair value of stock-based awards at the grant date requires judgment. The Company's use of the Black-Scholes option-pricing model and Monte-Carlo lattice model requires the input of subjective assumptions such as the expected term of the option, the expected volatility of the price of the Company's common stock, risk-free interest rates and the expected dividend yield of the Company's common stock. The assumptions used in the Company's valuation models represent management's best estimates. These estimates involve inherent uncertainties and the application of management's judgment. If factors change and different assumptions are used, the Company's stock-based compensation expense could be materially different in the future. Expected term represents the period that stock-based awards are expected to be outstanding and is determined based on historical experience of similar awards, giving consideration to the contractual terms of the stock-based awards, vesting schedules and expectations of future employee behavior as influenced by changes to the terms of its stock-based awards. The expected stock price volatility is based on our historical stock prices. If we use different assumptions for estimating stock-based compensation expense in future periods, the change in our non-cash stock-based compensation expense could adversely affect our results of operations.

During fiscal year 2017, the Company early adopted Accounting Standards Update ("ASU") 2016-09. ASU 2016-09 introduced targeted amendments intended to simplify the accounting for stock compensation, including the Company's election to eliminate the requirements to estimate the number of awards that are expected to vest, and instead, account for forfeitures when they occur. The new standard requires the change be adopted using the modified retrospective approach. As such, the Company recorded a cumulative-effect adjustment of \$0.2 million to decrease the September 30, 2016 accumulated deficit and common stock balances. See [Note 14 - Equity](#) in the notes to the consolidated financial statements for additional disclosures related to our stock-based compensation.

Litigation Contingencies

We are subject to various legal proceedings, claims, and litigation, either asserted or unasserted, that arise in the ordinary course of business. While the outcome of these matters is currently not determinable, we do not expect the resolution of these matters will have a material adverse effect on our business, financial position, results of operations, or cash flows. However, 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. See [Note 13 - Commitments and Contingencies](#) in the notes to our consolidated financial statements for disclosures related to our legal proceedings.

Asset Retirement Obligations

Pursuant to ASC 410, *Asset Retirement and Environmental Obligations*, an ARO is recorded when there is a legal obligation associated with the retirement of a tangible long-lived asset and the fair value of the liability can reasonably be estimated. Upon initial recognition of an asset retirement obligation, a company increases the carrying amount of the long-lived asset by the same amount as the liability. Over time, the liabilities are accreted for the change in their present value through charges to operations costs. The initial capitalized costs are depleted over the useful lives of the related assets through charges to depreciation, depletion, and/or amortization. If the fair value of the estimated ARO changes, an adjustment is recorded to both the ARO liability and the asset retirement cost. Revisions in estimated liabilities can result from revisions of estimated inflation rates, escalating retirement costs, and changes in the estimated timing of settling asset retirement obligations.

We have known conditional asset retirement conditions, such as certain asset decommissioning and restoration of rented facilities to be performed in the future. See [Note 13 - Commitments and Contingencies](#) in the notes to the consolidated financial statements for additional disclosures related to our AROs.

The above listing is not intended to be a comprehensive list of all of our accounting policies. In many cases, U.S. GAAP specifically dictates the accounting treatment of a particular transaction. There are also areas in which management's judgment in selecting any available alternative would not produce a materially different result. For a complete discussion of our accounting policies, recently adopted accounting pronouncements, and other required U.S. GAAP disclosures, we refer you to the accompanying footnotes to our consolidated financial statements in this Annual Report.

Results of Operations

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

	For the Fiscal Years Ended September 30,		
	2017	2016	2015
Revenue	100.0 %	100.0 %	100.0 %
Cost of revenue	65.4	66.4	64.9
Gross profit	34.6	33.6	35.1
Operating expense:			
Selling, general, and administrative	18.1	22.5	30.2
Research and development	10.2	10.8	11.2
Impairments	0.4	—	
Recovery of previously incurred litigation related fees and expenses from arbitration award	—	(2.8)	—
Gain from change in estimate on ARO obligation	—	—	(1.0)
(Gain) loss on sale of assets	(0.4)	(0.1)	0.3
Total operating expense	28.3	30.4	40.7
Operating income (loss)	6.3	3.2	(5.6)
Other income (expense):			
Interest income, net	0.2	0.1	0.1
Foreign exchange gain (loss)	0.1	(0.4)	(0.1)
Change in fair value of financial instruments	—	—	0.1
Other income	0.2	—	—
Total other income (expense)	0.5	(0.3)	0.1
Income (loss) from continuing operations before income tax expense	6.8	2.9	(5.5)
Income tax (expense) benefit	(0.1)	—	2.7
Income from continuing operations	6.7	2.9	(2.8)
Income from discontinued operations, net of tax	—	6.1	80.0
Net income	6.7 %	9.0 %	77.2 %

Comparison of Financial Results for the Fiscal Years Ended September 30, 2017 and 2016
(in thousands, except percentages)

	For the Fiscal Years Ended September 30,			
	2017	2016	\$ Change	% Change
Revenue	\$ 122,895	\$ 91,998	\$ 30,897	33.6%
Cost of revenue	80,361	61,044	19,317	31.6%
Gross profit	42,534	30,954	11,580	37.4%
Operating expense (income):				
Selling, general, and administrative	22,246	20,734	1,512	7.3%
Research and development	12,542	9,921	2,621	26.4%
Impairments	506	—	506	N/A
Recovery of previously incurred litigation related fees and expenses from arbitration award	—	(2,599)	2,599	100.0%
Gain from change in estimate on ARO obligation	(45)	—	(45)	N/A
Gain on sale of assets	(456)	(41)	(415)	(1,012.2)%
Total operating expense	34,793	28,015	6,778	24.2%
Operating income	7,741	2,939	4,802	163.4%
Other income (expense):				
Interest income, net	245	88	157	178.4%
Foreign exchange gain (loss)	82	(394)	476	120.8%
Other income	316	—	316	N/A
Total other income (expense)	643	(306)	949	310.1%
Income from continuing operations before income tax expense	8,384	2,633	5,751	218.4%
Income tax expense	(163)	(14)	(149)	(1,064.3)%
Income from continuing operations	8,221	2,619	5,602	213.9%
Income from discontinued operations, net of tax	14	5,647	(5,633)	(99.8)%
Net income	\$ 8,235	\$ 8,266	\$ (31)	(0.4)%

Revenue

For the fiscal year ended September 30, 2017, revenue increased 33.6% compared to the prior year driven by significantly higher sales of our CATV products primarily to U.S. customers.

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 34.6% and 33.6% for fiscal years ended September 30, 2017 and 2016, respectively.

Stock-based compensation expense within cost of revenue totaled approximately \$0.5 million and \$0.3 million during the fiscal years ended September 30, 2017 and 2016, respectively.

For the fiscal year ended September 30, 2017, gross margins increased by 37.4% when compared to the prior year. The increase in gross margins for the fiscal year ended September 30, 2017 was primarily due to product mix and higher sales volume.

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 \$2.6 million and \$1.4 million during the fiscal years ended September 30, 2017 and 2016, respectively. The increase in stock based compensation within SG&A during the fiscal year ended September 30, 2017 when compared to the prior year is primarily due to expense associated with Performance Stock Units granted during the fiscal year ended September 30, 2017.

SG&A expense for the fiscal year ended September 30, 2017 was higher than the amount reported in the prior year primarily due to higher compensation costs, severance, including \$1.0 million related to a workforce reduction we initiated in connection with the transition of our manufacturing operations in China to a new manufacturing facility in China during the fiscal year ended September 30, 2017, and stock-based compensation partially offset by lower legal and professional expenses.

As a percentage of revenue, SG&A expenses were 18.1% and 22.5% for the fiscal years ended September 30, 2017 and 2016, respectively. The decrease in SG&A expense as a percentage of revenue in the fiscal year ended September 30, 2017 compared to the prior year is due to the increase in revenues in the fiscal year ended September 30, 2017.

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 related 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 \$0.5 million and \$0.4 million during the fiscal years ended September 30, 2017 and 2016, respectively.

R&D expense for the fiscal year ended September 30, 2017 was higher than the amounts reported in the prior year primarily due to higher compensation costs and increased project spending primarily related to navigation products and Linear Externally Modulated Lasers.

As a percentage of revenue, R&D expenses were 10.2% and 10.8% for the fiscal years ended September 30, 2017 and 2016, respectively. The decrease in R&D expense as a percentage of revenue in the fiscal year ended September 30, 2017 compared to the prior year is due to the increase in revenues in the fiscal year ended September 30, 2017.

Impairments

In March 2017, in connection with the transition of our manufacturing operations in China to a new manufacturing facility in China, we identified equipment with a net book value of approximately \$0.6 million that would no longer be utilized after the planned move later in fiscal year 2017. After taking into consideration the costs of disposal and estimated net funds from the sale of the equipment of approximately \$0.1 million, we recorded a charge to impairments of approximately \$0.5 million in the fiscal year ended September 30, 2017. See [Note 8 - Property, Plant and Equipment, net](#) in the notes to the consolidated financial statements for additional information.

Recovery of previously incurred litigation related fees and expenses from arbitration award

Recovery of previously incurred litigation related fees and expenses from arbitration award consists of the fees awarded to the Company as a result of the SEI arbitration award in April 2016. As a percentage of revenue, the recovery of previously incurred litigation related fees and expenses from arbitration award was 2.8% for the fiscal year ended September 30, 2016.

Gain from Change in Estimate on ARO

As a result of the revision in the estimated amount and timing of cash flows for ARO during the fiscal year ended September 30, 2017, the Company reduced the ARO liability by \$45,000 and recorded a gain from change in estimate on ARO liability of \$45,000. See [Note 13 - Commitments and Contingencies](#) in the notes to the consolidated financial statements for additional information.

Operating Income

Operating income represents revenue less the cost of revenue and direct operating expenses incurred. Operating income is a measure of profit and loss that executive management uses to assess performance and make decisions. As a percentage of revenue, our operating income was 6.3% and 3.2% for the fiscal years ended September 30, 2017 and 2016, respectively. The increase in operating income as a percentage of revenue in the fiscal year ended September 30, 2017 compared to the prior year is due to the increase in operating income in the fiscal year ended September 30, 2017.

Other Income (Expense)

Interest Income, net

During the fiscal years ended September 30, 2017 and 2016, we recorded \$0.4 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 fiscal year ended September 30, 2017 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 Expense

For the fiscal year ended September 30, 2017, the Company recorded income tax expense from continuing operations of approximately \$0.2 million, and \$0 of income tax expense within income from discontinued operations.

For the fiscal year ended September 30, 2016, the Company recorded income tax expense from continuing operations of approximately \$14,000 and \$24,000 of income tax benefit within income from discontinued operations.

Income from Discontinued Operations, Net of Tax

	For the fiscal years ended September 30,			
	2017	2016	\$ Change	% Change
Revenue	\$ —	\$ —	\$ —	N/A
Cost of revenue	12	(659)	671	101.8%
Gross (loss) profit	(12)	659	(671)	(101.8)%
Operating expense (income)	15	(1,160)	(1,175)	(101.3)%
Recognition of previously deferred gain on sale of assets	—	3,804	(3,804)	(100.0)%
Other income	41	—	41	N/A
Income from discontinued operations before income tax expense	14	5,623	(5,609)	(99.8)%
Income tax expense	—	24	(24)	(100.0)%
Income from discontinued operations, net of tax	<u>\$ 14</u>	<u>\$ 5,647</u>	<u>\$ (5,633)</u>	<u>(99.8)%</u>

During the fiscal year ended September 30, 2016, we recorded income from discontinued operations from the Photovoltaics Business and Digital Products Business of \$1.0 million and \$4.6 million, respectively.

Included in cost of revenue for the fiscal year ended September 30, 2016 is \$0.4 million due to a reduction in expected product warranty liabilities from a settlement agreement associated with the Digital Products Business and a gain of \$0.3 million on the lease termination associated with the Digital Products Business.

During the fiscal year ended September 30, 2016, we recognized a gain associated with the release of the \$3.4 million deferred gain and reversal of other liabilities of \$0.4 million that had been recorded as of September 30, 2015, resulting in a credit of \$3.8 million to recognition of previously deferred gain on sale of assets within discontinued operations of the Digital Products Business as the result of the favorable ruling from the SEI arbitration. See [Note 13 - Commitments and Contingencies](#) in the notes to the consolidated financial statements for additional information.

Comparison of Financial Results for the Fiscal Years Ended September 30, 2016 and 2015
(in thousands, except percentages)

	For the Fiscal Years Ended September 30,			
	2016	2015	\$ Change	% Change
Revenue	\$ 91,998	\$ 81,685	\$ 10,313	12.6%
Cost of revenue	61,044	52,994	8,050	15.2%
Gross profit	30,954	28,691	2,263	7.9%
Operating expense (income):				
Selling, general, and administrative	20,734	24,711	(3,977)	(16.1)%
Research and development	9,921	9,119	802	8.8%
Recovery of previously incurred litigation related fees and expenses from arbitration award	(2,599)	—	(2,599)	N/A
Gain from change in estimate on ARO obligation	—	(845)	845	100.0%
(Gain) loss on sale of assets	(41)	228	(269)	(118.0)%
Total operating expense	28,015	33,213	(5,198)	(15.7)%
Operating income (loss)	2,939	(4,522)	7,461	165.0%
Other income (expense):				
Interest income, net	88	75	13	17.3%
Foreign exchange loss	(394)	(138)	(256)	(185.5)%
Change in fair value of financial instruments	—	122	(122)	(100.0)%
Total other (expense) income	(306)	59	(365)	(618.6)%
Income (loss) from continuing operations before income tax (expense) benefit	2,633	(4,463)	7,096	159.0%
Income tax (expense) benefit	(14)	2,191	(2,205)	(100.6)%
Income (loss) from continuing operations	2,619	(2,272)	4,891	215.3%
Income from discontinued operations, net of tax	5,647	65,372	(59,725)	(91.4)%
Net income	\$ 8,266	\$ 63,100	\$ (54,834)	(86.9)%

Revenue

For the fiscal year ended September 30, 2016, revenue increased 12.6% compared to the prior year driven by significantly higher sales of our CATV products primarily to U.S. customers.

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 33.6% and 35.1% for the years ended September 30, 2016 and 2015, respectively.

Stock-based compensation expense within cost of revenue totaled approximately \$0.3 million during the fiscal years ended September 30, 2016 and 2015.

For the fiscal year ended September 30, 2016, gross margins decreased when compared to the prior year. The decrease in gross margins for the fiscal year ended September 30, 2016 was primarily due to lower absorption of manufacturing overhead costs.

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 \$1.4 million and \$2.8 million during the fiscal years ended September 30, 2016 and 2015, respectively.

SG&A expense for the fiscal year ended September 30, 2016 was lower than the amount reported in the prior year primarily due to higher stock-based compensation, severance and compensation expense associated with the sale of the Photovoltaics and Digital Products Businesses in the prior year.

As a percentage of revenue, SG&A expenses were 22.5% and 30.2% for the fiscal years ended September 30, 2016 and 2015, respectively.

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 related 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 \$0.4 million during the fiscal years ended September 30, 2016 and 2015.

R&D expense for the fiscal year ended September 30, 2016 was higher than the amounts reported in the prior year primarily due to higher compensation costs and increased project spending.

As a percentage of revenue, R&D expenses were 10.8% and 11.2% for the fiscal years ended September 30, 2016 and 2015, respectively.

Recovery of previously incurred litigation related fees and expenses from arbitration award

Recovery of previously incurred litigation related fees and expenses from arbitration award consists of the fees awarded to the Company as a result of the SEI arbitration award in April 2016. As a percentage of revenue, the recovery of previously incurred litigation related fees and expenses from arbitration award was 2.8% for the fiscal year ended September 30, 2016.

Gain from Change in Estimate on ARO

As a result of the revision in the estimated amount and timing of cash flows for ARO during the fiscal year ended September 30, 2015, the Company reduced the ARO liability by \$2.9 million with an offsetting reduction to property, plant, and equipment, net of \$2.1 million, and recorded a gain from change in estimate on ARO liability of \$0.8 million. The Company first reduced the net leasehold improvement asset to the extent of the carrying amount of the related asset initially recorded when the ARO was established. The amount of the remaining reduction to the ARO was recorded as a reduction to operating expenses. See [Note 13 - Commitments and Contingencies](#) in the notes to the consolidated financial statements for additional information.

Operating Income (Loss)

Operating income (loss) represents revenue less the cost of revenue and direct operating expenses incurred. Operating income (loss) is a measure of profit and loss that executive management uses to assess performance and make decisions. As a percentage of revenue, our operating income (loss) was 3.2% and (5.6)% for the fiscal years ended September 30, 2016 and 2015, respectively.

Other Income (Expense)

Interest Income, net

During the fiscal year ended September 30, 2016, we recorded \$0.2 million of interest income earned on cash and cash equivalents balances. During the fiscal year ended September 30, 2015, we recorded \$0.2 million of interest income earned on the Promissory Note from NeoPhotonics which was primarily offset by an equivalent amount of interest expense incurred on our outstanding Credit Facility (as defined below). See [Note 5 - Discontinued Operations](#) in the notes to the consolidated financial statements for additional information.

Foreign Exchange

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

Change in Fair Value of Financial Instruments

Warrants representing the right to purchase 400,001 shares of our common stock expired on April 1, 2015.

Income Tax (Expense) Benefit

For the fiscal year ended September 30, 2016, the Company recorded income tax expense from continuing operations of approximately \$14,000, and \$24,000 of income tax benefit within income from discontinued operations.

For the fiscal year ended September 30, 2015, the Company recorded \$2.2 million of income tax benefit from continuing operations losses and \$26.5 million of income tax expense within income from discontinued operations.

During the fiscal year ended September 30, 2015, the Company utilized the \$24.1 million of deferred tax assets. As a result, a net deferred tax valuation allowance release of \$24.1 million was recorded as an income tax benefit during fiscal year 2014 following the Company's determination that it was more likely than not that certain deferred tax assets would be realized upon the sale of the Photovoltaics Business in fiscal year 2015. See [Note 12 - Income and other Taxes](#) in the notes to the consolidated financial statements for more information.

Our Board of Directors has adopted a Tax Benefits Preservation Plan (the "Rights Plan") to help preserve the value of our net operating losses and other favorable tax attribute carryovers by reducing the risk of limitation of these deferred tax assets. The Rights Plan was approved by our shareholders on March 10, 2015. On September 26, 2017, our Board of Directors extended the final expiration date of the rights contained therein from October 3, 2017 to October 3, 2018 (subject to earlier expiration as described in the Rights Plan). The Company expects to submit the extension of the Rights Plan to shareholders for approval at the Company's 2018 annual meeting of shareholders. The Rights Plan is intended to reduce the likelihood that we will experience an ownership change for purposes of Internal Revenue Code Section 382 by discouraging any person or group from becoming a "5% shareholder" or increasing their ownership of our common stock if they are already a "5% shareholder." Although the Rights Plan is intended to reduce the likelihood of an "ownership change" that could adversely affect us, there is no assurance that the Rights Plan will prevent all transfers of our common stock that could result in such an "ownership change".

Income from Discontinued Operations, Net of Tax

(in thousands, except percentages)

	For the Fiscal Years Ended September 30,			
	2016	2015	\$ Change	% Change
Revenue	\$ —	\$ 24,558	\$ (24,558)	(100.0)%
Cost of revenue	(659)	17,352	(18,011)	(103.8)%
Gross profit	659	7,206	(6,547)	(90.9)%
Operating (income) expense	(1,160)	5,040	6,200	123.0%
Recognition of previously deferred gain on sale of assets	3,804	—	3,804	NA
Other income	—	779	(779)	(100.0)%
Gain on sale of discontinued operations	—	88,952	(88,952)	(100.0)%
Income from discontinued operations before income tax benefit (expense)	5,623	91,897	(86,274)	(93.9)%
Income tax benefit (expense)	24	(26,525)	26,549	100.1%
Income from discontinued operations, net of tax	\$ 5,647	\$ 65,372	\$ (59,725)	(91.4)%

During the fiscal year ended September 30, 2016, we recorded income from discontinued operations from the Photovoltaics Business and Digital Products Business of \$1.0 million and \$4.6 million, net of tax, respectively.

Included in cost of revenue for the fiscal year ended September 30, 2016 is \$0.4 million due to a reduction in expected product warranty liabilities from a settlement agreement associated with the Digital Products Business and a gain of \$0.3 million on the lease termination associated with the Digital Products Business.

During the fiscal year ended September 30, 2016, we recognized a gain associated with the release of the \$3.4 million of deferred gain and reversal of other liabilities of \$0.4 million, which had been recorded as of September 30, 2015, resulting in a credit of \$3.8 million to recognition of previously deferred gain on sale of assets within discontinued operations of the Digital Products Business as the result of the favorable ruling from the SEI arbitration. See [Note 13 - Commitments and Contingencies](#) in the notes to the consolidated financial statements for additional information.

During the fiscal year ended September 30, 2015, we recognized a gain of \$87.0 million and \$2.0 million on the sales of the Photovoltaics Business and Digital Products Business, respectively, which was recorded within income from discontinued operations under the caption “gain on sale of discontinued operations”. During the fiscal year ended September 30, 2015, we recorded income from discontinued operations from the Photovoltaics Business and Digital Products Business of \$61.2 million and \$4.2 million, net of tax, respectively.

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 year ended September 30, 2017, in recent years we have historically consumed cash from operations and, until recently, 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.

For the fiscal year ended September 30, 2017, we earned net income of \$8.2 million and generated cash flows of approximately \$3.9 million from operating, investing and financing activities. As of September 30, 2017, cash and cash equivalents totaled \$68.3 million and net working capital totaled approximately \$103.0 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:

- **Tender Offer:** On June 15, 2015, we completed the modified “Dutch auction” tender offer (the “Tender Offer”) and purchased 6.9 million shares of our common stock at a purchase price of \$6.55 per share, for an aggregate cost of \$45.0 million excluding fees and expenses. Repurchased common stock was recorded to treasury stock. We incurred costs of \$0.7 million in connection with the Tender Offer, which were recorded to treasury stock.
- **Dividend Payment:** On July 5, 2016, the Company declared a special cash dividend of \$1.50 per share, or a total of \$39.2 million. The dividend was paid on July 29, 2016 to shareholders of record as of July 18, 2016.
- **Resolution of Outstanding Litigation:** In June 2016 we collected \$2.6 million in fees and costs from SEI and \$1.9 million held in escrow as the result of the favorable ruling from the SEI arbitration. See [Note 13 - Commitments and Contingencies](#).
- **Mirasol Settlements:** In January 2017, we entered into an agreement to settle all outstanding claims of the Mirasol class action lawsuit for \$0.3 million and the wrongful termination lawsuit for \$50,000 and recorded a charge during the fiscal year ended September 30, 2017 of \$0.2 million. See [Note 13- Commitments and Contingencies](#).
- **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 it has been amended through its seventh amendment on November 10, 2015, currently provides us with a revolving credit of up to \$15.0 million through November 2018 that can be used for working capital requirements, letters of credit, and other general corporate purposes. 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 11 - Credit Facilities](#) in the notes to the consolidated financial statements for additional disclosures. As of November 30, 2017, there was no outstanding balance under this Credit Facility and \$0.5 million reserved for one outstanding stand-by letter of credit.

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, and thereafter for the foreseeable future. At the discretion of our Board, 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 other businesses, pursue other strategic opportunities or a combination thereof. 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

The Consolidated Statements of Cash Flows for the fiscal years ended September 30, 2017, 2016 and 2015 reflects cash flows from both the continuing and discontinued operations of the Company.

Net Cash Provided By (Used In) Operating Activities

Operating Activities (in thousands, except percentages)	For the Fiscal Years Ended September 30,			Fiscal 2017 vs Fiscal 2016		Fiscal 2016 vs Fiscal 2015	
	2017	2016	2015	\$ Change	% Change	\$ Change	% Change
Net cash provided by (used in) operating activities	\$ 11,701	\$ (5,552)	\$ (3,917)	\$ 17,253	310.8%	\$ (1,635)	(41.7)%

Fiscal 2017:

For the fiscal year ended September 30, 2017, our operating activities provided cash of \$11.7 million primarily due to our net income of \$8.2 million, depreciation, amortization and accretion expense of \$3.8 million, stock-based compensation expense of \$3.6 million, impairment charge of \$0.5 million and warranty provision of \$0.6 million, partially offset by a change in our operating assets and liabilities (or working capital components, which includes non-current inventory) of \$4.5 million. The change in our operating assets and liabilities was primarily the result of an increase in accounts receivable of \$3.9 million, inventory of \$0.1 million and other assets of \$4.5 million partially offset by an increase in accounts payable of approximately \$2.1 million and accrued expenses and other liabilities of \$1.9 million.

Fiscal 2016:

For the fiscal year ended September 30, 2016, our operating activities used cash of \$5.6 million primarily due to decreases in our operating assets and liabilities (or working capital components, which includes non-current inventory) of \$13.5 million, the recognition of the previously deferred gain on sale of assets from discontinued operations of \$3.8 million, the gain on transfer of solar power assets and obligations of \$0.7 million, the gain on reduction of product warranty of discontinued operations of \$0.4 million and the payment and gain on settlement of Newark restructuring lease of \$0.3 million partially offset by depreciation, amortization and accretion expense of \$2.5 million, stock-based compensation expense of \$2.1 million, warranty provision of \$0.4 million, and our net income of \$8.3 million. The change in our operating assets and liabilities was primarily the result of an increase in accounts receivable of \$1.2 million and inventory of \$10.9 million, and a decrease in accrued expenses and other liabilities of \$4.8 million, partially offset by a decrease in other assets of \$0.1 million and an increase in accounts payable of approximately \$3.2 million.

Fiscal 2015:

Our operating activities consumed cash of \$3.9 million primarily due to the effect of adjustments for non-cash charges, including the gain on sale of the Photovoltaics Business of \$87.0 million, the gain on sale of the Digital Products Business of \$2.0 million, and the gain from change in estimate on ARO obligation of \$0.8 million, foreign currency translation adjustment of \$0.7 million as well as the changes in our operating assets and liabilities of \$8.6 million, partially offset by deferred income taxes of \$24.1 million, stock-based compensation expense of \$4.6 million, warranty provision of \$0.8 million, depreciation, amortization and accretion expense of \$3.0 million, allowance for doubtful accounts of \$0.6 million, and our net income of \$63.1 million. The change in our operating assets and liabilities was primarily the result of an increase in inventory of \$3.4 million, a decrease in accounts payable of \$3.2 million and a decrease in accrued expenses and other liabilities of \$5.8 million, partially offset by a decrease in accounts receivable of \$3.5 million and other assets of \$0.4 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) Provided By Investing Activities

<i>Investing Activities</i> (in thousands, except percentages)	For the Fiscal Years Ended September			Fiscal 2017 vs Fiscal 2016		Fiscal 2016 vs Fiscal 2015	
	30,						
	2017	2016	2015	\$ Change	% Change	\$ Change	% Change
Net cash (used in) provided by investing activities	\$ (9,126)	\$ (3,826)	\$ 164,169	\$ (5,300)	(138.5)%	\$ (167,995)	(102.3)%

Fiscal 2017:

For the fiscal year ended September 30, 2017, our investing activities used \$9.1 million of cash primarily for capital related expenditures of \$9.6 million, partially offset by the receipt of proceeds from the disposal of equipment of \$0.5 million.

Fiscal 2016:

For the fiscal year ended September 30, 2016, our investing activities used \$3.8 million of cash primarily from capital related expenditures of \$5.8 million, partially offset by the receipt of escrow funds from sale of assets of \$1.9 million.

Fiscal 2015:

For the fiscal year ended September 30, 2015, our investing activities provided \$164.2 million of cash primarily from proceeds from sale of the Photovoltaics Business of \$149.9 million and proceeds from sale of the Digital Products Business of \$17.0 million partially offset by capital related expenditures of \$2.8 million.

Net Cash Provided By (Used In) Financing Activities

<i>Financing Activities</i> (in thousands, except percentages)	For the Fiscal Years Ended September			Fiscal 2017 vs Fiscal 2016		Fiscal 2016 vs Fiscal 2015	
	30,						
	2017	2016	2015	\$ Change	% Change	\$ Change	% Change
Net cash provided by (used in) financing activities	\$ 1,306	\$ (38,254)	\$ (70,266)	\$ 39,560	103.4%	\$ 32,012	45.6%

Fiscal 2017:

For the fiscal year ended September 30, 2017, our financing activities provided cash of \$1.3 million from proceeds from stock transactions.

Fiscal 2016:

For the fiscal year ended September 30, 2016, our financing activities used cash of \$38.3 million due to the payment of a special dividend of \$39.2 million, partially offset by proceeds from stock plan transactions of \$1.0 million.

Fiscal 2015:

Our financing activities consumed cash of \$70.3 million primarily due to the net payment of \$26.5 million on our Credit Facility and purchase of treasury stock of \$45.7 million, partially offset by \$1.9 million in proceeds from stock plan transactions.

Contractual Obligations and Commitments

Our contractual obligations and commitments for fiscal 2018 and over the next five fiscal years are summarized in the table below:

(in thousands)

	Total	2018	2019 to 2020	2021 to 2022	2023 and later
Purchase obligations	\$ 13,582	\$ 13,445	\$ 137	\$ —	\$ —
Asset retirement obligations	1,860	—	40	59	1,761
Operating lease obligations	4,330	842	1,592	1,254	642
Total contractual obligations and commitments	\$ 19,772	\$ 14,287	\$ 1,769	\$ 1,313	\$ 2,403

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 September 30, 2017, 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 13 - Commitments and Contingencies](#) in the notes to the consolidated financial statements for additional information related to our ARO's.

Operating Leases

Operating leases include non-cancelable terms and exclude renewal option periods, property taxes, insurance and maintenance expenses on leased properties. See [Note 13 - Commitments and Contingencies](#) in the notes to the 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 consolidated financial condition, results of operations, liquidity, capital expenditures or capital resources.

Geographical Information

See [Note 15- Geographical Information](#) in the notes to the consolidated financial statements for disclosures related to geographic revenue and significant customers.

Recent Accounting Pronouncements

See [Note 3 - Recent Accounting Pronouncements](#) in the notes to the consolidated financial statements for disclosures related to recent accounting pronouncements.

Restructuring Accruals

See [Note 10 - Accrued Expenses and Other Current Liabilities](#) in the notes to the consolidated financial statements for disclosures related to our severance and restructuring-related accrual accounts.

ITEM 7A. 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 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

On November 11, 2010, we entered into a credit facility with Wells Fargo Bank, N.A.. The credit facility, as it has been amended through its ninth amendment currently provides us with a revolving credit of up to \$15.0 million through November 2018 that can be used for working capital requirements, letters of credit, and other general corporate purposes. 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 11 - Credit Facilities](#) for additional information related to our bank credit facility. As of September 30, 2017, we had no borrowings outstanding under our Credit Facility. As of September 30, 2017, the credit facility had \$0.5 million reserved for one outstanding stand-by letter of credit, leaving a remaining \$8.0 million borrowing availability balance under this Credit Facility. As of November 30, 2017, there was no outstanding balance under the Credit Facility.

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 8. Financial Statements and Supplementary Data

EMCORE CORPORATION
Consolidated Statements of Operations and Comprehensive Income
For the Fiscal Years Ended September 30, 2017, 2016 and 2015
(in thousands, except net income (loss) per share)

	For the Fiscal Years Ended September 30,		
	2017	2016	2015
Revenue	\$ 122,895	\$ 91,998	\$ 81,685
Cost of revenue	80,361	61,044	52,994
Gross profit	42,534	30,954	28,691
Operating expense (income):			
Selling, general, and administrative	22,246	20,734	24,711
Research and development	12,542	9,921	9,119
Impairments	506	—	—
Recovery of previously incurred litigation related fees and expenses from arbitration award	—	(2,599)	—
Gain from change in estimate on ARO obligation	(45)	—	(845)
(Gain) loss on sale of assets	(456)	(41)	228
Total operating expense	34,793	28,015	33,213
Operating income (loss)	7,741	2,939	(4,522)
Other income (expense):			
Interest income, net	245	88	75
Foreign exchange gain (loss)	82	(394)	(138)
Change in fair value of financial instruments	—	—	122
Other income	316	—	—
Total other income (expense)	643	(306)	59
Income (loss) from continuing operations before income tax expense	8,384	2,633	(4,463)
Income tax (expense) benefit	(163)	(14)	2,191
Income (loss) from continuing operations	8,221	2,619	(2,272)
Income from discontinued operations, net of tax	14	5,647	65,372
Net income	\$ 8,235	\$ 8,266	\$ 63,100
Foreign exchange translation adjustment	(18)	(268)	(990)
Comprehensive income	\$ 8,217	\$ 7,998	\$ 62,110
Per share data:			
Net income (loss) per basic share:			
Continuing operations	\$ 0.31	\$ 0.10	\$ (0.08)
Discontinued operations	0.00	0.22	2.18
Net income per basic share	\$ 0.31	\$ 0.32	\$ 2.10
Net income (loss) per diluted share:			
Continuing operations	\$ 0.30	\$ 0.10	\$ (0.08)
Discontinued operations	0.00	0.21	2.18
Net income per diluted share	\$ 0.30	\$ 0.31	\$ 2.10
Weighted-average number of basic shares outstanding	26,659	25,979	30,012
Weighted-average number of diluted shares outstanding	27,544	26,518	30,012

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

EMCORE CORPORATION
Consolidated Balance Sheets
As of September 30, 2017 and September 30, 2016
(in thousands, except per share data)

	As of September 30, 2017	As of September 30, 2016
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 68,333	\$ 63,905
Restricted cash	421	965
Accounts receivable, net of allowance of \$22 and \$36, respectively	22,265	18,432
Inventory	25,139	24,150
Prepaid expenses and other current assets	8,527	3,764
Total current assets	124,685	111,216
Property, plant, and equipment, net	16,635	12,213
Non-current inventory	2,686	3,531
Other non-current assets	78	251
Total assets	\$ 144,084	\$ 127,211
LIABILITIES and SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 11,818	\$ 10,575
Accrued expenses and other current liabilities	9,825	7,684
Total current liabilities	21,643	18,259
Asset retirement obligations	1,638	1,573
Other long-term liabilities	29	62
Total liabilities	23,310	19,894
Commitments and contingencies (Note 13)		
Shareholders' equity:		
Preferred stock, \$0.0001 par value, 5,882 shares authorized; none issued or outstanding	—	—
Common stock, no par value, 50,000 shares authorized; 33,938 shares issued and 27,028 shares outstanding as of September 30, 2017; 33,154 shares issued and 26,244 shares outstanding as of September 30, 2016	730,906	725,666
Treasury stock at cost; 6,910 shares	(47,721)	(47,721)
Accumulated other comprehensive income	561	579
Accumulated deficit	(562,972)	(571,207)
Total shareholders' equity	120,774	107,317
Total liabilities and shareholders' equity	\$ 144,084	\$ 127,211

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

EMCORE CORPORATION
Consolidated Statements of Shareholders' Equity
For the Fiscal Years Ended September 30, 2017, 2016 and 2015
(in thousands)

	Shares of Common Stock	Value of Common Stock	Treasury Stock	Accumulated Other Comprehensive Income	Accumulated Deficit	Total Shareholders' Equity
Balance as of September 30, 2014	31,109	\$ 755,368	\$ (2,071)	\$ 1,837	(642,787)	\$ 112,347
Net income	—	—	—	—	63,100	63,100
Translation adjustment	—	—	—	(990)	—	(990)
Stock-based compensation	948	4,320	—	—	—	4,320
Purchase of treasury stock	(6,870)	—	(45,650)	—	—	(45,650)
Stock option exercises	290	1,409	—	—	—	1,409
Issuance of common stock - ESPP	121	493	—	—	—	493
Issuance of common stock - Board of Directors	78	413	—	—	—	413
Balance as of September 30, 2015	25,676	762,003	(47,721)	847	(579,687)	135,442
Net income	—	—	—	—	8,266	8,266
Translation adjustment	—	—	—	(268)	—	(268)
Stock-based compensation	284	1,868	—	—	—	1,868
Stock option exercises	45	225	—	—	—	225
Special dividend paid	—	(39,214)	—	—	—	(39,214)
Issuance of common stock - ESPP	193	735	—	—	—	735
Issuance of common stock - Board of Directors	46	263	—	—	—	263
Cumulative adjustment for adoption of accounting standard	—	(214)	—	—	214	—
Balance as of September 30, 2016	26,244	725,666	(47,721)	579	(571,207)	107,317
Net income	—	—	—	—	8,235	8,235
Translation adjustment	—	—	—	(18)	—	(18)
Stock-based compensation	432	3,602	—	—	—	3,602
Stock option exercises	158	534	—	—	—	534
Issuance of common stock - ESPP	133	773	—	—	—	773
Issuance of common stock - Board of Directors	61	331	—	—	—	331
Balance as of September 30, 2017	27,028	\$ 730,906	\$ (47,721)	\$ 561	\$ (562,972)	\$ 120,774

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

EMCORE CORPORATION
Consolidated Statements of Cash Flows
For the Fiscal Years Ended September 30, 2017, 2016 and 2015
(in thousands)

	For the Fiscal Years Ended September 30,		
	2017	2016	2015
Cash flows from operating activities:			
Net income	\$ 8,235	\$ 8,266	\$ 63,100
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization expense	3,757	2,506	2,952
Stock-based compensation expense	3,602	2,086	4,586
Deferred income taxes	—	—	24,080
Gain on sale of Photovoltaics Business	—	—	(86,958)
Gain on sale of Digital Products Business	—	—	(1,994)
Provision adjustments related to doubtful accounts	23	23	556
Provision adjustments related to product warranty	573	376	838
Change in fair value of financial instruments	—	—	(122)
Gain from extinguishment of ARO obligation	(45)	—	(845)
Reclassification of foreign currency translation adjustment	—	—	(744)
Impairments of equipment	506	—	—
Recognition of previously deferred gain on sale of assets from discontinued operations	—	(3,804)	—
Net (gain) loss on disposal of equipment	(456)	(41)	237
Settlement of customer related warranty claim	—	—	(442)
Other	(5)	(1,422)	(552)
Total non-cash adjustments	7,955	(276)	(58,408)
Changes in operating assets and liabilities:			
Accounts receivable	(3,859)	(1,171)	3,526
Inventory	(140)	(10,904)	(3,440)
Other assets	(4,455)	148	359
Accounts payable	2,095	3,179	(3,231)
Accrued expenses and other current liabilities	1,870	(4,794)	(5,823)
Total change in operating assets and liabilities	(4,489)	(13,542)	(8,609)
Net cash provided by (used in) operating activities	11,701	(5,552)	(3,917)
Cash flows from investing activities:			
Proceeds from sale of Photovoltaics Business	—	—	149,936
Proceeds from sale of Digital Products Business	—	—	16,982
Purchase of equipment	(9,600)	(5,779)	(2,799)
Receipt of escrow funds from sale of assets	—	1,853	—
Proceeds from disposal of property, plant and equipment	474	100	50
Net cash (used in) provided by investing activities	(9,126)	(3,826)	164,169
Cash flows from financing activities:			
Payments from borrowings of credit facilities	—	—	(26,518)
Repurchases of common stock	—	—	(45,650)
Payment of special dividend	—	(39,214)	—
Proceeds from stock plans	1,306	960	1,902
Net cash provided by (used in) financing activities	1,306	(38,254)	(70,266)
Effect of exchange rate changes on foreign currency	3	242	105
Net increase (decrease) in cash, cash equivalents and restricted cash	3,884	(47,390)	90,091
Cash, cash equivalents and restricted cash at beginning of period	64,870	112,260	22,169
Cash, cash equivalents and restricted cash at end of period	\$ 68,754	\$ 64,870	\$ 112,260
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION			
Cash paid during the period for interest	\$ 71	\$ 88	\$ 194
Cash paid during the period for income taxes	\$ 114	\$ 124	\$ 938
NON-CASH INVESTING AND FINANCING ACTIVITIES			
Changes in accounts payable related to purchases of equipment	\$ (861)	\$ 282	\$ 514
Issuance of common stock to Board of Directors	\$ 331	\$ 263	\$ 413

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

EMCORE Corporation
Notes to our Consolidated Financial Statements

NOTE 1. Description of Business

Business Overview

EMCORE Corporation together with its subsidiaries (referred to herein 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.

We currently have one reporting segment: Fiber Optics.

Sale of Photovoltaics and Digital Products Businesses

In the fiscal year ended September 30, 2015, EMCORE completed the sale of the Company’s Photovoltaics Business to SolAero Technologies Corporation (“SolAero”) pursuant to the Asset Purchase Agreement (the “Photovoltaics Agreement”) under which SolAero acquired substantially all of the assets, and assumed substantially all of the liabilities, primarily related to or used in connection with the Company’s Photovoltaics Business, including EMCORE’s subsidiaries EMCORE Solar Power, Inc. and EMCORE IRB Company, LLC (collectively, the “Photovoltaics Business” and, the sale of the Photovoltaics Business, the “Photovoltaics Asset Sale”), for \$149.9 million in cash.

In the fiscal year ended September 30, 2015, EMCORE completed the sale of the Company’s telecommunications business (the “Digital Products Business”) to NeoPhotonics Corporation, a Delaware corporation (“NeoPhotonics”), pursuant to the Asset Purchase Agreement (the “Digital Products Agreement”), under which NeoPhotonics acquired certain assets, and certain liabilities, related to the Company’s Digital Products Business for an aggregate purchase price of \$17.5 million. On January 2, 2015, EMCORE completed the sale of the Digital Products Business for \$1.5 million in cash and a promissory note in the principal amount of \$16.0 million (the “Promissory Note”). On April 16, 2015, EMCORE and NeoPhotonics entered into an agreement to adjust the purchase price for the Digital Products Business, resulting in an adjusted balance of the Promissory Note of \$15.5 million. On April 17, 2015, NeoPhotonics paid in full the outstanding balance of the Promissory Note of \$15.5 million, plus accrued interest of \$0.2 million.

No Photovoltaics Business or Digital Products Business assets or liabilities that were sold remain on the consolidated balance sheet as of September 30, 2017 or September 30, 2016. The financial results of the Photovoltaics Business and the Digital Products Business are presented as “discontinued operations” on the consolidated statements of operations and comprehensive income for the fiscal years ended September 30, 2017, 2016 and 2015. See [Note 5 - Discontinued Operations](#) for additional information. The notes to our consolidated financial statements relate to our continuing operations only, unless otherwise indicated.

Liquidity and Capital Resources

Historically, we have consumed cash from operations and until recently, 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 and capital markets transactions.

On December 10, 2014, we completed the sale of our Photovoltaics Business for 150.0 million in cash prior to working capital adjustments of \$0.1 million.

On January 2, 2015, we completed the sale of our Digital Products Business for \$1.5 million in cash and an adjusted Promissory Note balance of \$15.5 million. On April 17, 2015, NeoPhotonics paid in full the outstanding balance of the Promissory Note of \$15.5 million, plus accrued interest of \$0.2 million.

On June 15, 2015, we completed the modified "Dutch auction" tender offer (the "Tender Offer") and purchased 6.9 million shares of our common stock at a purchase price of \$6.55 per share, for an aggregate cost of \$45.0 million excluding fees and expenses. Repurchased common stock was recorded to treasury stock. The Company incurred costs of \$0.7 million in connection with the Tender Offer, which were recorded to treasury stock.

As of September 30, 2017, cash and cash equivalents totaled \$68.3 million and net working capital totaled approximately \$103.0 million. Net working capital, calculated as current assets minus current liabilities, is a financial metric we use which represents available operating liquidity. For the fiscal year ended September 30, 2017, we earned net income of \$8.2 million.

NOTE 2. Summary of Significant Accounting Policies

Principles of Consolidation: Our consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (U.S. GAAP) and include the assets, liabilities, shareholders' equity, and operating results of the Company and its wholly owned subsidiaries. All significant intercompany accounts and transactions have been eliminated in consolidation. We are not the primary beneficiary of, nor do we hold a significant variable interest in, any variable interest entity.

Use of Estimates: The preparation of 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. The accounting estimates that require our most significant, difficult, and/or subjective judgments include:

- the valuation of inventory and stock-based compensation;
- the useful lives of assets and assessment of recovery of long-lived assets;
- asset retirement obligations and contingencies, including litigation and indemnification-related;
- the allowance for doubtful accounts and warranty accruals; and,
- the valuation allowance for deferred tax assets.

We develop estimates based on historical experience and on various assumptions about the future that are believed to be reasonable based on the best information available to us. Our reported financial position or results of operations may be materially different under changed conditions or when using different estimates and assumptions, particularly with respect to significant accounting policies. In the event that estimates or assumptions prove to differ from actual results, adjustments are made in subsequent periods to reflect more current information.

Concentration of Credit Risk: Financial instruments that may subject us to concentrations of credit risk consist primarily of cash and cash equivalents and accounts receivable. Our cash and cash equivalents are held in safekeeping primarily with Wells Fargo. When necessary, we perform credit evaluations on our customers' financial condition and occasionally we request deposits in advance of shipping product to our customers. These financial evaluations require significant judgment and are based on a variety of factors including, but not limited to, current economic trends, historical payment patterns, bad debt write-off experience, and financial review of the particular customer.

Cash and Cash Equivalents: Cash and cash equivalents consists primarily of bank deposits and highly liquid short-term investments with a maturity of three months or less at the time of purchase.

Restricted Cash: Restricted cash represents recently deposited cash that is temporarily restricted by our bank in accordance with the terms of the outstanding credit facility.

Accounts Receivable: We regularly evaluate the collectability of our accounts receivable and maintain allowances for doubtful accounts for estimated losses resulting from the inability of our customers to meet their financial obligations to us. The allowance is based on the age of receivables and a specific identification of receivables considered at risk of collection. We classify charges associated with the allowance for doubtful accounts as selling, general, and administrative expense.

Inventory: Inventory is stated at the lower of cost or market (first-in, first-out). Inventory that is expected to be used within the next 12 months is classified as current inventory. We write-down inventory once it has been determined that conditions exist that may not allow the inventory to be sold for its intended purpose or the inventory is determined to be excess or obsolete based on assumptions about future demand and market conditions. The charge related to inventory write-downs is recorded as a cost of revenue. We evaluate inventory levels at least quarterly against sales forecasts on a significant part-by-part basis, in addition to determining its overall inventory risk. We have incurred, and may in the future incur charges to write-down our inventory. See [Note 8 - Inventory](#) in the notes to the consolidated financial statements for additional information related to our inventory.

Property, Plant, and Equipment: Our property, plant, and equipment are recorded at cost. Plant and equipment are depreciated on a straight-line basis over the following estimated useful lives of the assets:

<u>Estimated Useful Life</u>	
Equipment	three to ten years
Furniture and fixtures	five years
Computer hardware and software	five to seven years
Leasehold improvements	three to six years

Leasehold improvements are amortized over the lesser of the asset life or the lease term. Expenditures for repairs and maintenance are charged to expense as incurred. The costs for major renewals and improvements are capitalized and depreciated over their estimated useful lives of the related asset. The cost and related accumulated depreciation of the assets are removed from the accounts upon disposition and any resulting gain or loss is reflected in the consolidated statement of operations and comprehensive income.

Valuation of Long-lived Assets: Long-lived assets consist primarily of property, plant, and equipment, net. Since our long-lived assets are subject to amortization, we review these assets for impairment in accordance with the provisions of Accounting Standards Codification ("ASC") 360, *Property, Plant, and Equipment*. We review long-lived assets for impairment whenever events or changes in circumstances indicate that its carrying amount may not be recoverable. Our impairment testing of long-lived assets consists of determining whether the carrying amount of the long-lived asset (asset group) is recoverable, in other words, whether the sum of the future undiscounted cash flows expected to result from the use and eventual disposition of the asset (asset group) exceeds its carrying amount. The determination of the existence of impairment involves judgments that are subjective in nature and may require the use of estimates in forecasting future results and cash flows related to an asset or group of assets. In making this determination, we use certain assumptions, including estimates of future cash flows expected to be generated by these assets, which are based on additional assumptions such as asset utilization, the length of service that assets will be used in our operations, and estimated salvage values.

Asset Retirement and Environmental Obligations: Pursuant to ASC 410, *Asset Retirement and Environmental Obligations*, an asset retirement obligation ("ARO" or "AROs") is recorded when there is a legal obligation associated with the retirement of a tangible long-lived asset and the fair value of the liability can reasonably be estimated. Upon initial recognition of an asset retirement obligation, a company increases the carrying amount of the long-lived asset by the same amount as the liability. Over time, the liabilities are accreted for the change in their present value through charges to operations costs. The initial capitalized costs are depleted over the useful lives of the related assets through charges to depreciation, and/or amortization. If the fair value of the estimated ARO changes, an adjustment is recorded to both the ARO and the asset retirement cost. Revisions in estimated liabilities can result from revisions of estimated inflation rates, escalating retirement costs, and changes in the estimated timing of settling ARO liabilities.

We have known asset retirement conditions, such as certain asset decommissioning and restoration of rented facilities to be performed in the future.

Fair Value of Financial Instruments: We determine the fair value of our financial instruments in accordance with ASC 820, *Fair Value Measurements and Disclosures*.

Revenue Recognition: Revenue is recognized upon shipment, provided persuasive evidence of a contract exists, the price is fixed, the product meets our customer's specifications, title and ownership have transferred to the customer, and there is reasonable assurance of collection of the sales proceeds. The majority of our products have shipping terms that are free on board or free carrier alongside ("FCA") shipping point, which means that we fulfill our delivery obligation when the goods are handed over to the freight carrier at our shipping dock. This means the customer bears all costs and risks of loss or damage to the goods from that point. We account for shipping and related transportation costs by recording the charges that are invoiced to customers as revenue, with the corresponding cost recorded as cost of revenue. In those instances where inventory is maintained at a consigned location, revenue is recognized only when our customer pulls product for use and after title and ownership has transferred to the customer. Any warranty cost and remaining obligations that are inconsequential or perfunctory are accrued when the corresponding revenue is recognized.

Distributors: We use a number of distributors around the world and recognize revenue upon shipment of product to these distributors. Title and risk of loss pass to the distributors upon shipment, and our distributors are contractually obligated to pay us on standard commercial terms, just like direct customers. We do not sell to our distributors on consignment and, except in the event of product discontinuance, do not give distributors a right of return.

Contract Manufacturers: Prior to certain 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. 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. As part of the manufacturing process at our contract manufacturers, the finished product is tested prior to shipment to the customer using the same criteria that our customer uses to test product it receives. Revenue is recognized upon shipment of customer-qualified product, provided persuasive evidence of a contract exists, the price is fixed, the product meets our customer's specifications, title and ownership have transferred to the customer, and there is reasonable assurance of collection of the sales proceeds.

Product Warranty Reserves: We provide our customers with limited rights of return for non-conforming shipments and warranty claims for certain products. Pursuant to ASC 450, *Contingencies*, we make estimates of product warranty expense using historical experience rates as a percentage of revenue 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 product issues. In addition, from time to time, specific warranty accruals may be made if unforeseen technical problems arise. Should our actual experience relative to these factors differ from our estimates, we may be required to record additional warranty reserves. Alternatively, if we provide more reserves than needed, we may reverse a portion of such provisions in future periods.

Litigation Contingencies: We are subject to various legal proceedings, claims, and litigation, either asserted or unasserted that arise in the ordinary course of business. 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.

Research and Development: Research and development costs are charged as an expense when incurred.

Stock-Based Compensation: Stock-based compensation expense is measured at the stock option or award grant date, based on the fair value of the award, and is recorded to cost of revenue, sales, general, and administrative, and research and development expense based on an employee's responsibility and function over the requisite service period. We use the Black-Scholes option-pricing model or the Monte-Carlo lattice model and the straight-line attribution approach to determine the fair value of stock-based awards in accordance with ASU 2016-09, *Compensation*. These option-pricing models require the input of highly subjective assumptions, including the option's expected life, the expected volatility of the price of the Company's common stock, risk-free interest rates and the expected dividend yield of the Company's common stock. Stock-based compensation expense is reduced for forfeitures.

During fiscal year 2017, the Company early adopted Accounting Standards Update (“ASU”) 2016-09. ASU 2016-09 introduces targeted amendments intended to simplify the accounting for stock compensation, including the Company's election to eliminate the requirements to estimate the number of awards that are expected to vest, and instead, account for forfeitures when they occur. The new standard requires the change be adopted using the modified retrospective approach. As such, the Company recorded a cumulative-effect adjustment of \$0.2 million to decrease the September 30, 2016 accumulated deficit and common stock balances.

Foreign Exchange: We recognize gains and losses due to the effect of exchange rate changes on foreign currency primarily due to 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 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 (loss) gain on our consolidated statements of operations and comprehensive income.

Income Taxes: In accordance with ASC 740, *Income Taxes*, deferred tax assets and liabilities are recognized for the expected tax consequences of temporary differences between the tax bases of assets and liabilities and their reported amounts. We record valuation allowances against all deferred tax assets for amounts which are not considered more likely to be realized.

Comprehensive Income: ASC 220, *Comprehensive Income*, establishes standards for reporting and display of comprehensive income and its components in financial statements. It requires that all items that are required to be recognized under accounting standards as components of comprehensive income be reported in the financial statement that is displayed with the same prominence as other financial statements. Our comprehensive income consists of both net income and foreign currency translation adjustments and it is presented in the accompanying consolidated statements of operations and comprehensive income.

Income (Loss) Per Share: We are required, in periods in which we have net income, to calculate basic and diluted income per share using the two-class method. The two-class method is required because our unvested restricted stock awards are considered participating securities as these securities have the right to receive dividends or dividend equivalents should we declare dividends on our common stock. Under the two-class method, during periods of net income, net income is first reduced for distributions declared on all classes of securities to arrive at undistributed earnings. The undistributed earnings are then allocated on a pro-rata basis between the common shareholders and participating securities holders. The weighted-average number of common shares and participating securities outstanding during the period is then used to calculate basic and diluted income per share.

In periods in which we have a net loss, basic loss per share is calculated by dividing the loss attributable to common shareholders by the weighted-average number of common shares outstanding during the period.

NOTE 3. Recent Accounting Pronouncements

There have been no recent accounting pronouncements or changes in accounting pronouncements that are of significance, or of potential significance, to us other than those discussed below:

- In May 2017, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“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 guidance is effective for annual periods, beginning after December 15, 2017 and interim periods within those annual periods. The Company does not expect the adoption of ASU 2017-09 will have a material impact on the Company's consolidated financial statements.

- In November 2016, the FASB issued ASU 2016-18, *Statement of Cash Flows (Topic 230): Restricted Cash (ASU 2016-18)*, which provides amendments to current guidance to address the classification and presentation of changes in restricted cash or restricted cash equivalents. Specifically, there is no guidance to address how to classify and present changes in restricted cash or restricted cash equivalents that occur when there are transfers between cash, cash equivalents and restricted cash or restricted cash equivalents and when there are direct cash receipts into restricted cash or restricted cash equivalents. The new guidance is effective for annual periods beginning after December 15, 2017 and interim periods within those annual periods. Early adoption is permitted. This standard requires the use of the retrospective transition method. The Company early adopted ASU 2016-18 at the beginning of fiscal year 2017. Accordingly, for the fiscal years ended September 30, 2017, 2016 and 2015, the Company reclassified restricted cash to be presented with cash and cash equivalents on the consolidated statements of cash flows in the amount of \$0.4 million, \$1.0 million and \$0.4 million, respectively.
- In August 2016, the FASB issued ASU 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments*, which clarifies how companies present and classify certain cash receipts and cash payments in the statement of cash flows. This guidance is effective for fiscal years beginning after December 15, 2017. Early adoption is permitted. The Company early adopted ASU 2016-15 at the beginning of fiscal year 2017, but there was no impact on our Consolidated Financial Statements.
- In March 2016, the FASB issued ASU 2016-09, *Compensation-Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting*. This guidance is effective for annual periods beginning after December 15, 2016, and interim periods, within those annual periods. Early adoption is permitted. During fiscal year 2017, the Company early adopted ASU 2016-09. ASU 2016-09 introduces targeted amendments intended to simplify the accounting for stock compensation, including the Company's election to eliminate the requirements to estimate the number of awards that are expected to vest, and instead, account for forfeitures when they occur. The new standard requires the change be adopted using the modified retrospective approach. As such, the Company recorded a cumulative-effect adjustment of \$0.2 million to decrease the September 30, 2016 accumulated deficit and common stock balances.

The ASU also requires income tax benefits and deficiencies to be recognized as income tax expense or benefit in the income statement and the tax effects of exercised or vested awards should be treated as discrete items in the reporting period in which they occur. The income tax consequences of the new standard did not have an impact on the consolidated financial statements. Excess tax benefits should be classified along with other income tax cash flows as an operating activity. The new standard also generally requires presentation of cash paid by the employer for employee taxes as a financing activity. The Company has historically not withheld shares from employees for any of their share-based payment awards, and thus, the new standard did not have an impact on the consolidated statement of cash flows.

- 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. The new standard will be effective for our fiscal year beginning October 1, 2019 and early adoption is permitted.

This update will be applied using a modified retrospective transition approach for leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements. The Company anticipates taking advantage of the practical expedient option. The operating lease obligations at September 30, 2017 were approximately \$4.3 million. Assuming an average discounted rate of 4% applied to these minimum remaining rental payments, we estimate that the impact to our balance sheet upon adoption would be within the range of \$1.8 million to \$2.8 million due to recognition of the right-of-use asset and lease liability related to current operating leases. The Company is continuing to evaluate the effect of this update on its consolidated financial statements and related disclosures.

- In July 2015, the FASB issued ASU 2015-11, *Inventory (Topic 330): Simplifying the Measurement of Inventory*. This standard requires inventory to be measured at the lower of cost and net realizable value. The guidance clarifies that net realizable value is the estimated selling price in the ordinary course of business, less reasonably predictable costs of completion, disposal and transportation. This guidance is effective for fiscal years beginning after December 15, 2016 and interim periods within those fiscal years. The new standard will be effective for our fiscal year beginning October 1, 2017 and early adoption is permitted. We are currently evaluating the impact of this accounting standard update on our consolidated financial statements.

- In May 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers* which will supersede most current U.S. GAAP guidance on this topic. In April 2016, the FASB issued ASU No. 2016-10, *Revenue from Contracts with Customers (Topic 606): Identifying Performance Obligations and Licensing* to clarify two aspects of the guidance within ASU No. 2014-09 on identifying performance obligations and the licensing implementation guidance. Under the new standards, 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. The new standard, as amended through December 2016, will be effective for our fiscal year beginning October 1, 2018 and early adoption is permitted as of October 1, 2017. The standard permits the use of either the retrospective or cumulative effect transition method. We have established a cross-functional coordinated implementation team to implement ASU 2014-09. We are in the process of identifying and implementing changes to our systems, processes and internal controls to meet the reporting and disclosure requirements.

Upon evaluation, we believe that the key revenue streams will be split between product sales and firm fixed price contracts, which comprise the majority of our business. Based upon the evaluation completed to date, the Company believes that the pattern of revenue recognition for these revenue streams will generally be at a point-in-time for product sales and over a period of time for firm fixed price contracts, which is consistent with current guidance. The Company does not believe the adoption of ASU 2014-09 will have a material impact on the Company's financial statements and related disclosures. As of September 30, 2017, the Company intends to adopt ASU 2014-09 utilizing a fully retrospective transition approach on October 1, 2018.

NOTE 4. Cash, Cash Equivalents and Restricted Cash

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

<i>(in thousands)</i>	As of September 30, 2017	As of September 30, 2016	As of September 30, 2015
Cash	\$ 8,054	\$ 3,989	\$ 8,162
Cash equivalents	\$ 60,279	\$ 59,916	\$ 103,723
Restricted cash	421	965	375
Total cash, cash equivalents and restricted cash	\$ 68,754	\$ 64,870	\$ 112,260

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 September 30, 2017, 2016 and 2015.

NOTE 5. Discontinued Operations
Sale of Photovoltaics Business

The following table presents the statements of operations for the discontinued operations of the Photovoltaics Business:

<i>(in thousands)</i>	For the Fiscal Years Ended September 30,		
	2017	2016	2015
Revenue	\$ —	\$ —	\$ 12,614
Cost of revenue	12	(159)	8,245
Gross loss	(12)	159	4,369
Operating expense (income)	13	(868)	2,240
Other income	—	—	779
Gain on sale of discontinued operations	—	—	86,958
(Loss) income from discontinued operations before income tax expense	(25)	1,027	89,866
Income tax benefit (expense)	—	20	(28,700)
(Loss) income from discontinued operations, net of tax	\$ (25)	\$ 1,047	\$ 61,166

On December 22, 2015, we settled all of the outstanding rights and obligations of a solar power venture in Spain, including outstanding non-current receivables, for a payment of \$0.7 million. The outstanding non-current receivables had a net book value of \$0 at the time of settlement as they were fully allowed for previously. The resulting gain was recorded in the discontinued operations of the Photovoltaics Business for the fiscal year ended September 30, 2016.

Included in discontinued operations of the Photovoltaics Business during the fiscal year ended September 30, 2016 were \$0.4 million of New Mexico incentive tax credits received. There were no incentive tax credits received during the fiscal years ended September 30, 2017 and 2015.

Sale of Digital Products Business

The following table presents the statements of operations for the discontinued operations of the Digital Products Business:

<i>(in thousands)</i>	For the Fiscal Years Ended September 30,		
	2017	2016	2015
Revenue	\$ —	\$ —	\$ 11,944
Cost of revenue	—	(500)	9,107
Gross profit	—	500	2,837
Operating expense (income)	2	(292)	2,800
Recognition of previously deferred gain on sale of assets	—	3,804	—
Gain on sale of discontinued operations	—	—	1,994
Other income	41	—	—
Income from discontinued operations before income tax expense	39	4,596	2,031
Income tax benefit (expense)	—	4	2,175
Income from discontinued operations, net of tax	\$ 39	\$ 4,600	\$ 4,206

In December 2015, we entered into an agreement to terminate our lease and related obligations associated with a facility in Newark, California which we abandoned effective February 2016 following the sale of the Digital Products Business. As a result of this agreement, we paid \$0.2 million and recorded a gain of \$0.3 million on the lease termination in the discontinued operations of the Digital Products Business during the fiscal year ended September 30, 2016. Also see [Note 10 - Accrued Expenses and Other Current Liabilities](#).

Included in cost of revenue for the fiscal year ended September 30, 2016 is \$0.4 million due to a reduction in expected product warranty liabilities from a settlement associated with the Digital Products Business.

During the fiscal year ended September 30, 2016, we recognized the deferred gain of \$3.4 million and reversal of other liabilities of \$0.4 million, that had been recorded as of September 30, 2015, resulting in a credit of \$3.8 million to deferred gain on sale of assets within discontinued operations of the Digital Products Business as the result of the favorable ruling from the Sumitomo Electric Industries, LTD (“SEI”) arbitration. Also see [Note 13- Commitments and Contingencies](#).

NOTE 6. 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.

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 7. Accounts Receivable

The components of accounts receivable consisted of the following:

	As of September 30, 2017	As of September 30, 2016
<i>(in thousands)</i>		
Accounts receivable, gross	\$ 22,287	\$ 18,468
Allowance for doubtful accounts	(22)	(36)
Accounts receivable, net	<u>\$ 22,265</u>	<u>\$ 18,432</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 fiscal years ended September 30, 2017, 2016 and 2015.

Allowance for Doubtful Accounts <i>(in thousands)</i>	For the Fiscal Years Ended September 30,		
	2017	2016	2015
Balance at beginning of period	\$ 36	\$ 462	\$ 116
Provision adjustment - expense, net of recoveries	23	23	556
Write-offs and other adjustments - deductions to receivable balances	(37)	(449)	(210)
Balance at end of period	<u>\$ 22</u>	<u>\$ 36</u>	<u>\$ 462</u>

NOTE 8. Inventory

The components of inventory consisted of the following:

<i>(in thousands)</i>	As of September 30, 2017	As of September 30, 2016
Raw materials	\$ 15,826	\$ 16,095
Work in-process	6,586	5,687
Finished goods	5,414	5,899
Inventory balance at end of period	<u>\$ 27,826</u>	<u>\$ 27,681</u>
Current portion	<u>\$ 25,139</u>	<u>\$ 24,150</u>
Non-Current portion	<u>\$ 2,686</u>	<u>\$ 3,531</u>

The non-current inventory balance of \$2.7 million and \$3.5 million as of September 30, 2017 and September 30, 2016, respectively, is comprised entirely of raw materials which we acquired as part of a last time purchase as a result of the vendor announcing they would cease manufacturing a part.

NOTE 9. Property, Plant, and Equipment, net

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

<i>(in thousands)</i>	As of September 30, 2017	As of September 30, 2016
Equipment	\$ 31,507	\$ 28,247
Furniture and fixtures	1,109	1,109
Computer hardware and software	2,974	2,860
Leasehold improvements	2,330	1,896
Construction in progress	4,539	1,779
Property, plant, and equipment, gross	\$ 42,459	\$ 35,891
Accumulated depreciation	(25,824)	(23,678)
Property, plant, and equipment, net	<u>\$ 16,635</u>	<u>\$ 12,213</u>

Depreciation expense totaled \$3.7 million, \$2.4 million and \$2.1 million during the fiscal years ended September 30, 2017, 2016 and 2015, respectively.

Impairment Testing

In March 2017, in connection with the transition of our manufacturing operations in China to a new manufacturing facility in China, we identified equipment with a net book value of approximately \$0.6 million that would no longer be utilized after the completion of the move later in fiscal year 2017. After taking into consideration the costs of disposal and estimated net funds from the sale of the equipment of approximately \$0.1 million, we recorded a charge to impairments of approximately \$0.5 million in the fiscal year ended September 30, 2017.

As of September 30, 2016, we determined no impairment triggers were present, and therefore, an impairment test was not performed.

As of September 30, 2015, we performed an impairment test on long-lived assets. The impairment test was triggered by continued losses from operations realized in fiscal year 2015. The impairment testing indicated that no impairment existed and that future undiscounted cash flows exceeded the carrying value.

NOTE 10. 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 September 30, 2017	As of September 30, 2016
Compensation	\$ 3,904	\$ 3,628
Warranty	684	871
Professional fees	653	761
Customer deposits	20	38
Income and other taxes	2,920	944
Severance and restructuring accruals	628	642
Other	1,016	800
Accrued expenses and other current liabilities	<u>\$ 9,825</u>	<u>\$ 7,684</u>

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

Income and other taxes: For the fiscal year ended September 30, 2017, the Company recorded approximately \$0.2 million of income tax expense from continuing operations and \$0 of income tax benefit within income from discontinued operations. For the fiscal year ended September 30, 2016, the Company recorded \$14,000 of income tax expense from continuing operations income and \$24,000 of income tax benefit within income from discontinued operations. For the fiscal year ended September 30, 2015, the Company recorded \$2.2 million of income tax benefit from continuing operations losses and \$26.5 million of income tax expense within income from discontinued operations. The income tax expense within discontinued operations includes estimated alternative minimum tax and other adjustments prescribed by ASC 740 in allocating expected annual income tax expense (benefit) between continuing operations and discontinued operations.

Severance and restructuring accruals: In connection with the abandonment of our Newark, California facility following the closing of the sale of the Digital Products Business, we accrued for the remaining lease costs through the lease termination in May 2016. In December 2015, we entered into an agreement to terminate this lease and related obligations, including AROs, as of February 2016 for a payment of \$0.2 million. As a result of the agreement, we recorded a gain of \$0.3 million on the lease termination. The resulting gain was recorded in the discontinued operations of the Digital Products Business for the fiscal year ended September 30, 2016. See [Note 4 - Discontinued Operations](#).

On June 7, 2016, the Company's former Chief Financial Officer ("CFO") notified the Company that he would resign as the Company's CFO, effective as of June 20, 2016 (the "Separation Date"). The Company and the former CFO entered into a separation agreement and general release, dated June 7, 2016 (the "Separation Agreement"), which includes mutual releases by the former CFO and the Company of all claims related to his employment and service relationship with, and termination of employment and service from, the Company. The Separation Agreement provides for, among other things, the continuation of his base salary for 64 weeks, benefits for 16 months, outplacement services for a period of not more than 1 year and with a value not in excess of \$15,000 and immediate vesting of all his outstanding non-vested equity awards, other than his most recent equity award. These payments are not contingent upon any future service by the former CFO. The Company recorded a charge of approximately \$0.4 million in the fiscal year ended September 30, 2016 related to this Separation Agreement.

In an effort to better align our current and future business operations, in May 2016 the Company announced a reduction in its workforce by approximately 30 individuals and recorded a charge for severance for the affected employees in the amount of \$0.3 million in the fiscal year ended September 30, 2016. In November 2016, the Company announced an additional reduction in the workforce of approximately 5 individuals and recorded a charge of \$0.2 million in the fiscal year ended September 30, 2017 related to the outsourcing of our satellite communications assembly operations. In September 2017, the Company announced it would be closing its Ivyland, Pennsylvania location during fiscal year 2018 and reducing its workforce by approximately 11 individuals and recorded a charge for severance for the affected employees in the amount of \$0.3 million in the fiscal year ended September 30, 2017.

In March 2017, the Company announced an additional workforce reduction of approximately 14 individuals and recorded a charge of \$0.1 million in the fiscal year ended September 30, 2017 related to the outsourcing of our wafer fabrication lab. During the fiscal year ended September 30, 2017, the Company recorded an additional charge of \$0.4 million for six additional individuals related to the March 2017 workforce reduction. Also, in March 2017, in connection with our opening of a new manufacturing facility in China to reduce costs and improve efficiency later in fiscal year 2017, we accrued for a workforce reduction of approximately 265 individuals and recorded a charge of \$0.5 million in the fiscal year ended September 30, 2017. During the fiscal year ended September 30, 2017, the Company recorded an additional charge of \$0.4 million for the workforce reduction of 72 additional individuals related to the opening of our new manufacturing facility in China.

Our severance and restructuring-related accruals specifically relate to the separation agreements and reductions in force 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 accrual account:

<i>(in thousands)</i>	Severance-related accruals	Restructuring- related accruals	Total
Balance as of September 30, 2015	\$ 1,110	\$ 338	\$ 1,448
Expense - charged to accrual	728	—	728
Payments and accrual adjustments	(1,196)	(338)	(1,534)
Balance as of September 30, 2016	\$ 642	\$ —	\$ 642
Expense - charged to accrual	1,994	—	1,994
Payments and accrual adjustments	(2,008)	—	(2,008)
Balance as of September 30, 2017	\$ 628	\$ —	\$ 628

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

Product Warranty Accruals <i>(in thousands)</i>	For the Fiscal Years Ended September 30,		
	2017	2016	2015
Balance at beginning of period	\$ 871	\$ 1,664	\$ 2,816
Provision for product warranty - expense	573	376	838
Adjustments and utilization of warranty accrual	(760)	(1,169)	(1,990)
Balance at end of period	\$ 684	\$ 871	\$ 1,664

NOTE 11. 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 November 10, 2015, we entered into a Seventh Amendment of the Credit Facility which extended the maturity date of the facility to November 2018. On July 27, 2017, we entered into a Ninth Amendment of the Credit Facility which adjusted the interest rate to LIBOR plus 1.75%. The Credit Facility currently provides us with a revolving credit line of up to \$15.0 million that can be used for working capital requirements, letters of credit, and other general corporate purposes.

As of September 30, 2017, there were no amounts outstanding under this Credit Facility and the Company was in compliance with all financial covenants. Also, as of September 30, 2017, the Credit Facility had approximately \$0.5 million reserved for one outstanding stand-by letter of credit and \$8.0 million available for borrowing. As of November 30, 2017, there was no outstanding balance under this Credit Facility.

NOTE 12. Income and other Taxes

The Company's income (loss) from continuing operations before income taxes consisted of the following:

Income (loss) from continuing operations before income taxes <i>(in thousands)</i>	For the Fiscal Years Ended September 30,		
	2017	2016	2015
Domestic	\$ 10,632	\$ 1,735	\$ (5,713)
Foreign	(2,248)	898	1,250
Income (loss) from continuing operations before income taxes	\$ 8,384	\$ 2,633	\$ (4,463)

The Company's income tax expense (benefit) consisted of the following:

Income tax expense (benefit)	For the Fiscal Years Ended September 30,		
	2017	2016	2015
<i>(in thousands)</i>			
Federal:			
Current	\$ 135	\$ —	\$ —
Deferred	—	—	(1,835)
	135	—	(1,835)
State:			
Current	28	(117)	—
Deferred	—	—	(356)
	28	(117)	(356)
Foreign:			
Current	—	131	—
Deferred	—	—	—
	—	131	—
Total income tax expense (benefit)	\$ 163	\$ 14	\$ (2,191)

EMCORE Corporation is incorporated in the state of New Jersey. A reconciliation of the provision for income taxes, with the amount computed by applying the statutory U.S. federal and state income tax rates to continuing operations income before provision for income taxes is as follows:

Provision for Income Taxes	For the Fiscal Years Ended September 30,		
	2017	2016	2015
<i>(in thousands)</i>			
Income tax benefit computed at U.S. federal statutory rate	\$ 2,841	\$ 896	\$ (1,518)
State tax expense benefit, net of U.S. federal effect	414	(41)	(356)
Foreign tax rate differential	229	(94)	(269)
Effect due to change in tax rate	2,528	626	—
Windfall from stock based compensation	(150)	—	—
Other	126	(57)	108
State net operating loss carryforward adjustment	933	685	—
Change in valuation allowance	(6,758)	(2,001)	(156)
Income tax expense (benefit)	\$ 163	\$ 14	\$ (2,191)
Effective tax rate	1.9%	0.5%	49.1%

Significant components of our deferred tax assets are as follows:

Deferred Tax Assets <i>(in thousands)</i>	As of September 30, 2017	As of September 30, 2016
Deferred tax assets:		
Federal net operating loss carryforwards	\$ 144,455	\$ 147,449
Foreign net operating loss carryforwards	587	51
Income tax credit carryforwards	3,211	3,062
Inventory reserves	2,037	2,614
Accounts receivable reserves	8	14
Accrued warranty reserve	249	328
State net operating loss carryforwards	4,525	7,009
Stock compensation	2,367	3,334
Deferred compensation	349	896
Fixed assets and intangibles	136	124
Other	927	728
Total deferred tax assets	158,851	165,609
Valuation allowance	(158,851)	(165,609)
Net deferred tax assets	\$ —	\$ —

At September 30, 2014, the Company determined that it was more likely than not that certain deferred tax assets would be realized upon the sale of the Photovoltaic Business in fiscal year 2015. As a result, a net deferred tax valuation allowance release of \$24.6 million was recorded as an income tax benefit during fiscal year 2014. The sale of the Photovoltaic Business closed on December 10, 2014 and the Company realized a gain on the transaction.

During the fiscal year ended September 30, 2015, the Company utilized the \$24.6 million of deferred tax assets. The Company paid alternative minimum taxes of \$0.6 million during the fiscal year ended September 30, 2015 and the remaining income tax expense will be offset mainly through utilization of \$24.1 million of capital loss and utilization of net operating loss carry forwards.

For the fiscal years ended September 30, 2017, 2016 and 2015, the Company recorded income tax (expense) benefit from continuing operations of approximately \$(0.2) million, \$0 and \$2.2 million, respectively. For the fiscal years ended September 30, 2017, 2016 and 2015, the Company recorded income tax benefit (expense) from discontinued operations of approximately \$0, \$24,000 and \$(26.5) million, respectively. Income tax expense is comprised of estimated alternative minimum tax allocated between continuing operations and discontinued operations as prescribed by ASC 740 and foreign tax expense included within continuing operations.

For the fiscal years ended September 30, 2017, 2016 and 2015, the effective tax rate on continuing operations was 1.9%, 0.5%, and 49.1%, respectively. The higher tax rate for fiscal year 2017 was primarily due to higher alternative minimum tax as a result of the increase in net income. The lower tax rate for fiscal year 2016 was primarily due to permanent differences, state tax benefits, foreign tax rate differentials and changes in the Company's results in the current year as compared to the prior year. The higher tax rate for fiscal year 2015 was primarily due to permanent differences, state tax benefits and foreign tax rate differentials. The Company uses estimates to forecast the results from continuing operations for the current fiscal year as well as permanent differences between book and tax accounting.

We have not provided for U.S. federal and state income taxes on non-U.S. subsidiaries' undistributed earnings as of September 30, 2017 because we plan to indefinitely reinvest the unremitted earnings of our non-U.S. subsidiaries.

All deferred tax assets have a full valuation allowance at September 30, 2017. 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 fiscal year ended September 30, 2017, we increased previously unrecognized tax benefits by \$0.1 million related to foreign taxes. During the fiscal years ended September 30, 2016 and 2015, we decreased previously unrecognized tax benefits by \$0.1 million and \$0.2 million, respectively. Of the fiscal year 2016 amount of unrecognized tax benefits, \$112,800 was recognized in income tax expense from continuing operations and \$12,000 was recognized in income tax expense from discontinued operations. Of the fiscal year 2015 amount, \$0.1 million was recognized in income tax benefit from continuing operations and \$0.1 million was recognized in income tax expense from discontinued operations. As of September 30, 2017 and September 30, 2016, we had approximately \$0.3 million of interest and penalties accrued as tax liabilities on our balance sheet.

As of September 30, 2017, the Company had net operating loss carryforwards for U.S. federal income tax purposes of approximately \$424.9 million which begin to expire in 2021. As of September 30, 2017, the Company had foreign net operating loss carryforwards of \$2.3 million which begin to expire in 2021, as well as state net operating loss carryforwards of approximately \$52.5 million which begin to expire in 2018. As of September 30, 2017, the Company also had tax credits (primarily foreign income and U.S. research and development tax credits) of approximately \$3.2 million. The research credits will begin to expire in 2018. Utilization of net operating loss and tax credit carryforwards are subject to a substantial annual limitation due to the ownership change limitations set forth in Internal Revenue Code Section 382 and similar state provisions. The Company prepared an Internal Revenue Code 382 analysis to determine the annual limitations on the Company's consolidated net operating loss carryforwards. As a result of the \$424.9 million of U.S. net operating loss carryforwards, approximately \$226.5 million is subject to an annual limitation and \$198.4 million of the net operating losses are not subject to an annual limitation. Such annual limitations could result in the expiration of the net operating loss and tax credit carryforwards before utilization.

The Company's Board of Directors has adopted a Tax Benefits Preservation Plan (the "Rights Plan") to help preserve the value of our net operating losses and tax credit carryforwards by reducing the risk of limitation of these deferred tax assets. The Rights Plan was approved by the Company's shareholders on March 10, 2015. On September 26, 2017, the Company extended the final expiration date of the rights contained therein from October 3, 2107 to October 3, 2018 (subject to earlier expiration as described in the Rights Plan). The Company expects to submit the extension of the Rights Plan to shareholders for approval at the Company's 2018 annual meeting of shareholders. The Rights Plan is intended to reduce the likelihood that the Company will experience an ownership change for purposes of Internal Revenue Code Section 382 by discouraging any person or group from becoming a "5% shareholder" or increasing their ownership of the Company's common stock if they are already a "5% shareholder."

A reconciliation of the beginning and ending amount of unrecognized gross tax benefits is as follows:

Unrecognized Gross Tax Benefit <i>(in thousands)</i>	
Balance as of September 30, 2015	\$ 413
Adjustments based on tax positions related to the current year	—
Adjustments based on tax positions of prior years	(125)
Balance as of September 30, 2016	288
Adjustments based on tax positions related to the current year	131
Adjustments based on tax positions of prior years	—
Balance as of September 30, 2017	\$ 419

We believe that it is reasonably possible that all of the uncertain tax position will be paid or settled within the next 12 months. We file income tax returns in the U.S. federal, state, and local jurisdictions. In April 2015 the IRS completed its exam of the September 30, 2012 tax return and the Company was notified there were no changes to the originally filed return. There are no state income tax returns under examination. The following tax years remain open to assessment for each of the more significant jurisdictions where we are subject to income taxes: after fiscal year 2013 for the U.S. federal, after fiscal year 2012 for the State of New Mexico, and after fiscal year 2012 for the state of California.

Included in discontinued operations during the fiscal years ended September 30, 2016 and 2015 were \$0.4 million and \$0.2 million, respectively, of New Mexico incentive tax credits received. The amount received was allocated to cost of goods sold, selling, general and administrative and research and development expense primarily based on the number of employees allocated to the related departments. These credits resulted in cash refunds and a reduction of future payroll and compensation taxes. There was no incentive tax credit received during the fiscal year ended September 30, 2017.

NOTE 13. Commitments and Contingencies

Leases: Estimated future minimum lease payments under non-cancelable operating leases with an initial or remaining term of one year or more are \$0.8 million, \$0.8 million, \$0.8 million, \$0.6 million, and \$1.3 million for the fiscal years ended September 30, 2018, 2019, 2020, 2021 and 2022 and thereafter, respectively.

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 \$1.4 million, \$1.4 million and \$1.3 million for the fiscal years ended September 30, 2017, 2016 and 2015, respectively. There are no off-balance sheet arrangements other than our operating leases.

Asset Retirement Obligation: 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.

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%. See the discussions below regarding ARO settlements during the fiscal years ended September 30, 2017 and 2016. There was no ARO settled during the fiscal year ended September 30, 2015. Accretion expense of \$0.1 million was recorded during the fiscal years ended September 30, 2017, 2016 and 2015.

EMCORE leases its primary facility in Alhambra, California covering six buildings where manufacturing, research and development, and general and administrative work is performed. Several leases related to these facilities expired in 2011, and were being maintained on a month-to-month basis. 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 September 30, 2017 and 2016 of \$1.6 million and \$1.5 million, respectively.

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.

During the fiscal year ended September 30, 2017, in connection with the Company moving to a new manufacturing facility in China, the lease and related obligations, including ARO, at the former China facility was terminated, resulting in no payment by the Company. As a result of this agreement, the Company reduced its ARO associated with the former China facility by \$45,000.

During the fiscal year ended September 30, 2016, the Company entered into an agreement to terminate the lease and related obligations, including ARO, in Newark, California for a one-time settlement payment of \$0.2 million. As a result of this agreement and payment, the Company reduced its ARO associated with the Newark facility by \$0.3 million.

In May 2016, which was 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 \$50,000 and \$48,000 at September 30, 2017 and 2016, respectively.

The following table summarizes ARO activity:

Asset Retirement Obligations	September 30,
<i>(in thousands)</i>	2017
Balance at September 30, 2016	\$ 1,618
Accretion expense	65
Revision in estimated cash flows	(45)
Balance at September 30, 2017	\$ 1,638

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. In March 2012, we entered into a Master Purchase Agreement with SEI, pursuant to which we agreed to sell certain assets and transfer certain obligations. Under the terms of the Master Purchase Agreement, we agreed to indemnify SEI for up to \$3.4 million of potential claims and expenses for the two-year period following the sale and we recorded this amount as a deferred gain on our balance sheet as a result of these contingencies.

On September 23, 2014, SEI filed for arbitration against EMCORE, in accordance with the terms of the Master Purchase Agreement between the parties. SEI was seeking \$47.5 million from EMCORE, relating to numerous claims. On April 12, 2016, the International Court of Arbitration tribunal rejected SEI's claims. The panel ruled that EMCORE owed SEI none of the amounts SEI sought in the arbitration and that the Company was entitled to collect the \$1.9 million held in escrow, which was received in June 2016. The Company was also entitled to recover \$2.6 million in fees and costs from SEI, which was received in June 2016. During the fiscal year ended September 30, 2016, we recognized a gain associated with the release of \$3.4 million of previously recorded gain associated with the sale of assets and reversal of other liabilities of \$0.4 million, resulting in a credit of \$3.8 million to recognition of previously deferred gain on sale of assets within discontinued operations of the Digital Products Business. During the fiscal year ended September 30, 2016, we recognized the \$2.6 million recovery of previously incurred litigation fees and costs incurred by EMCORE within operating income as such represented the recovery of previously incurred legal expenses. See [Note 4 - Discontinued Operations](#).

Legal Proceedings: We are subject to various legal proceedings, claims, and litigation, either asserted or unasserted, that arise in the ordinary course of business. While the outcome of these matters is currently not determinable, we do not expect the resolution of these matters to have a material adverse effect on our business, financial position, results of operations, or cash flows. However, 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) Mirasol Class Action

On December 15, 2015, Plaintiff Christina Mirasol (“Mirasol”), on her own behalf and on behalf of a putative class of similarly situated individuals composed of current and former non-exempt employees of the Company working in California since December 15, 2011, filed a complaint against the Company in the Superior Court of California, Los Angeles County (the “Court”). The complaint alleged seven causes of action related to: (1) failure to pay overtime; (2) failure to provide meal periods; (3) failure to pay minimum wages; (4) failure to timely pay wages upon termination; (5) failure to provide compliant wage statements; (6) unfair competition under the California Business and Professions Code § 17200 et seq.; and (7) penalties under the Private Attorneys General Act. The claims were premised primarily on the allegation that Mirasol and the putative class members were not provided with their legally required meal periods. Mirasol sought recovery on her own behalf and on behalf of the putative class in an unspecified amount for compensatory and liquidated damages as well as for declaratory relief, injunctive relief, statutory penalties, pre-judgment interest, costs and attorneys’ fees.

In exchange for a one-time cash payment offered by the Company, certain current and former employees previously agreed to release the Company from all potential claims related to the matters alleged in the Mirasol lawsuit. The Company had recorded an accrual for these amounts at September 30, 2016 that was not material to the Company’s results of operations, financial condition or cash flows, which had been recorded within Operating Expenses for the fiscal year ended September 30, 2016. On January 6, 2017, the Company and Mirasol agreed to a class action settlement of \$0.3 million with regards to all outstanding claims. The parties have agreed to a formal settlement agreement, which was preliminarily approved by the Court, and will require final Court approval. As of September 30, 2017, the \$0.3 million settlement remains outstanding. During the fiscal year ended September 30, 2017, the Company recorded an accrual of \$0.2 million within Operating Expenses related to the settlement.

c) Mirasol Wrongful Termination Lawsuit

In August 2016, EMCORE was served with a second lawsuit by former employee Mirsaol, in the Superior Court of Los Angeles alleging that the Company violated California’s employment laws in terminating her employment in November 2015. By her complaint, Mirasol asserted five causes of action: (1) wrongful termination in violation of public policy; (2) discrimination on the basis of disability and/or medical condition; (3) failure to accommodate; (4) failure to engage in the interactive process; and (5) intentional infliction of emotional distress. On September 26, 2016, Mirasol dismissed the fifth cause of action for intentional infliction of emotional distress. Mirasol alleged that EMCORE wrongfully terminated her at the conclusion of a Family and Medical Act leave, without engaging in the interactive process of offering to provide her with reasonable accommodations. The plaintiff sought general, special, and punitive damages. On January 6, 2017, the Company and Mirasol agreed to a settlement of \$50,000 with regards to all outstanding claims. This amount was paid as of September 30, 2017.

NOTE 14. 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.

The Board of Directors (the “Board”) of the Company previously approved, subject to stockholder approval, amendments to the 2012 Plan that would, among other changes, (1) increase the limit on the aggregate number of shares of common stock that may be delivered pursuant to awards granted under the 2012 Plan by 2,400,000 shares to a new aggregate share limit of 5,301,366 shares; (2) extend the ability to grant performance-based awards under the 2012 plan through the first annual meeting of shareholders that occurs in 2022; (3) extend the term of the 2012 Plan until March 17, 2027; (4) increase the annual limits on the number of different types of awards that may be granted to an individual under the 2012 Plan, so a participant may receive (a) a maximum of 200,000 stock options, 200,000 stock appreciation rights, 200,000 shares of restricted stock, 200,000 restricted stock units, 200,000 stock purchase rights and 200,000 share awards in any fiscal year of the Company, (b) in connection with their initial year of service, up to an additional 400,000 stock options, 400,000 stock appreciation rights, 400,000 shares of restricted stock, 400,000 restricted stock units, 400,000 stock purchase rights and 400,000 share awards, and (c) a maximum of \$1,000,000 in cash earned in connection with the grant of performance units in any fiscal year; and (5) require all awards granted under the Amended 2012 Plan to have a minimum vesting period of one year and require that no award may vest earlier than the first anniversary of the grant date of the award, subject to limited exception. The Company’s stockholders approved the amendments to the 2012 Plan on March 17, 2017.

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 fiscal year ended September 30, 2017:

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (in years)	Aggregate Intrinsic Value (*) (in thousands)
Outstanding as of September 30, 2016	750,338	\$16.84		
Granted	—	—		
Exercised	(157,879)	\$3.38		\$ 920
Forfeited	(7,936)	\$4.83		
Expired	(257,725)	\$22.03		
Outstanding as of September 30, 2017	326,798	\$19.54	1.94	\$ 295
Exercisable as of September 30, 2017	282,378	\$21.88	0.99	\$ 138
Vested and expected to vest as of September 30, 2017	326,798	\$19.54	1.94	\$ 295

(*) 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 fiscal years ended September 30, 2016 and 2015, the intrinsic value of options exercised was \$87,000 and \$0.3 million, respectively.

As of September 30, 2017, there was approximately \$0.1 million 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 2.8 years.

With the dividend of \$1.50 per share declared on July 5, 2016, payable to shareholders of record as of the close of business on July 18, 2016 and paid by the Company on July 29, 2016, the number of shares subject to all outstanding options as of that dividend payable date and the exercise price of each such options were equitably and proportionately adjusted to preserve the intrinsic value of the outstanding awards in accordance with the original terms of the options. The impact of the dividend adjustment to outstanding options as of the dividend payable date has increased the exercisable, vested and expected to vest shares in the above table.

On December 10, 2014, in connection with the sale of the Photovoltaics Business, which constituted a change in control under the equity plans, the terms of approximately 56,000 stock options for approximately 80 employees were modified to include accelerated vesting effective as of that date. The total incremental benefit resulting from the modifications was approximately \$0.2 million and is included in the Company's income from discontinued operations, net of tax, for the fiscal year ended September 30, 2015.

Valuation Assumptions

There were no stock option grants for the fiscal year ended September 30, 2017. The fair value of each stock option grant for the fiscal years ended September 30, 2016 and 2015, excluding the adjustment for a special dividend paid in July 2016, was estimated on the date of grant using the Black-Scholes option valuation model, adhering to the straight-line attribution approach using the following weighted-average assumptions, of which the expected term and stock price volatility rate are highly subjective:

	For the Fiscal Years Ended September 30,		
	2017	2016	2015
Black-Scholes weighted average assumptions:			
Expected dividend rate	—%	—%	—%
Expected stock price volatility rate	—%	60.9%	66.1%
Risk-free interest rate	—%	1.6%	1.8%
Expected term (in years)	—	6.0	6.0
Weighted average grant date fair value per share of stock options granted:	\$ —	\$ 3.40	\$3.73

Expected Dividend Yield: The Black-Scholes valuation model calls for a single expected dividend rate as an input. Although we paid a special dividend in July 2016, no dividend rate was assumed in the valuation.

Expected Stock Price Volatility Rate: The fair values of stock-based payments were calculated using the Black-Scholes valuation method with a volatility factor based on our historical common stock prices.

Risk-Free Interest Rate: The risk-free interest rate used in the Black-Scholes valuation method was based on the implied yield that was available on U.S. Treasury zero-coupon notes with an equivalent remaining term. Where the expected terms of stock-based awards do not correspond with the terms for which interest rates are quoted, we performed a straight-line interpolation to determine the rate from the available maturities.

Expected Term: Expected term represents the period that our stock-based awards are expected to be outstanding and was determined based on historical experience of similar awards, giving consideration to the contractual terms of the stock-based awards, vesting schedules and expectations of future employee behavior as influenced by changes to the terms of stock-based awards.

Restricted Stock

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 for the fiscal year ended September 30, 2017:

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, 2016	878,416	\$4.25	—	\$0.00
Granted	307,509	\$8.44	8,154	\$8.20
Vested	(357,013)	\$4.15	—	\$0.00
Canceled	(8,154)	\$5.50	—	\$0.00
Forfeited	(42,674)	\$4.66	—	\$0.00
Non-vested as of September 30, 2017	778,084	\$5.91	8,154	\$8.20

As of September 30, 2017, there was approximately \$3.4 million of remaining unamortized stock-based compensation expense associated with RSUs, which will be expensed over a weighted average remaining service period of approximately 2.3 years. The 0.8 million outstanding non-vested and expected to vest RSUs have an aggregate intrinsic value of approximately \$6.4 million and a weighted average remaining contractual term of 1.3 years. For the fiscal years ended September 30, 2017, 2016 and 2015 the intrinsic value of RSUs vested were approximately \$3.4 million, \$1.6 million and \$4.6 million, respectively. For the fiscal years ended September 30, 2016 and 2015, the weighted average grant date fair value of RSUs granted was \$5.53 and \$5.38, respectively.

As of September 30, 2017, there was approximately \$0.1 million of remaining unamortized stock-based compensation expense associated with RSAs, which will be expensed over a weighted average remaining service period of approximately 3.0 years.

In connection with the appointment of Mr. Jikun Kim as the Company's Chief Financial Officer on June 20, 2016, he was granted a time based equity award of 150,000 RSUs that are scheduled to vest in five equal annual installments on each of the first five anniversaries of his hiring date.

On October 18, 2016, the Company granted 70,000 RSUs with a grant date fair value of \$0.4 million to its CEO, Jeffrey Rittichier, that will vest in 4 equal annual installments beginning on October 18, 2017.

On September 29, 2017, the Company amended the October 18, 2016 grant of 70,000 RSUs by (i) reducing 17,500 of the 70,000 RSUs that are schedule to vest on October 18, 2020 to 9,346 RSUs that are scheduled to vest as of that same date, resulting in a new total of 61,846 RSUs granted pursuant to this award and (ii) issuing Mr. Rittichier 8,154 RSAs that were originally subject to the RSA award and that had a grant date fair value of \$0.1 million that are scheduled to vest on October 18, 2020.

With the dividend of \$1.50 per share declared on July 5, 2016, payable to shareholders of record as of the close of business on July 18, 2016 and paid by the Company on July 29, 2016, the number of shares subject to all outstanding RSUs as of the dividend payable date was equitably and proportionately adjusted to preserve the intrinsic value of the outstanding awards in accordance with the original terms of the awards. The impact of the dividend adjustment to outstanding RSUs as of the dividend payable date has increased the non-vested RSUs outstanding and the expected to vest RSUs as disclosed in the above table.

On December 10, 2014, in connection with the sale of the Photovoltaics Business, which constituted a change in control, the terms of approximately 147,000 RSUs for approximately 80 employees were modified to include accelerated vesting effective as of that date. The total incremental expense resulting from the modifications was approximately \$49,000 and is included in the Company's income from discontinued operations, net of tax, for the fiscal year ended September 30, 2015. In total, approximately 0.3 million RSU's vested due to change in control provisions.

On June 24, 2016, in connection with the resignation of the Company's former CFO, Mark Weinswig, approximately \$0.3 million of stock compensation expense was recorded for acceleration of some and cancellation of other restricted stock units. See [Note 10 - Accrued Expenses and Other Current Liabilities](#) for additional information.

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 if employment terminates prior to the lapse of the restrictions. PRSAs are considered issued and outstanding on the grant date and are subject to forfeiture if specified vesting conditions are not satisfied. PSUs and PRSAs are not considered issued or outstanding common stock until they vest. PSUs 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.

On October 18, 2016, the Company granted our CEO, Mr. Rittichier, 100,000 target PSUs with a grant date fair value of \$0.7 million and our CFO, Jikun Kim, 195,180 target PSUs with a grant date fair value of \$1.4 million.

The PSUs issued will vest based on a combination of the relative total shareholder return of EMCORE’s stock compared to the Russell Microcap Index and the executive’s continued employment. The total number of shares to be issued to each individual ranges from zero (0) to 200% of the target PSUs granted. Between zero (0) and 200% of one third of the target PSUs will vest, if at all, on each of October 17, 2017, 2018 and 2019.

On December 14, 2016, the Company granted 71,669 target PSUs with a grant date fair value of \$1.0 million to certain employees. The PSUs issued will vest based on a combination of the relative total shareholder return of EMCORE’s stock compared to the Russell Microcap Index and the employee’s continued employment. The total number of shares to be issued to each individual may range from zero (0) to 200% of the target PSUs granted. Between zero (0) and 200% of the target PSUs granted will vest, if at all, on December 14, 2019.

On September 29, 2017, the Company amended the October 18, 2016 grant of 100,000 target PSUs by (i) eliminating 33,333 (at target level) of the 100,000 target PSUs that were scheduled to vest, if at all, on October 17, 2019 and (ii) issuing Mr. Rittichier 33,333 (at target level) PRSAs that were originally subject to the PSU award and that had a grant date fair value of \$0.4 million.

The PRSAs will vest based on a combination of the relative total shareholder return of EMCORE’s stock compared to the Russell Microcap Index and the executive’s continued employment. The total number of shares to be issued to each individual ranges from zero (0) to 200% of the target PRSAs granted. Between zero (0) and 200% of one third of the target PRSAs will vest, if at all, on October 17, 2019.

The following table summarizes the activity related to PSUs and PRSAs for the fiscal year ended September 30, 2017:

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, 2016	—	\$0.00	—	\$0.00
Granted	366,849	\$8.34	33,333	\$12.25
Vested	—	\$0.00	—	\$0.00
Canceled	(33,333)	\$7.34	—	\$0.00
Forfeited	(4,808)	\$13.36	—	\$0.00
Non-vested as of September 30, 2017	328,708	\$8.36	33,333	\$12.25

As of September 30, 2017, there was approximately \$1.4 million of remaining unamortized stock-based compensation expense associated with PSUs, which will be expensed over a weighted average remaining service period of approximately 1.2 years. The 0.3 million outstanding non-vested and expected to vest PSUs have an aggregate intrinsic value of approximately \$2.7 million and a weighted average remaining contractual term of 1.2 years. For the fiscal years ended September 30, 2017, 2016 and 2015, there were no PSUs vested. There were no PSUs granted during the fiscal years ended September 30, 2016 and 2015.

As of September 30, 2017, there was approximately \$0.4 million of remaining unamortized stock-based compensation expense associated with PRSAs, which will be expensed over a weighted average remaining service period of approximately 2.0 years.

Stock-based compensation

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

Stock-based Compensation Expense - by award type <i>(in thousands)</i>	For the Fiscal Years Ended September 30,		
	2017	2016	2015
Employee stock options	\$ 45	\$ 38	\$ 194
Restricted stock units and awards	1,643	1,683	2,658
Performance stock units and awards	1,367	—	—
Employee stock purchase plan	300	223	143
401(k) match in common stock	—	—	284
Outside director fees in common stock	247	218	341
Total stock-based compensation expense	<u>\$ 3,602</u>	<u>\$ 2,162</u>	<u>\$ 3,620</u>

Stock-based Compensation Expense - by expense type <i>(in thousands)</i>	For the Fiscal Years Ended September 30,		
	2017	2016	2015
Cost of revenue	\$ 492	\$ 345	\$ 341
Selling, general, and administrative	2,605	1,445	2,847
Research and development	505	372	432
Total stock-based compensation expense	<u>\$ 3,602</u>	<u>\$ 2,162</u>	<u>\$ 3,620</u>

For the fiscal year ended September 30, 2017, total stock-based compensation expense did not agree with the amount listed on our statements of shareholders' equity due to the timing difference between the expense accrued and the issuance of common stock for the payment of outside directors' fees. For the fiscal year ended September 30, 2016, total stock-based compensation expense did not agree with the amount listed on our statements of shareholders' equity primarily due to the timing difference between the expense accrued and the issuance of common stock for the payment of outside directors' fees and due to reclassification of stock-based compensation expense related to discontinued operations. For the fiscal year ended September 30, 2015, total stock-based compensation expense did not agree with the amount listed on our statements of shareholders' equity primarily due to the timing difference between the expense accrued and the issuance of common stock for the payment of outside directors' fees and our 401(k) company match and due to reclassification of stock-based compensation expense related to discontinued operations.

The stock-based compensation expense above relates to continuing operations. Stock-based compensation within selling, general and administrative expense was higher for the fiscal year ended September 30, 2017 due to stock-based compensation expense associated with the grants of PSUs and PRSAs. Included within discontinued operations is \$0, \$(77,000) and \$1.0 million of stock based compensation expense for the fiscal years ended September 30, 2017, 2016 and 2015, respectively.

Capital Stock

Our authorized capital stock consists of 50 million shares of common stock, no par value, and 5,882,000 shares of preferred stock, \$0.0001 par value. As of September 30, 2017, we had 33.9 million and 27.0 million shares of common stock issued and outstanding, respectively. There were no shares of preferred stock issued or outstanding as of September 30, 2017 and 2016.

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 fiscal years ended September 30, 2017, 2016 and 2015 was approximately \$0.5 million, \$0.4 million and \$0.2 million, respectively. For the fiscal year ended September 30, 2015, we contributed approximately \$0.3 million in common stock to the savings plan. All participant accounts had their holdings in Company stock liquidated as of December 3, 2015.

Income (Loss) Per Share

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

Basic and Diluted Net Income (Loss) Per Share (in thousands, except per share)	For the Fiscal Years Ended September 30,		
	2017	2016	2015
Numerator:			
Income from continuing operations	\$ 8,221	\$ 2,619	\$ (2,272)
(Loss) income from discontinued operations	14	5,647	65,372
Undistributed earnings allocated to common shareholders for basic and diluted net income per share	8,235	8,266	63,100
Denominator:			
Denominator for basic net income per share - weighted average shares outstanding	26,659	25,979	30,012
Dilutive options outstanding, unvested stock units, unvested stock awards and ESPP	885	539	—
Denominator for diluted net income per share - adjusted weighted average shares outstanding	27,544	26,518	30,012
Net income (loss) per basic share:			
Continuing operations	\$ 0.31	\$ 0.10	\$ (0.08)
Discontinued operations	0.00	0.22	2.18
Net income per basic share	\$ 0.31	\$ 0.32	\$ 2.10
Net income (loss) per diluted share:			
Continuing operations	\$ 0.30	\$ 0.10	\$ (0.08)
Discontinued operations	0.00	0.21	2.18
Net income per diluted share	\$ 0.30	\$ 0.31	\$ 2.10
Weighted average antidilutive options, unvested restricted stock units and awards, unvested performance stock units and ESPP shares excluded from the computation	398	508	1,391
Average market price of common stock	\$ 8.92	\$ 5.88	\$ 5.81

For diluted income (loss) per share, the denominator includes all outstanding common shares and all potential dilutive common shares to be issued. For the year ended September 30, 2017, we excluded 0.4 million of weighted average outstanding stock options, RSUs and PSUs from the calculation of diluted net income per share because their effect would have been anti-dilutive. For the years ended September 30, 2016 and 2015, we excluded 0.5 million and 1.4 million, respectively, of weighted average outstanding stock options and RSUs from the calculation of diluted net income per share because their effect would have been anti-dilutive.

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 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 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.

Per the amended ESPP, the total number of shares of common stock on which options may be granted under the ESPP are 3,250,000 shares. With the special dividend paid in July 2016, the total number of shares of common stock on which options may be granted under the ESPP were increased by 265,574 shares to a total of 3,515,574 shares. We issue new shares of common stock to satisfy the issuance of shares under this stock-based compensation plan. Common stock issued under the ESPP during the fiscal years ended September 30, 2017, 2016 and 2015 totaled 133,000, 193,000 and 121,000 shares, respectively. As of September 30, 2017, the total amount of common stock issued under the ESPP totaled 2,604,503 shares and the total shares remaining available for issuance under the ESPP totaled 911,071.

Future Issuances

As of September 30, 2017, we had common stock reserved for the following future issuances:

Future Issuances	Number of Common Stock Shares Available for Future Issuances
Exercise of outstanding stock options	326,798
Unvested restricted stock units	778,084
Unvested performance stock units	657,416
Purchases under the employee stock purchase plan	911,071
Issuance of stock-based awards under the Equity Plans	2,413,289
Purchases under the officer and director share purchase plan	88,741
Total reserved	5,175,399

NOTE 15. 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.

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	For the Fiscal Years Ended September 30,		
	2017	2016	2015
(in thousands)			
United States	\$ 98,520	\$ 66,436	\$ 55,736
Asia	16,713	17,401	16,885
Europe	7,015	7,618	8,249
Other	647	543	815
Total revenue	\$ 122,895	\$ 91,998	\$ 81,685

Significant Customers: Significant customers are defined as customers representing greater than 10% of our consolidated revenue. Revenue from three of our significant customers represented 71% of our consolidated revenue for the fiscal year ended September 30, 2017. Revenue from three of our significant customers represented 61% of our consolidated revenue for the fiscal year ended September 30, 2016. Revenue from four of our significant customers represented 61% of our consolidated revenue for the fiscal year ended September 30, 2015.

Long-lived Assets: Long-lived assets consist of property, plant, and equipment. As of September 30, 2017 and September 30, 2016, approximately 46% and 38%, respectively, of our long-lived assets were located in the United States. The remaining long-lived assets are primarily located in China.

NOTE 16. Selected Quarterly Financial Information (unaudited)

The following tables present our unaudited consolidated results of operations for the eight most recently ended quarters. We believe that all necessary adjustments, consisting only of normal recurring adjustments, have been included in the amounts below to present fairly the selected quarterly information when read in conjunction with the consolidated financial statements and notes included elsewhere in this Annual Report. Our results from operations vary substantially from quarter to quarter. Accordingly, the operating results for a quarter are not necessarily indicative of results for any subsequent quarter or for the full year. We have experienced and expect to continue to experience significant fluctuations in quarterly results.

EMCORE CORPORATION
Quarterly Consolidated Statements of Operations
For the Fiscal Year Ended September 30, 2017
(in thousands, except income per share)
(unaudited)

	For the Three Months Ended			
	December 31, 2016	March 31, 2017	June 30, 2017	September 30, 2017
Revenue	\$ 30,176	\$ 32,591	\$ 30,952	\$ 29,176
Cost of revenue	20,133	21,553	20,110	18,565
Gross profit	10,043	11,038	10,842	10,611
Operating expense (income):				
Selling, general, and administrative	5,578	5,672	5,815	5,181
Research and development	2,199	3,141	3,340	3,862
Impairments	—	468	—	38
Gain from change in estimate on ARO obligation	—	—	—	(45)
Gain on sale of assets	—	—	(322)	(134)
Total operating expense	7,777	9,281	8,833	8,902
Operating income	2,266	1,757	2,009	1,709
Other income (expense):				
Interest income, net	23	46	77	99
Foreign exchange (loss) gain	(403)	44	53	388
Other income	—	—	316	—
Total other (expense) income	(380)	90	446	487
Income from continuing operations before income tax (expense) benefit	1,886	1,847	2,455	2,196
Income tax (expense) benefit	(120)	8	(19)	(32)
Income from continuing operations	1,766	1,855	2,436	2,164
Loss from discontinued operations, net of tax	(9)	(7)	(11)	41
Net income	\$ 1,757	\$ 1,848	\$ 2,425	\$ 2,205
Per share data:				
Net income per basic share:				
Continuing operations	\$ 0.07	\$ 0.07	\$ 0.09	\$ 0.08
Discontinued operations	0.00	0.00	0.00	0.00
Net income per basic share	\$ 0.07	\$ 0.07	\$ 0.09	\$ 0.08
Net income per diluted share:				
Continuing operations	\$ 0.07	\$ 0.07	\$ 0.09	\$ 0.08
Discontinued operations	0.00	0.00	0.00	0.00
Net income per diluted share	\$ 0.07	\$ 0.07	\$ 0.09	\$ 0.08
Weighted-average number of basic shares outstanding	26,279	26,622	26,833	26,904
Weighted-average number of diluted shares outstanding	27,039	27,585	27,816	27,768

EMCORE CORPORATION
Quarterly Consolidated Statements of Operations
For the Fiscal Year Ended September 30, 2016
(in thousands, except income per share)
(unaudited)

	For the Three Months Ended			
	December 31, 2015	March 31, 2016	June 30, 2016	September 30, 2016
Revenue	\$ 22,490	\$ 21,532	\$ 22,376	\$ 25,600
Cost of revenue	15,089	14,510	14,964	16,481
Gross profit	7,401	7,022	7,412	9,119
Operating expense (income):				
Selling, general, and administrative	4,821	4,825	6,125	4,963
Research and development	2,560	2,564	2,405	2,392
Recovery of previously incurred litigation related fees and expenses from arbitration award	—	—	(2,599)	—
Gain on sale of assets	—	—	(41)	—
Total operating expense	7,381	7,389	5,890	7,355
Operating income (loss)	20	(367)	1,522	1,764
Other income (expense):				
Interest (expense) income, net	(17)	25	32	48
Foreign exchange (loss) gain	(135)	25	(201)	(83)
Total other (expense) income	(152)	50	(169)	(35)
Loss from continuing operations before income tax (expense) benefit	(132)	(317)	1,353	1,729
Income tax (expense) benefit	(2)	155	(175)	8
(Loss) income from continuing operations	(134)	(162)	1,178	1,737
Income from discontinued operations, net of tax	\$ 1,121	\$ 4,144	\$ 123	\$ 259
Net income	<u>\$ 987</u>	<u>\$ 3,982</u>	<u>\$ 1,301</u>	<u>\$ 1,996</u>
Per share data:				
Net income (loss) per basic share:				
Continuing operations	\$ 0.00	\$ (0.01)	\$ 0.05	\$ 0.07
Discontinued operations	0.04	0.16	0.00	0.01
Net income per basic share	<u>\$ 0.04</u>	<u>\$ 0.15</u>	<u>\$ 0.05</u>	<u>\$ 0.08</u>
Net income (loss) per diluted share:				
Continuing operations	\$ 0.00	\$ (0.01)	\$ 0.05	\$ 0.06
Discontinued operations	0.04	0.16	0.00	0.01
Net income per diluted share	<u>\$ 0.04</u>	<u>\$ 0.15</u>	<u>\$ 0.05</u>	<u>\$ 0.07</u>
Weighted-average number of basic shares outstanding	<u>25,697</u>	<u>25,942</u>	<u>26,103</u>	<u>26,177</u>
Weighted-average number of diluted shares outstanding	<u>25,697</u>	<u>25,942</u>	<u>26,269</u>	<u>26,674</u>

Report of Independent Registered Public Accounting Firm

The Board of Directors and Shareholders
EMCORE Corporation:

We have audited the accompanying consolidated balance sheets of EMCORE Corporation and subsidiaries (the Company) as of September 30, 2017 and 2016, and the related consolidated statements of operations and comprehensive income, shareholders' equity, and cash flows for each of the years in the three-year period ended September 30, 2017. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of EMCORE Corporation and subsidiaries as of September 30, 2017 and 2016, and the results of their operations and their cash flows for each of the years in the three-year period ended September 30, 2017, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of September 30, 2017, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and our report dated December 5, 2017, expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

/s/ KPMG LLP

Irvine, California
December 5, 2017

ITEM 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

ITEM 9A. Management's Annual Report on Internal Control over Financial Reporting

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 Securities Exchange Act of 1934, as amended) (the "Exchange Act") as of the end of the period covered by this Annual Report on Form 10-K. 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. Management's Annual Report on Internal Controls over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such is defined in Rules 13a-15(f) and 15d-15(f) promulgated under the Exchange Act. Under the supervision of our Chief Executive Officer and Chief Financial Officer and with the participation of our management, we conducted an evaluation of the effectiveness of our internal control over financial reporting as of September 30, 2017 based on the framework in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). Based on that evaluation, our management concluded that our internal control over financial reporting was effective as of September 30, 2017.

c. 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 Securities Exchange Act of 1934, as amended) during the quarter ended September 30, 2017 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

d. Limitations on Effectiveness of Controls and Procedures

Our management, including our Chief Executive Officer and Chief Financial Officer, does not expect that our disclosure controls or our internal controls over financial reporting will prevent or detect all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Controls can also be circumvented by individual acts, by collusion of two or more people, or by management override of the controls. The design of any system of controls is based, in part, upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Over time, controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with associated policies or procedures. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

The effectiveness of our internal control over financial reporting as of September 30, 2017 has been audited by KPMG LLP, our independent registered public accounting firm, as stated in their report which is included as follows.

Report of Independent Registered Public Accounting Firm

The Board of Directors and Shareholders
EMCORE Corporation:

We have audited EMCORE Corporation's internal control over financial reporting as of September 30, 2017, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). EMCORE Corporation's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed 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. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, EMCORE Corporation maintained, in all material respects, effective internal control over financial reporting as of September 30, 2017, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of EMCORE Corporation and subsidiaries as of September 30, 2017 and 2016, and the related consolidated statements of operations and comprehensive income, shareholders' equity, and cash flows for each of the years in the three-year period ended September 30, 2017, and our report dated December 5, 2017, expressed an unqualified opinion on those consolidated financial statements.

/s/ KPMG LLP

Irvine, California
December 5, 2017

[ITEM 9B.](#) Other Information

Not Applicable.

[PART III.](#)

[ITEM 10.](#) Directors, Executive Officers and Corporate Governance

Information regarding our executive officers and directors required by this Item is incorporated by reference to our Definitive Proxy Statement in connection with our Annual Meeting of Stockholders (Proxy Statement), which will be filed with the Securities and Exchange Commission within 120 days after the fiscal year ended September 30, 2017. Information required by Item 405 of Regulation S-K is incorporated by reference to the section entitled “Section 16(a) Beneficial Ownership Reporting Compliance” in the Proxy Statement referenced above. Information required by Items 407(c)(3), (d)(4) and (d)(5) of Regulation S-K is incorporated by reference to the Section entitled “Proposal 1: Election of Directors - Governance of the Company - Board Committees” in the Proxy Statement.

We have adopted a code of ethics entitled the “EMCORE Corporation Code of Business Conduct and Ethics,” which is applicable to all employees, officers, and directors of the Company. The full text of our Code of Business Conduct and Ethics is included with the Corporate Governance information available on our website (www.emcore.com). We intend to disclose any changes in or waivers from our code of ethics for our directors and executive officers to the extent disclosure is required by the applicable rules of the SEC and Nasdaq Stock Market LLC by posting such information on our website or by filing a Current Report on Form 8-K.

[ITEM 11.](#) Executive Compensation

Information required by this Item is incorporated by reference to the sections entitled “Proposal 1: Election of Directors - Director Compensation for Fiscal Year 2017,” “Compensation Discussion and Analysis,” “Executive Compensation,” “Compensation Committee Report” and “Compensation Committee Interlocks and Insider Participation” in the Proxy Statement.

[ITEM 12.](#) Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

Information regarding security ownership of certain beneficial owners and management is incorporated by reference to the section entitled “Security Ownership of Certain Beneficial Owners and Management” in the Proxy Statement.

Information regarding our equity compensation plans is incorporated by reference to the section entitled “Equity Compensation Plan Information ” in the Proxy Statement.

[ITEM 13.](#) Certain Relationships, Related Transactions and Director Independence

Information required by this Item is incorporated by reference to the sections entitled “Proposal 1: Election of Directors - Governance of the Company - Related Person Transaction Approval Policy” and “Proposal 1 - Election of Directors - Governance of the Company - Director Independence” in the Proxy Statement.

[ITEM 14.](#) Principal Accounting Fees and Services

Information required by this Item is incorporated by reference to the section entitled “Fiscal Years 2017 & 2016 Auditor Fees and Services” in the Proxy Statement.

Part IV.

ITEM 15. Exhibits and Financial Statement Schedules

(a)(1) Financial Statements

Included in Part II, Item 8 of this Annual Report on Form 10-K:

- Consolidated Statements of Operations and Comprehensive Income for the fiscal years ended September 30, 2017, 2016, and 2015
- Consolidated Balance Sheets as of September 30, 2017 and 2016
- Consolidated Statements of Shareholders' Equity for the fiscal years ended September 30, 2017, 2016, and 2015
- Consolidated Statements of Cash Flows for the fiscal years ended September 30, 2017, 2016, and 2015
- Notes to Consolidated Financial Statements
- Report of Independent Registered Public Accounting Firm

(a)(2) Financial Statement Schedules

The applicable financial statement schedules required under this Item 15(a)(2) are presented in our consolidated financial statements and notes thereto under Item 8 of this Annual Report on Form 10-K.

- | | |
|-------|---|
| 2.1 | <u>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).</u> |
| 2.2 | <u>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 Current Report on Form 8-K filed by the Registrant on November 26, 2014).</u> |
| 2.3 | <u>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).</u> |
| 2.4 | <u>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).</u> |
| 3.1 | <u>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).</u> |
| 3.2 | <u>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).</u> |
| 3.3 | <u>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).</u> |
| 3.4 | <u>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).</u> |
| 3.5 | <u>By-Laws of EMCORE Corporation, as amended through March 17, 2017 (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on March 20, 2017).</u> |
| 4.1** | <u>Specimen Certificate for Shares of Common Stock</u> |
| 4.2 | <u>Tax Benefits Preservation Plan, dated September 17, 2014, by and between EMCORE Corporation and American Stock Transfer & Trust Company, LLC (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on September 18, 2014).</u> |
| 4.3 | <u>Amendment No. 1 to Tax Benefits Preservation Plan, dated September 26, 2017, by and between EMCORE Corporation and American Stock Transfer & Trust Company, LLC (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on September 29, 2017).</u> |

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†	Directors Compensation Policy (Effective January 1, 2016) (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed on May 5, 2016).
10.3†	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).
10.4†	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).
10.5†	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).
10.6†	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).
10.7***†	2012 Equity Incentive Plan, as amended and restated on January 19, 2017.
10.8†	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).
10.09†	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).
10.10†	Form of Performance-Based Restricted Stock Award Agreement under the 2012 Equity Incentive Plan (for executive officers) (as of October 2016) (incorporated by reference to Exhibit 10.10 to the Company's Annual Report on Form 10-K filed on December 7, 2016).
10.11***†	Form of Performance-Based Restricted Stock Award Agreement under the 2012 Equity Incentive Plan (for non-executive officers) (as of October 2016).
10.12***†	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.
10.13***†	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.
10.14†	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).
10.15†	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).
10.16†	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).
10.17†	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).
10.18†	EMCORE Corporation Fiscal 2017 Bonus Plan (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on December 16, 2016).
21.1**	Subsidiaries of the Company.
23.1**	Consent of KPMG LLP, independent registered public accounting firm.
24.1	Power of Attorney (see the signature page of this Annual Report on Form 10-K)
31.1**	Certificate of Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2**	Certificate of Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1***	Certificate of Chief Executive Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2***	Certificate of Chief Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
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*

ITEM 16. Form 10-K Summary

None.

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: **December 5, 2017**

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

Date: **December 5, 2017**

By: **/s/ Jikun Kim**
Jikun Kim
Chief Financial Officer
(Principal Financial and Accounting Officer)

Each person whose signature appears below constitutes and appoints and hereby authorizes Jeffrey Rittichier such person's true and lawful attorney-in-fact, with full power of substitution or resubstitution, for such person and in his name, place and stead, in any and all capacities, to sign on such person's behalf, individually and in each capacity stated below, any and all amendments to this Form 10-K, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Commission granting unto said attorney-in-fact, full power and authority to do and perform each and every act and thing requisite or necessary to be done in and about the premises, as fully to all intents and purposes as such person might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact, or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant in the capacities indicated, on December 5, 2017.

Signature	Title
<u>/s/ Jeffrey Rittichier</u> Jeffrey Rittichier	Chief Executive Officer (Principal Executive Officer)
<u>/s/ Jikun Kim</u> Jikun Kim	Chief Financial Officer (Principal Financial and Accounting Officer)
<u>/s/ Ettore J. Coringrato, Jr.</u> Ettore J. Coringrato, Jr.	Director
<u>/s/ Stephen L. Domenik</u> Stephen L. Domenik	Director
<u>/s/ Gerald J. Fine, Ph.D.</u> Gerald J. Fine, Ph.D.	Chairman of the Board
<u>/s/ Rex S. Jackson</u> Rex S. Jackson	Director

NUMBER
EC 06603



SHARES

INCORPORATED UNDER THE LAWS OF THE STATE OF NEW JERSEY

SEE REVERSE FOR CERTAIN DEFINITIONS

CUSIP 290846 10 4

THIS CERTIFIES THAT:

IS THE OWNER OF

FULLY PAID AND NON-ASSESSABLE SHARES OF COMMON STOCK, WITHOUT PAR VALUE, OF

EMCORE CORPORATION

transferable on the books of the Corporation by the holder hereof in person or by attorney upon surrender of this certificate duly endorsed or assigned. This certificate and the shares represented hereby are subject to the laws of the State of New Jersey, and to the Articles of Incorporation and Bylaws of the Corporation, as now in effect or as hereafter amended. This certificate is not valid until countersigned and registered by the Transfer Agent and Registrar.

WITNESS the facsimile seal of the Corporation and the facsimile signatures of its duly authorized officers.

DATED:

Mark Weir
CHIEF FINANCIAL OFFICER



H. Han
CHIEF EXECUTIVE OFFICER

BY: *[Signature]*
AUTHORIZED SIGNATURE

COUNTERSIGNED AND REGISTERED
AMERICAN STOCK TRANSFER & TRUST COMPANY, LLC
NEW YORK, NY
TRANSFER AGENT AND REGISTRAR

The following abbreviations, when used in the inscription on the face of this certificate, shall be construed as though they were written out in full according to applicable laws or regulations:

TEN COM - as tenants in common
TEN ENT- as tenants by the entireties
JT TEN - as joint tenants with right of survivorship and not as tenants in common
UNIF GIFT MIN ACT-Custodian.....
(Cust) (Minor)
under Uniform Gifts to Minors Act.....
(State)

Additional abbreviations may also be used though not in the above list.

For Value Received, hereby sell, assign and transfer unto

PLEASE INSERT SOCIAL SECURITY OR OTHER IDENTIFYING NUMBER OF ASSIGNEE

(PLEASE PRINT OR TYPEWRITE NAME AND ADDRESS, INCLUDING ZIP CODE, OF ASSIGNEE)

Shares of the stock represented by the within Certificate, and do hereby irrevocably constitute and appoint

Attorney

to transfer the said stock on the books of the within named Corporation with full power of substitution in the premises.

Dated _

NOTICE: THE SIGNATURE TO THIS ASSIGNMENT MUST CORRESPOND WITH THE NAME AS WRITTEN UPON THE FACE OF THE CERTIFICATE IN EVERY PARTICULAR, WITHOUT ALTERATION OR ENLARGEMENT OR ANY CHANGE WHATSOEVER.

Signature(s) Guaranteed

By _ The Signature(s) must be guaranteed by an eligible guarantor institution (Banks, Stockbrokers, Savings and Loan Associations and Credit Unions with membership in an approved Signature Guarantee Medallion Program), pursuant to SEC Rule 17Ad-15.

EMCORE CORPORATION

2012 EQUITY INCENTIVE PLAN

(As Amended and Restated Effective as of January 19, 2017)

ARTICLE I.
PURPOSES OF THE PLAN

The purposes of this Plan are:

- to attract and retain the best available personnel for positions of substantial responsibility,
- to provide additional incentive to Employees, Directors and Consultants, and
- to promote the success of the Company's business.

Options granted under the Plan may be Incentive Stock Options or Nonstatutory Stock Options, as determined by the Administrator at the time of grant. Stock Appreciation Rights, Restricted Stock, Restricted Stock Units, Stock Purchase Rights, Performance Units and Share Awards may also be granted under the Plan.

ARTICLE II.
DEFINITIONS

2.1 *Certain Definitions.* As used herein, the following definitions shall apply:

- (a) “*Administrator*” means the Committee administering the Plan, in accordance with Section 4 of the Plan.
- (b) “*Adjustment Event*” means any dividend payable in capital stock, stock split, share combination, extraordinary cash dividend, recapitalization, reorganization, merger, consolidation, split-up, spin-off, combination, exchange of shares or other similar event affecting the Common Stock.
- (c) “*Affiliate*” means (i) any corporation or limited liability company in an unbroken chain of corporations or limited liability companies ending with the Company if each corporation or limited liability company owns stock or membership interests (as applicable) possessing more than fifty percent (50%) of the total combined voting power of all classes of stock in one of the other corporations or limited liability companies in such chain; (ii) any Subsidiary or Parent of the Company or any Affiliate of the Company; or (iii) any other entity, approved by the Committee as an Affiliate under the Plan, in which the Company or any of its Affiliates has a material equity interest.
- (d) “*Applicable Laws*” means the requirements relating to the administration of equity plans under U.S. state corporate laws, U.S. federal and state securities laws, the Code, any stock exchange or quotation system on which the Common Stock is listed or quoted and the applicable laws of any foreign country or jurisdiction where Awards are, or will be, granted under the Plan.
- (e) “*Award*” means, individually or collectively, a grant under the Plan of Options, Stock Appreciation Rights, Restricted Stock, Restricted Stock Units, Stock Purchase Rights, Performance Units, or Share Awards.
- (f) “*Award Agreement*” means the written or electronic agreement, contract, or other instrument or document evidencing or setting forth the terms and provisions applicable to each Award granted under the Plan. The Award Agreement is subject to the terms and conditions of the Plan, and in the event of any inconsistency or conflict between the terms of the Plan and an Award Agreement, the terms of the Plan shall govern. The terms of any plan, policy or guideline adopted by the Administrator and applicable to an Award shall be deemed incorporated in and part of the related Award Agreement. The Administrator may

provide for the use of electronic, internet or other non-paper Award Agreements, and the use of electronic, internet or other non-paper means for the Participant's acceptance of, or actions under, an Award Agreement unless otherwise expressly specified herein.

(g) "Awarded Stock" means the Common Stock subject to an Award.

(h) "Beneficial Ownership" (including correlative terms) shall have the same meaning given such term in Rule 13d-3 promulgated under the Exchange Act.

(i) "Board" means the Board of Directors of the Company.

(j) "Cause" means (as determined by the Administrator) (i) willful and continued failure to perform substantially the Participant's material duties with the Company (other than any such failure resulting from the Participant's incapacity as a result of physical or mental illness) after a written demand for substantial performance specifying the manner in which the Participant has not performed such duties is delivered to the Participant by the person or entity that supervises or manages the Participant, (ii) engaging in willful and serious misconduct that is injurious to the Company or any of its Subsidiaries, (iii) one or more acts of fraud or personal dishonesty resulting in or intended to result in personal enrichment at the expense of the Company or any of its Subsidiaries, (iv) substantial abusive use of alcohol, drugs or similar substances that, in the sole judgment of the Company, impairs the Participant's job performance, (v) material violation of any Company policy that results in harm to the Company or any of its Subsidiaries or (vi) indictment for or conviction of (or plea of guilty or *nolo contendere*) to a felony or of any crime (whether or not a felony) involving moral turpitude. A "Termination for Cause," shall include a determination by the Administrator following a Participant's termination of employment for any other reason that, prior to such termination of employment, circumstances constituting Cause existed with respect to such Participant. Notwithstanding the foregoing, with respect to any Participant who is a party to an employment agreement with the Company or any Parent, Subsidiary or Affiliate, "Cause" shall have the meaning, if any, specified in such Participant's employment agreement.

(k) "Change in Control" means the occurrence of any of the following:

(i) an acquisition in one transaction or a series of related transactions (other than directly from the Company or pursuant to Awards granted under the Plan or other similar awards granted by the Company) of any Voting Securities by any Person, immediately after which such Person has Beneficial Ownership of fifty percent (50%) or more of the combined voting power of the Company's then outstanding Voting Securities; *provided, however*, in determining whether a Change in Control has occurred hereunder, Voting Securities which are acquired in a Non-Control Acquisition shall not constitute an acquisition that would cause a Change in Control;

(ii) the individuals who, immediately prior to the effective date of this amended and restated version of this Plan, are members of the Board (the "**Incumbent Board**"), cease for any reason to constitute at least a majority of the members of the Board; *provided, however*, that if the election, or nomination for election, by the Company's common stockholders, of any new director was approved by a vote of at least a majority of the Incumbent Board, such new director shall, for purposes of the Plan, be considered as a member of the Incumbent Board; *provided further, however*, that no individual shall be considered a member of the Incumbent Board if such individual initially assumed office as a result of either an actual or threatened "Election Contest" (as described in Rule 14a-11 promulgated under the Exchange Act) or other actual or threatened solicitation of proxies or consents by or on behalf of a Person other than the Board (a "**Proxy Contest**") including by reason of any agreement intended to avoid or settle any Election Contest or Proxy Contest; or

(iii) the *consummation* of:

(A) a merger, consolidation or reorganization involving the Company *unless*:

(1) the stockholders of the Company, immediately before such merger, consolidation or reorganization, own, directly or indirectly, immediately following such merger, consolidation or reorganization, more than fifty percent (50%) of the combined voting power of the outstanding voting securities of the corporation resulting from such merger or consolidation or reorganization (the "**Surviving Corporation**") in substantially the same proportion as their ownership of the Voting Securities immediately before such merger, consolidation or reorganization,

(2) the individuals who were members of the Incumbent Board immediately prior to the execution of the agreement providing for such merger, consolidation or reorganization constitute at least a majority

of the members of the board of directors of the Surviving Corporation, or a corporation Beneficially Owning, directly or indirectly, a majority of the voting securities of the Surviving Corporation, and

(3) no Person, *other than* (i) the Company, (ii) any Related Entity, (iii) any employee benefit plan (or any trust forming a part thereof) that, immediately prior to such merger, consolidation or reorganization, was maintained by the Company, the Surviving Corporation, or any Related Entity or (iv) any Person who, together with its Affiliates, immediately prior to such merger, consolidation or reorganization had Beneficial Ownership of fifty percent (50%) or more of the then outstanding Voting Securities, owns, together with its Affiliates, Beneficial Ownership of fifty percent (50%) or more of the combined voting power of the Surviving Corporation's then outstanding voting securities (a transaction described in clauses (1) through (3) above is referred to herein as a “**Non-Control Transaction**”);

(B) a complete liquidation or dissolution of the Company; or

(C) the sale or other disposition of all or substantially all of the assets or business of the Company to any Person (other than a transfer to a Related Entity or the distribution to the Company's stockholders of the stock of a Related Entity or any other assets).

Notwithstanding the foregoing, a Change in Control shall not be deemed to occur solely because any Person (the “**Subject Person**”) acquired Beneficial Ownership of fifty percent (50%) or more of the combined voting power of the then outstanding Voting Securities as a result of the acquisition of Voting Securities by the Company which, by reducing the number of Voting Securities then outstanding, increases the proportional number of shares Beneficially Owned by the Subject Persons, *provided* that if a Change in Control would occur (but for the operation of this sentence) as a result of the acquisition of Voting Securities by the Company, and (1) before such share acquisition by the Company the Subject Person becomes the Beneficial Owner of any new or additional Voting Securities in a related transaction or (2) after such share acquisition by the Company the Subject Person becomes the Beneficial Owner of any new or additional Voting Securities which in either case increases the percentage of the then outstanding Voting Securities Beneficially Owned by the Subject Person, then a Change in Control shall be deemed to occur. Solely for purposes of this Change in Control definition, (x) “Affiliate” shall mean, with respect to any Person, any other Person that, directly or indirectly, controls, is controlled by, or is under common control with, such Person; (y) any “Relative” (for this purpose, “Relative” means a spouse, child, parent, parent of spouse, sibling or grandchild) of an individual shall be deemed to be an Affiliate of such individual for this purpose; and (z) neither the Company nor any Person controlled by the Company shall be deemed to be an Affiliate of any holder of Common Stock.

(l) “*Change in Control Price*” means the price per share on a fully diluted basis offered in conjunction with any transaction resulting in a Change in Control, as determined in good faith by the Administrator as constituted before the Change in Control, if any part of the offered price is payable other than in cash.

(m) “*Code*” means the Internal Revenue Code of 1986, as amended, and the regulations and other guidance promulgated thereunder.

(n) “*Committee*” means the Compensation Committee of the Board or, if applicable, the full Board or the delegate of the Compensation Committee of the Board as permitted or required herein.

(o) “*Common Stock*” means the no par value common stock of the Company and any other securities into which the Common Stock is changed or for which the Common Stock is exchanged (or, in the case of certain Restricted Stock Units, the cash equivalent thereof).

(p) “*Company*” means EMCORE Corporation, a New Jersey corporation, and any successor thereto.

(q) “*Consultant*” means any person, including an advisor, engaged by the Company or any Parent, Subsidiary or Affiliate to render services to such entity in a consulting, independent contractor or other similar role.

(r) “*Director*” means a member of the Board.

(s) “*Disability*” means, unless otherwise provided in an Award Agreement, a physical or mental disability or infirmity that prevents or is reasonably expected to prevent the performance of a Participant's employment-related duties for a period of six months or longer and, within 30 days after the Company notifies the Participant in writing that it intends to terminate his employment, the Participant shall not have returned to the performance of his employment-related duties on a full-time basis;

provided, that (i) for purposes of Incentive Stock Options, the term “Disability” shall have the meaning assigned to the term “Permanent and Total Disability” by Section 22(e)(3) of the Code (i.e., physical or mental disability or infirmity lasting not less than 12 months), and (ii) with respect to any Award that constitutes deferred compensation subject to Section 409A of the Code, “Disability” shall have the meaning set forth in Section 409A(a)(2)(c) of the Code. The Administrator’s reasoned and good faith judgment of Disability shall be final, binding and conclusive, and shall be based on such competent medical evidence as shall be presented to it by such Participant and/or by any physician or group of physicians or other competent medical expert employed by the Participant or the Company to advise the Administrator. Notwithstanding the foregoing (but except in the case of ISOs and awards subject to Section 409A of the Code), with respect to any Participant who is a party to an employment agreement with the Company or any Parent, Subsidiary or Affiliate, “Disability” shall have the meaning, if any, specified in such Participant’s employment agreement.

(t) “*Dividend Equivalents*” means an amount equal to any dividends and distributions paid by the Company with respect to the number of shares of Common Stock subject to an Award. Awards of Dividend Equivalents shall be subject to Section 4.6.

(u) “*Employee*” means any person, including Officers and Directors, employed by the Company or any Parent, Subsidiary or Affiliate. A Service Provider shall not cease to be an Employee in the case of (i) any leave of absence approved by the Company or (ii) transfers between locations of the Company or between the Company, its Parent, any Subsidiary, an Affiliate, or any successor or (iii) as provided in an Award Agreement. For purposes of Incentive Stock Options, no such leave may exceed ninety days, unless reemployment upon expiration of such leave is guaranteed by statute or contract. If reemployment upon expiration of a leave of absence approved by the Company is not so guaranteed, on the 181st day of such leave any Incentive Stock Option held by the Optionee shall cease to be treated as an Incentive Stock Option and shall be treated for tax purposes as a Nonstatutory Stock Option. Neither service as a Director nor payment of a director’s fee by the Company shall be sufficient to constitute “employment” by the Company.

(v) “*Exchange Act*” means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

(w) “*Fair Market Value*” of a share of Common Stock as of a given date shall be: (i) if the Common Stock is listed or admitted to trading on an established stock exchange (including, for this purpose, The Nasdaq Global Market that comprises part of The Nasdaq Stock Market), the closing sale price for a share of Common Stock on the composite tape or in Nasdaq Global Market trading as reported in *The Wall Street Journal* (or, if not so reported, such other nationally recognized reporting source as the Administrator shall select) on such date, or, if no such price is reported on such date, the most recent day for which such price is available shall be used; (ii) if the Common Stock is not then listed or admitted to trading on such a stock exchange, the closing sale price for a share of Common Stock on such date as reported by The Nasdaq Capital Market or, if not so reported, by the OTC Bulletin Board (or any successor or similar quotation system regularly reporting the market value of the Common Stock in the over-the-counter market), or, if no such price is reported for such date, the most recent day for which such price is available shall be used; or (iii) in the event neither of the valuation methods provided for in clauses (i) and (ii) above is practicable, the fair market value of a share of Common Stock determined by such other reasonable valuation method as the Administrator shall, in its discretion, select and apply in good faith as of the given date; *provided, however*, that for purposes of an ISO, such fair market value shall be determined subject to Section 422(c)(7) of the Code.

(x) “*Fiscal Year*” means the fiscal year of the Company.

(y) “*Incentive Stock Option*” means an Option designated as such and that qualifies as an incentive stock option within the meaning of Section 422 of the Code.

(z) “*Non-Control Acquisition*” - an acquisition by (i) an employee benefit plan (or a trust forming a part thereof) maintained by (A) the Company or (B) any corporation or other Person of which a majority of its voting power or its voting equity securities or equity interest is owned, directly or indirectly, by the Company (a “*Related Entity*”), (ii) the Company or any Related Entity, or (iii) any Person in connection with a Non-Control Transaction.

(aa) “*Nonstatutory Stock Option*” means an Option designated as such or an Option that does not otherwise meet the requirements of Section 422 of the Code.

(bb) “*Notice of Grant*” means a written or electronic notice evidencing certain terms and conditions of an individual Award. The Notice of Grant is part of the Award Agreement (and may be contained in the document or instrument evidencing the Award Agreement).

(cc) “*Officer*” means each person who is an officer of the Company or any Subsidiary or Parent and who is subject to the reporting requirements under Section 16(a) of the Exchange Act.

(dd) “*Option*” means a stock option granted pursuant to the Plan.

(ee) “*Optionee*” means the holder of an outstanding Option granted under the Plan.

(ff) “*Parent*” means a “parent corporation,” whether now or hereafter existing, of the Company as defined in Section 424(e) of the Code.

(gg) “*Participant*” means the holder of an outstanding Award granted under the Plan.

(hh) “*Performance Goals*” for any grant of Awards intended to qualify as “performance-based” compensation under Section 162(m) of the Code will be based upon the relative or comparative achievement of one or more of the following criteria, as determined by the Administrator: net sales; revenue; revenue growth or product revenue growth; operating income (before or after taxes); pre- or after-tax income (before or after allocation of corporate overhead and bonus); net earnings; earnings per share; net income or adjusted net income (before or after taxes); return on equity; total shareholder return; return on assets or net assets; appreciation in and/or maintenance of share price; market share; gross profits; earnings (including adjusted pre-tax earnings, earnings before taxes, earnings before interest and taxes or earnings before interest, taxes, depreciation and amortization); economic value-added models or equivalent metrics; comparisons with various stock market indices; reductions in costs; total net cash flow; cash flow or cash flow per share (before or after dividends); return on capital (including return on total capital or return on invested capital); cash flow return on investment; improvement in or attainment of expense levels or working capital levels; operating margins, gross margins or cash margin; year-end cash; debt reductions; shareholder equity; market share; regulatory achievements; and implementation, completion or attainment of measurable objectives with respect to customer satisfaction, research, development, products or projects and recruiting and maintaining personnel.

Performance objectives may be established on a Company-wide basis or with respect to one or more Company business units or divisions, or Subsidiaries; and either in absolute terms, relative to the performance of one or more similarly situated companies, or relative to the performance of an index covering a peer group of companies. When establishing performance objectives for the applicable Performance Period, the Administrator may exclude any or all “extraordinary items” as determined under U.S. generally acceptable accounting principles including, without limitation, the charges or costs associated with restructurings of the Company, discontinued operations, other unusual or non-recurring items, and the cumulative effects of accounting changes, and as identified in the Company’s financial statements, notes to the Company’s financial statements or management’s discussion and analysis of financial condition and results of operations contained in the Company’s most recent report filed with the U.S. Securities and Exchange Commission pursuant to the Exchange Act; *provided*, that the Administrator shall have no discretion with respect to any Award intended to qualify as “performance-based” compensation under Section 162(m) of the Code if the exercise of such discretion or the ability to exercise such discretion would cause such Award to fail to qualify as “performance-based” compensation under Section 162(m) of the Code.

(ii) “*Performance Period*” means the time period of any Fiscal Year or such other period as determined by the Administrator in its sole discretion during which the performance objectives must be met.

(jj) “*Performance Unit*” means a Participant’s contractual right to receive a cash-denominated award, payable in cash or shares of Common Stock or a combination thereof, under the Plan at the end of a specified period of time that is forfeitable by the Participant until the completion of a specified period of future service, until the attainment of specified performance objectives, or until otherwise determined by the Administrator or in accordance with the Plan. Each Performance Unit represents an unfunded and unsecured obligation of the Company.

(kk) “*Person*” means “person” as such term is used for purposes of Section 13(d) or 14(d) of the Exchange Act, including, without limitation, any individual, corporation, limited liability company, partnership, trust, unincorporated organization, government or any agency or political subdivision thereof, or any other entity or any group of Persons.

(ll) “*Plan*” means this EMCORE Corporation 2012 Equity Incentive Plan, as the same may be interpreted by the Administrator and/or be amended from time to time.

(mm) “*Replacement Award*” means an Award made to employees of companies or businesses acquired by the Company to replace incentive awards and opportunities held by such employees prior to such acquisition.

(nn) “*Restricted Stock*” means a grant of a stated number of shares of Common Stock to a Participant under the Plan that is forfeitable by the Participant until the completion of a specified period of future service, until the attainment of specified

performance objectives, and/or until otherwise determined by the Administrator or in accordance with the Plan. Additionally, Restricted Stock, if context demands, may also refer herein to shares of Common Stock acquired pursuant to a grant of Stock Purchase Rights under Section 11 of the Plan.

(oo) “*Restricted Stock Unit*” means a Participant’s contractual right to receive a stated number of shares of Common Stock or, if provided by the Administrator on or after the grant date, cash equal to the Fair Market Value of such shares of Common Stock or any combination of shares of Common Stock and cash having an aggregate Fair Market Value equal to such stated number of shares of Common Stock, under the Plan at the end of a specified period of time that is forfeitable by the Participant until the completion of a specified period of future service, until the attainment of specified performance objectives, or until otherwise determined by the Administrator or in accordance with the Plan. Each Restricted Stock Unit represents an unfunded and unsecured obligation of the Company.

(pp) “*Rule 16b-3*” means Rule 16b-3 of the Exchange Act or any successor to Rule 16b-3, as in effect when discretion is being exercised with respect to the Plan.

(qq) “*Section 16(b)*” means Section 16(b) of the Exchange Act.

(rr) “*Service Provider*” means an Employee, Director or Consultant. Unless otherwise provided in an Award Agreement, a person shall continue to be a Service Provider even if such person ceases to be an Employee, Director or Consultant, as the case may be, but continues to provide services uninterrupted in a different position constituting a Service Provider.

(ss) “*Share*” means a share of the Common Stock, as adjusted in accordance with Section 15 of the Plan.

(tt) “*Share Award*” means an Award of unrestricted shares of Common Stock granted pursuant to the Plan.

(uu) “*Stock Appreciation Right*” means, with respect to shares of Common Stock, the right to receive a payment from the Company in cash and/or shares of Common Stock equal to the product of (i) the excess, if any, of the Fair Market Value of one share of Common Stock on the exercise date over a specified base price fixed by the Administrator on the grant date, multiplied by (ii) a stated number of shares of Common Stock.

(vv) “*Stock Purchase Right*” means the right to purchase Common Stock pursuant to Section 11 of the Plan, as evidenced by a Notice of Grant.

(ww) “*Subsidiary*” means a “subsidiary corporation”, whether now or hereafter existing, of the Company as defined in Section 424(f) of the Code.

(xx) “*Voting Securities*” means all the outstanding voting securities of the Company entitled to vote generally in the election of the Board.

ARTICLE III. STOCK SUBJECT TO THE PLAN

3.1 *Number.* Subject to the provisions of Section 15 of the Plan, the maximum aggregate number of Shares that are available for Awards under the Plan is 5,301,366 Shares (all of which may be the subject of Incentive Stock Options granted under the Plan). The foregoing limitation shall be adjusted proportionately in connection with any change in the Company’s capitalization as described in Section 15 of the Plan. The Shares may consist, in whole or in part, of Common Stock held in treasury or authorized but unissued shares of Common Stock, not reserved for any other purpose.

3.2 *Cancelled or Forfeited Awards, etc.* Shares subject to any Award granted under the Plan (other than Replacement Awards) that for any reason are canceled, terminated, forfeited, settled in cash or otherwise settled without the issuance of Common Stock, or, with respect to Shares of Restricted Stock that are forfeited back to or repurchased by the Company, such Shares shall become available for future grant or sale under the Plan (unless the Plan has terminated); *provided*, however, that Shares that have actually been issued under the Plan under any Award shall not be returned to the Plan and shall not become available for future distribution under the Plan, except that if Shares of Restricted Stock are repurchased by the Company at their original purchase price or are forfeited to the Company, such Shares shall become available for future grant or sale under the Plan (unless the Plan has terminated). To the extent an Award under the Plan is paid out in cash rather than stock, such cash payment shall not reduce the number of Shares available for issuance under the Plan. Replacement Awards that for any reason are canceled, terminated,

forfeited, settled in cash or otherwise settled without the issuance of Common Stock after the effective date of the Plan shall not be available for grant under the Plan.

Without limiting the generality of the above, (i) shares of Common Stock tendered by a Participant or withheld by the Company to pay the exercise price of any Options or Stock Appreciation Rights, as well as any shares of Common Stock repurchased by the Company on the open market using the proceeds from the exercise of any Options or other Awards, shall not be available for grant under the Plan, (ii) shares of Common Stock tendered by a Participant or withheld by the Company to satisfy the tax withholding obligations related to any Options, Stock Appreciation Rights, or other “full-value” Awards shall not be available for grant under the Plan, and (iii) upon settlement of Stock Appreciation Rights, the total number of shares of Common Stock subject to the Stock Appreciation Rights shall not be available for grant under the Plan (for purposes of clarity, if a Stock Appreciation Right relates to 100,000 shares and is exercised at a time when the payment due is 15,000 shares, 100,000 shares shall be counted against the Plan’s share limit). However, shares of Common Stock issued in connection with Awards that are assumed, converted or substituted pursuant to an Adjustment Event or Change in Control (i.e., Alternative Awards), or issued in connection with Replacement Awards, shall not be counted against the maximum limitation specified in Section 3.1 above.

For purposes of this Article III, if a Stock Appreciation Right is granted in tandem with an Option so that only one may be exercised with the other being surrendered on such exercise in accordance with Article X, the number of shares subject to the tandem Option and Stock Appreciation Right award shall only be taken into account once (and not as to both Awards).

3.3 *Limit on Awards to Non-Employee Directors.* Awards that are granted during any one calendar year to any person who, on the grant date of the Award, is a non-employee Director are subject to the limits of this Section 3.3. The maximum number of shares of Common Stock subject to Awards granted during any one calendar year to an individual who, on the grant date of the Award, is a non-employee Director is the number of shares that produces a grant date fair value for the Award that, when combined with the grant date fair value of any other Awards granted during that same calendar year to that individual in his or her capacity as a non-employee Director, is \$250,000; provided that this limit is \$350,000 as to (1) a non-employee Director who is serving as the Chairman of the Board or the Lead Independent Director at the time the applicable grant is made or (2) any new non-employee Director for the calendar year in which the non-employee Director is first elected or appointed to the Board. For purposes of this Section 3.3, a “non-employee Director” is an individual who, on the grant date of the Award, is a member of the Board who is not then an Officer or Employee of the Company or one of its Subsidiaries. For purposes of this Section 3.3, “grant date fair value” means the value of the Award as of the date of grant of the Award and as determined using the equity award valuation principles applied in the Company’s financial reporting. The limits of this Section 3.3 do not apply to, and shall be determined without taking into account, any Award granted to an individual who, on the grant date of the Award, is an Officer or Employee of the Company or one of its Subsidiaries. The limits of this Section 3.3 apply on an individual basis and not on an aggregate basis to all non-employee Directors as a group.

ARTICLE IV. ADMINISTRATION OF THE PLAN

4.1 *Procedure.*

(ab) *Administrative Body.* The Committee shall administer the Plan.

(ac) *Section 162(m).* To the extent that the Administrator determines it to be desirable to qualify Awards granted hereunder as “performance-based compensation” within the meaning of Section 162(m) of the Code, the Plan shall be administered by a Committee of two or more “outside directors” within the meaning of Section 162(m) of the Code.

(ad) *Rule 16b-3.* To the extent desirable to qualify transactions hereunder as exempt under Rule 16b-3, the transactions contemplated hereunder shall be structured to satisfy the requirements for exemption under Rule 16b-3.

(ae) *Other Administration.* Other than as provided above, the Plan shall be administered by the Committee, which committee shall be constituted to satisfy Applicable Laws.

(af) *Delegation.* The Committee may delegate, subject to the provisions of this Plan, EMCORE Corporation’s Incentive Stock Option Grant Policy and such other policies as the Committee may adopt, to any officer or group of officers, or director or group of directors of the Company (including to a subcommittee of members of the Compensation Committee of the Board) or its affiliates any portion of its authority and powers under the Plan with respect to Participants who are not Officers; *provided*, that any delegation to one or more officers of the Company shall be subject to N.J.S.A. Section 14A:8-1(4) (or successor provision). Only the Committee may select, grant, administer, or exercise any other discretionary authority under the Plan in respect of Awards granted to such Participants who are Officers.

4.2 *Powers of the Administrator.* Subject to the provisions of the Plan, the Administrator shall have the authority, in its discretion:

- (i) to determine the Fair Market Value;
- (ii) to select the Service Providers to whom Awards may be granted hereunder;
- (iii) to determine the number of shares of Common Stock to be covered by each Award granted hereunder;
- (iv) to approve forms of agreement for use under the Plan;
- (v) to determine the terms and conditions, not inconsistent with the terms of the Plan, of any Award granted hereunder. Such terms and conditions include, but are not limited to, the exercise price, the time or times when Awards may be exercised, purchased or vested (which may be based on performance criteria), any vesting acceleration or waiver of forfeiture or repurchase restrictions, any customary representations, warranties and covenants with respect to securities law matters, and any restriction or limitation regarding any Award or the shares of Common Stock relating thereto, based in each case on such factors as the Administrator, in its sole discretion, shall determine;
- (vi) to construe and interpret the terms of the Plan and Awards granted pursuant to the Plan;
- (vii) to prescribe, amend and rescind rules and regulations relating to the Plan, including rules and regulations relating to sub-plans established for the purpose of qualifying for preferred tax treatment under foreign tax laws or satisfying applicable foreign laws;
- (viii) to modify the terms and conditions of Awards granted to Participants employed outside the United States, or take any action which it deems advisable to obtain, comply with or otherwise reflect any necessary governmental regulatory procedures, exemptions or approvals with respect to the Plan or any subplan established hereunder;
- (ix) to modify or amend each Award (subject to Sections 4.4 and 17.3 of the Plan), including the discretionary authority to extend the post-termination exercisability period of Awards longer than is otherwise provided for in the Plan (but in no event later than the expiration of the term of such Award as set forth in the Award Agreement);
- (x) to allow Participants to satisfy withholding tax obligations by electing to have the Company withhold from the Shares or cash to be issued upon exercise or vesting of an Award that number of Shares or cash having a Fair Market Value equal to the amount required to be withheld. All elections by a Participant to have Shares or cash withheld for this purpose shall be made in such form and under such conditions as the Administrator may deem necessary or advisable;
- (xi) to authorize any person to execute on behalf of the Company any instrument required to effect the grant of an Award previously granted by the Administrator;
- (xii) appoint accountants, actuaries, counsel, advisors and other persons that it deems necessary or desirable in connection with the administration of the Plan;
- (xiii) to make all other determinations deemed necessary or advisable for administering the Plan.

4.3 *Effect of Administrator's Decision.* The Administrator's decisions, determinations and interpretations shall be final and binding on all Participants and any other holders of Awards. The Administrator's determinations under the Plan need not be uniform and may be made by the Administrator selectively among persons who receive, or are eligible to receive, Awards under the Plan, whether or not such persons are similarly situated. To the maximum extent permitted by law, no member of the Administrator shall be liable for any action taken or decision made in good faith relating to the Plan or any Award hereunder.

4.4 *Prohibition Against Repricing.* Except to the extent (i) approved in advance by a majority of the shares of the Company entitled to vote generally in the election of directors or (ii) as a result of any Adjustment Event, the Administrator shall not have the power or authority to reduce, whether through amendment or otherwise, the exercise price of any outstanding Option or base price of any outstanding Stock Appreciation Right, or to grant any new Award, or make any cash payment, in substitution for or upon the cancellation of Options or Stock Appreciation Rights previously granted.

4.5 *Minimum Vesting Requirement.* Except as provided in the next sentence, all Awards granted under the Plan shall be subject to a minimum vesting requirement of one year, and no portion of any such Award may vest earlier than the first anniversary of the grant date of the award (the “*Minimum Vesting Requirement*”). The Minimum Vesting Requirement shall not apply to 5% of the total number of shares available under the Plan.

4.6 *Dividends on Unvested Equity Awards.* If the Company pays an ordinary cash dividend, the cash dividend shall not be paid on a current basis with respect to any Awards that are not vested as of the record date for the ordinary cash dividend. Nothing in this Section 4.6 shall limit or restrict the Administrator’s ability (1) for Shares subject to Restricted Stock Awards, to pay the amount of the ordinary cash dividend upon (and subject to) the vesting of such Shares subject to the Restricted Stock Awards, or (2) for Restricted Stock Units or Performance Units, to credit Dividend Equivalents with respect to such Awards in the form of additional Restricted Stock Units or Performance Units, as applicable, that will be subject to the same vesting terms and conditions as the underlying Restricted Stock Units or Performance Units to which they relate, or (3) to make any adjustment pursuant to Section 15 of the Plan.

ARTICLE V. ELIGIBILITY

Nonstatutory Stock Options, Stock Appreciation Rights, Stock Purchase Rights, Restricted Stock Units, Restricted Stock, Performance Units or Share Awards may be granted to Service Providers. Incentive Stock Options may be granted only to Employees.

ARTICLE VI. LIMITATIONS ON OPTIONS AND STOCK APPRECIATION RIGHTS

6.1 *Generally.* Each Option shall be designated in the Award Agreement as either an Incentive Stock Option or a Nonstatutory Stock Option. However, notwithstanding such designation, to the extent that the aggregate Fair Market Value of the Shares with respect to which Incentive Stock Options are exercisable for the first time by the Optionee during any calendar year (under all plans of the Company and any Parent or Subsidiary) exceeds \$100,000, such Options shall be treated as Nonstatutory Stock Options. For purposes of this Section 6.1, Incentive Stock Options shall be taken into account in the order in which they were granted. The Fair Market Value of the Shares shall be determined as of the time the Option with respect to such Shares is granted.

6.2 *Individual Limitations.* The following limitations shall apply to grants of Options and Stock Appreciation Rights:

(ag) No Service Provider shall be granted, in any Fiscal Year, Options to purchase more than 200,000 Shares. No Service Provider shall be granted, in any Fiscal Year, Stock Appreciation Rights covering more than 200,000 Shares.

(ah) In connection with his or her initial service, a Service Provider may be granted in the Fiscal Year of initial service Options to purchase up to an additional 400,000 Shares, which shall not count against the limit set forth in paragraph (a) above. In connection with his or her initial service, a Service Provider may be granted in the Fiscal Year of initial service Stock Appreciation Rights covering up to an additional 400,000 Shares, which shall not count against the limit set forth in paragraph (a) above.

(ai) The foregoing limitations shall be adjusted proportionately in connection with any change in the Company’s capitalization as described in Section 15 of the Plan.

(aj) If an Option or Stock Appreciation Right is cancelled in the same Fiscal Year in which it was granted (other than in connection with a transaction described in Section 15 of the Plan), such cancelled Award will be counted against the limits set forth in paragraphs (a) and (b) above.

ARTICLE VII. TERM OF PLAN

The Plan was originally approved by the Company’s shareholders at the annual meeting of shareholders on March 9, 2012 and an amendment and restatement of the Plan was approved by the Company’s shareholders at the annual meeting of shareholders on March 5, 2014 and on March 11, 2016. The amendment and restatement of the Plan provided herein is subject to shareholder approval at the annual meeting of shareholders on March 17, 2017. The Plan shall continue in effect, unless sooner terminated pursuant to this Article VII, until the tenth anniversary of the date on which shareholder approval of the Plan is last obtained.

ARTICLE VIII.
TERM OF OPTION AND STOCK APPRECIATION RIGHTS

The term of each Option and Stock Appreciation Right shall be stated in the Award Agreement (but no term shall be longer than ten (10) years from the date of grant). In the case of an Incentive Stock Option, the term shall be ten (10) years from the date of grant or such shorter term as may be provided in the Award Agreement. Moreover, in the case of an Incentive Stock Option granted to an Optionee who, at the time the Incentive Stock Option is granted, owns stock representing more than ten percent (10%) of the total combined voting power of all classes of stock of the Company or any Parent or Subsidiary, the term of the Incentive Stock Option shall be five (5) years from the date of grant or such shorter term as may be provided in the Award Agreement.

ARTICLE IX.
OPTION EXERCISE PRICE AND CONSIDERATION

9.1 *Exercise Price.* The per Share exercise price for the Shares to be issued pursuant to exercise of an Option shall be determined by the Administrator, subject to the following:

(ak) In the case of an Incentive Stock Option

(i) granted to an Employee who, at the time the Incentive Stock Option is granted, owns stock representing more than ten percent (10%) of the voting power of all classes of stock of the Company or any Parent or Subsidiary, the per Share exercise price shall be no less than 110% of the Fair Market Value per Share on the date of grant.

(ii) granted to any Employee other than an Employee described in paragraph (i) immediately above, the per Share exercise price shall be no less than 100% of the Fair Market Value per Share on the date of grant.

(al) In the case of a Nonstatutory Stock Option, the per Share exercise price shall be no less than 100% of the Fair Market Value per Share on the date of grant.

(am) Notwithstanding the foregoing, and subject to the EMCORE Corporation's Incentive Stock Option Grant Policy and such other policies as the Administrator may adopt, Options may be granted with a per Share exercise price of less than 100% of the Fair Market Value per Share on the date of grant pursuant to a Replacement Award.

9.2 *Waiting Period and Exercise Dates.* At the time an Option is granted, the Administrator shall fix the period within which the Option may be exercised and shall determine any conditions that must be satisfied before the Option may be exercised.

9.3 *Form of Consideration.* The Administrator shall determine the acceptable form of consideration for exercising an Option, including the method of payment. In the case of an Incentive Stock Option, the Administrator shall determine the acceptable form of consideration at the time of grant. Such consideration may consist entirely of:

(i) cash;

(ii) check;

(iii) promissory note;

(iv) other Shares which (A) in the case of Shares acquired upon exercise of an option, have been owned by the Optionee for more than six months on the date of surrender, and (B) have a Fair Market Value on the date of surrender equal to the aggregate exercise price of the Shares as to which said Option shall be exercised;

(v) consideration received by the Company under a cashless exercise program implemented by the Company in connection with the Plan (including, without limitation, by a reduction in the number of Shares otherwise deliverable with respect to the Option);

(vi) any combination of the foregoing methods of payment; or

(vii) such other consideration and method of payment for the issuance of Shares to the extent permitted by Applicable Laws.

**ARTICLE X.
EXERCISE OF OPTIONS AND STOCK APPRECIATION RIGHTS**

10.1 *Procedure for Exercise; Rights as a Shareholder.* Subject to Section 4.5, any Option and Stock Appreciation Right granted hereunder shall be exercisable according to the terms of the Plan and at such times and under such conditions as determined by the Administrator and set forth in the Award Agreement. Unless the Administrator provides otherwise, vesting of Options and Stock Appreciation Rights granted hereunder shall be tolled during any unpaid leave of absence. An Option may not be exercised for a fraction of a Share.

Stock Appreciation Rights may be granted in tandem with Options which, unless otherwise determined by the Administrator at or after the grant date, shall have substantially similar terms and conditions to such Options to the extent applicable, or may be granted on a freestanding basis, not related to any Option. Stock Appreciation Rights shall be evidenced in writing, whether as part of the Award Agreement governing the terms of the Options, if any, to which such Stock Appreciation Right relates or pursuant to a separate Award Agreement with respect to freestanding Stock Appreciation Rights. Stock Appreciation Rights that are granted in tandem with an Option may only be exercised upon the surrender of the right to exercise such Option for an equivalent number of shares of Common Stock, and may be exercised only with respect to the shares of Common Stock for which the related Option is then exercisable.

An Option shall be deemed exercised when the Company receives: (i) written or electronic notice of exercise (in accordance with the Award Agreement) from the person entitled to exercise the Option, and (ii) full payment for the Shares with respect to which the Option is exercised. Full payment may consist of any consideration and method of payment authorized by the Administrator and permitted by the Award Agreement and the Plan.

A Stock Appreciation Right shall be deemed exercised when the Company receives written or electronic notice of exercise (in accordance with the Award Agreement) from the person entitled to exercise the Stock Appreciation Right. Upon exercise of a Stock Appreciation Right, the Participant shall be entitled to receive payment in the form, determined by the Administrator, of cash or shares of Common Stock having a Fair Market Value equal to such cash amount, or any combination of shares of Common Stock and cash having an aggregate Fair Market Value equal to such cash amount, determined by multiplying: (i) any increase in the Fair Market Value of one share of Common Stock on the exercise date over the base price fixed by the Administrator on the grant date of such Stock Appreciation Right, which may not be less than the Fair Market Value of a share of Common Stock on the grant date of such Stock Appreciation Right (except if awarded in tandem with an Option but after the grant date of such Option, then not less than the exercise price of such Option), by (ii) the number of shares of Common Stock with respect to which the Stock Appreciation Right is exercised. Notwithstanding the foregoing, on the grant date the Administrator may establish a maximum amount per share which will be payable upon exercise of a Stock Appreciation Right.

Shares issued upon exercise of an Option or Stock Appreciation Right shall be issued in the name of the Participant or, if requested by the Participant, in the name of the Participant and his or her spouse. Until the Shares are issued (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company) with respect to an Option or Stock Appreciation Right, no right to vote or receive dividends or any other rights as a shareholder shall exist with respect to the Awarded Stock, notwithstanding the exercise of such Award. The Company shall issue (or cause to be issued) such Shares promptly after the Award is exercised. No adjustment will be made for a dividend or other right for which the record date is prior to the date the Shares are issued, except as provided in Section 15 of the Plan.

10.2 *Termination of Relationship as a Service Provider.* If a Participant ceases to be a Service Provider, other than upon the Participant's death or Disability or termination for Cause, the Participant may exercise his or her Option or Stock Appreciation Right within such period of time as is specified in the Award Agreement to the extent that such Award is vested on the date of termination (but in no event later than the expiration of the term of such Award as set forth in the Award Agreement). In the absence of a specified time in the Award Agreement, the Option or Stock Appreciation Right shall remain exercisable until the earlier of (i) the 90th day following the date of such termination or, if later, the 90th day following expiration of any blackout period then in effect with respect to such Award, and (ii) the expiration of the term of such Award. If, on the date of termination, the Participant is not vested as to his or her entire Option or Stock Appreciation Right, the Shares covered by the unvested portion of such Award shall revert to the Plan. If, after termination, the Participant does not exercise his or her Option or Stock Appreciation Right within the time specified by the Administrator, such Award shall terminate, and the Shares covered by such Award shall revert to the Plan.

10.3 *For Cause Termination.* If a Participant ceases to be a Service Provider due to a termination for Cause, all Options and Stock Appreciation Rights granted to such Participant which are then outstanding (whether or not exercisable on or

prior to the date of such termination) shall immediately terminate, and the Shares covered by such Awards shall revert to the Plan.

10.4 *Disability of Service Provider.* If a Participant ceases to be a Service Provider as a result of the Participant's Disability, the Participant may exercise his or her Option or Stock Appreciation Right within such period of time as is specified in the Award Agreement to the extent such Award is vested on the date of termination (but in no event later than the expiration of the term of such Award as set forth in the Award Agreement). In the absence of a specified time in the Award Agreement, the Option or Stock Appreciation Right shall remain exercisable for twenty-four (24) months following the Participant's termination (but in no event later than the expiration of the term of such Award as set forth in the Award Agreement). If, on the date of termination, the Participant is not vested as to his or her entire Option or Stock Appreciation Right, the Shares covered by the unvested portion of such Award shall revert to the Plan. If, after termination, the Participant does not exercise his or her Option or Stock Appreciation Right within the time specified herein, such Award shall terminate, and the Shares covered by such Award shall revert to the Plan.

10.5 *Death of Service Provider.* If a Participant dies while a Service Provider, the Option or Stock Appreciation Right may be exercised within such period of time as is specified in the Award Agreement (but in no event later than the expiration of the term of such Award as set forth in the Award Agreement), by the Participant's estate or by a person who acquires the right to exercise such Award by bequest or inheritance, but only to the extent that such Award is vested on the date of death. In the absence of a specified time in the Award Agreement, the Option or Stock Appreciation Right shall remain exercisable for twenty-four (24) months following the Participant's termination (but in no event later than the expiration of the term of such Award as set forth in the Award Agreement). If, at the time of death, the Participant is not vested as to his or her entire Option or Stock Appreciation Right, the Shares covered by the unvested portion of such Award shall immediately revert to the Plan. The Option or Stock Appreciation Right may be exercised by the executor or administrator of the Participant's estate or, if none, by the person(s) entitled to exercise such Award under the Participant's will or the laws of descent or distribution. If the Option or Stock Appreciation Right is not so exercised within the time specified herein, such Award shall terminate, and the Shares covered by such Award shall revert to the Plan.

ARTICLE XI. STOCK PURCHASE RIGHTS

11.1 *Grant of Stock Purchase Rights.* The Administrator, in its sole discretion, will determine the number of Shares to be granted to each Participant under Stock Purchase Rights, provided that during any Fiscal Year, no Participant will receive more than an aggregate of 200,000 Shares subject to Stock Purchase Rights. Notwithstanding the foregoing limitation, in connection with a Participant's initial service as an Employee, an Employee may be granted in the Fiscal Year of initial service an aggregate of up to an additional 400,000 Shares subject to Stock Purchase Rights, which shall not count against the limit set forth in the preceding sentence. The foregoing limitations shall be adjusted proportionately in connection with any change in the Company's capitalization as described in Section 15 of the Plan. If an Award is cancelled in the same Fiscal Year in which it was granted (other than in connection with a transaction described in Section 15 of the Plan), the cancelled Award will be counted against the limits set forth in this Section 11.1.

11.2 *Rights to Purchase.* Stock Purchase Rights may be issued either alone, in addition to, or in tandem with other Awards granted under the Plan and/or cash awards made outside of the Plan. After the Administrator determines that it will offer Stock Purchase Rights under the Plan, it shall advise the offeree in writing or electronically, by means of a Notice of Grant, of the terms, conditions and restrictions related to the offer, including the number of Shares that the offeree shall be entitled to purchase, the price to be paid, and the time within which the offeree must accept such offer. The offer shall be accepted by execution of an Award Agreement in the form determined by the Administrator.

11.3 *Repurchase Option.* Unless the Administrator determines otherwise, the Award Agreement shall grant the Company a repurchase option exercisable upon the voluntary or involuntary termination of the purchaser's service with the Company for any reason (including death or Disability). The purchase price for Shares repurchased pursuant to the Award Agreement shall be the original price paid by the purchaser and may be paid by cancellation of any indebtedness of the purchaser to the Company (to the extent permitted by Applicable Laws). Subject to Section 4.5, the repurchase option shall lapse at a rate determined by the Administrator.

11.4 *Other Provisions.* The Award Agreement shall contain such other terms, provisions and conditions not inconsistent with the Plan as may be determined by the Administrator in its sole discretion.

(an) *General Restrictions.* The Administrator may set restrictions based upon the achievement of specific performance objectives (Company-wide, divisional, or individual), applicable federal or state securities laws, or any other basis determined by the Administrator in its discretion.

(ao) *Section 162(m) Performance Restrictions.* For purposes of qualifying grants of Stock Purchase Rights to Employees as “performance-based compensation” under Section 162(m) of the Code, the Administrator, in its discretion, may set restrictions based upon the achievement of Performance Goals. The Performance Goals will be set by the Administrator on or before the latest date permissible to enable the Stock Purchase Rights to qualify as “performance-based compensation” under Section 162(m) of the Code. In granting Stock Purchase Rights which are intended to qualify under Section 162(m) of the Code, the Administrator will follow any procedures determined by it from time to time to be necessary or appropriate to ensure qualification of the Stock Purchase Rights under Section 162(m) of the Code (e.g., in determining the Performance Goals).

11.5 *Rights as a Shareholder.* Once the Stock Purchase Right is exercised, the purchaser shall have the rights equivalent to those of a shareholder, and shall be a shareholder when his or her purchase is entered upon the records of the duly authorized transfer agent of the Company. No adjustment will be made for a dividend or other right for which the record date is prior to the date the Stock Purchase Right is exercised, except as provided in Section 15 of the Plan.

ARTICLE XII.

RESTRICTED STOCK, RESTRICTED STOCK UNITS AND PERFORMANCE UNITS

12.1 *Grant.* Restricted Stock, Restricted Stock Units and Performance Units may be granted at any time and from time to time as determined by the Administrator. Each Restricted Stock, Restricted Stock Unit and Performance Unit grant shall be evidenced by an Award Agreement that shall specify such other terms and conditions as the Administrator, in its sole discretion, shall determine, including all terms, conditions, and restrictions related to the grant (and the form of payout for Restricted Stock Units and Performance Units), which, subject to Section 12.4 of the Plan, may be left to the discretion of the Administrator. The Administrator, in its sole discretion, will determine the number of Restricted Stock Units to be granted to each Participant, provided that during any Fiscal Year, no Participant will receive more than an aggregate of 200,000 Restricted Stock Units. The Administrator, in its sole discretion, will determine the number of Shares to which the Restricted Stock to be granted to each Participant pertain, provided that during any Fiscal Year, no Participant will receive any award(s) of Restricted Stock covering more than 200,000 Shares. The Administrator, in its sole discretion, will determine the number of Performance Units to be granted to each Participant, provided that during any Fiscal Year, the maximum dollar amount of cash which may be earned in connection with the grant(s) of Performance Units may not exceed \$1,000,000. Notwithstanding the foregoing limitation, in connection with a Participant's initial service as an Employee, an Employee may be granted in the Fiscal Year of initial service an aggregate of up to an additional 400,000 Restricted Stock Units, and an award(s) of Restricted Stock covering up to an additional 400,000 Shares; such Awards shall not count against the limit set forth in the preceding sentences. The foregoing limitations shall be adjusted proportionately in connection with any change in the Company's capitalization as described in Section 15 of the Plan. If an Award is cancelled in the same Fiscal Year in which it was granted (other than in connection with a transaction described in Section 15 of the Plan), the cancelled Award will be counted against the limits set forth in this Section 12.1.

12.2 *Vesting Criteria and Other Terms.* Subject to Section 4.5, the Administrator shall set vesting or other restriction criteria in its discretion, which, depending on the extent to which the criteria are met, will determine the number of Restricted Stock Units, Restricted Stock and Performance Units that will be paid out to the Participant. The period for which such restrictions apply are referred to herein as the “Restriction Period”.

(ap) The Administrator may set vesting or other restriction criteria based upon the achievement of Company-wide, departmental, business unit, or individual goals (including, but not limited to, continued employment or service, or performance objectives), applicable federal or state securities laws, or any other basis determined by the Administrator in its discretion.

(aq) *Section 162(m) Performance Restrictions.* For purposes of qualifying grants of Restricted Stock Units, Restricted Stock and Performance Units to Employees as “performance-based compensation” under Section 162(m) of the Code, the Administrator, in its discretion, may set performance objectives based upon the achievement of Performance Goals. The Performance Goals shall be set by the Administrator on or before the latest date permissible to enable the Restricted Stock Units, Restricted Stock and Performance Units to qualify as “performance-based compensation” under Section 162(m) of the Code. In granting Restricted Stock Units, Restricted Stock and Performance Units that are intended to qualify under Section 162(m) of the Code, the Administrator shall follow any procedures determined by it from time to time to be necessary or appropriate to ensure

qualification of the Restricted Stock Units, Restricted Stock and Performance Units under Section 162(m) of the Code (e.g., in determining the Performance Goals).

12.3 *Earning of Awards.* Upon meeting the applicable vesting or other restriction criteria for Restricted Stock Units, Restricted Stock or Performance Units, the Participant shall be entitled to receive a payout as specified in the Award Agreement.

12.4 *Provisions Applicable to Restricted Stock Units and Performance Units.*

(ar) Payment of earned Restricted Stock Units and Performance Units shall be made as soon as practicable after the date(s) set forth in the Award Agreement. The Administrator, in its sole discretion, may pay earned Restricted Stock Units and Performance Units in cash, Shares, or a combination thereof. Shares represented by Restricted Stock Units that are fully paid in cash again shall be available for grant under the Plan.

(as) No shares of Common Stock will be issued at the time an Award of Restricted Stock Units or Performance Units is made, and the Company shall not be required to set aside a fund for the payment of any such Award.

(at) Subject to Section 4.6, the Administrator shall determine whether and to what extent Dividend Equivalents will be credited to the account of a Participant receiving an Award of Restricted Stock Units. Unless and until the Company provides issuance of Shares in respect of his or her Award of Restricted Stock Units that is entered upon the records of the duly authorized transfer agent of the Company, a Participant holding outstanding Restricted Stock Units shall not be entitled to exercise any voting rights and any other rights as a stockholder with respect to the shares of Common Stock underlying such Award. Unless and until the Company provides issuance of Shares in respect of his or her Award of Performance Units that is entered upon the records of the duly authorized transfer agent of the Company, a Participant holding outstanding Performance Units shall not be entitled to exercise any voting rights and any other rights as a stockholder with respect to the shares of Common Stock payable in event of such Award.

12.5 *Cancellation.* On the date set forth in the Award Agreement, all unearned Restricted Stock Units, Restricted Stock and Performance Units shall be forfeited to the Company.

12.6 *Provisions Applicable to Restricted Stock.*

(a) Except as otherwise provided in an Award Agreement, no Restricted Stock may be sold, transferred, pledged, assigned, or otherwise alienated or hypothecated until the lapse of the Restriction Period. Thereafter, Restricted Stock may be sold, transferred, pledged, assigned or otherwise alienated or hypothecated in compliance with all Applicable Laws, the Award Agreement and any other agreement to which the Restricted Stock is subject. The Administrator shall require that any stock certificates evidencing any Restricted Stock be held in the custody of the Secretary of the Company until the applicable Restriction Period lapses, and that, as a condition of any grant of Restricted Stock, the Participant shall have delivered a stock power, endorsed in blank, relating to the shares of Common Stock covered by such Award. Any attempt by a Participant, directly or indirectly, to offer, transfer, sell, pledge, hypothecate or otherwise dispose of any Restricted Stock or any interest therein or any rights relating thereto without complying with the provisions of the Plan shall be void and of no effect.

(b) Each certificate evidencing shares of Common Stock subject to an Award of Restricted Stock shall be registered in the name of the Participant holding such Restricted Stock and shall bear the following (or similar) legend:

“THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO THE TERMS AND CONDITIONS (INCLUDING FORFEITURE) CONTAINED IN THE EMCORE CORPORATION 2012 EQUITY INCENTIVE PLAN AND THE RELATED AWARD AGREEMENT AND NEITHER THIS CERTIFICATE NOR THE SHARES REPRESENTED BY IT ARE ASSIGNABLE OR OTHERWISE TRANSFERABLE EXCEPT IN ACCORDANCE WITH SUCH PLAN, A COPY OF WHICH IS ON FILE WITH THE SECRETARY OF THE COMPANY.”

(c) Subject to Section 4.6, the Administrator shall determine whether and to what extent dividends and distributions will be credited to the account of a Participant receiving an Award of Restricted Stock. A Participant holding outstanding Restricted Stock shall be entitled to exercise full voting rights and other rights as a stockholder with respect to the shares of Common Stock underlying such Award during the period in which such shares remain subject to the Restriction Period.

ARTICLE XIII.
Share Awards

Subject to Section 4.5, Share Awards may be granted to Participants at such time or times as shall be determined by the Administrator on such terms and conditions as the Administrator may determine in its discretion. The Administrator, in its sole discretion, will determine the number of Shares covered by any Share Award to be granted to each Participant; provided, that during any Fiscal Year, no Participant will receive any Share Award(s) covering more than 200,000 Shares. Notwithstanding the foregoing limitation, in connection with a Participant's initial service as an Employee, an Employee may be granted in the Fiscal Year of initial service a Share Award(s) covering up to an additional 400,000 Shares, which shall not count against the limit set forth in the preceding sentence. The foregoing limitations shall be adjusted proportionately in connection with any change in the Company's capitalization as described in Section 15 of the Plan. Share Awards may be made as additional compensation for services rendered by a Participant to the Company or any Parent, Subsidiary or Affiliate, or may be in lieu of cash or other compensation to which the Participant may be entitled from the Company or any Parent, Subsidiary or Affiliate.

ARTICLE XIV.
NON-TRANSFERABILITY OF AWARDS

Unless determined otherwise by the Administrator, an Award may not be sold, pledged, assigned, hypothecated, transferred, or disposed of in any manner other than by will or by the laws of descent or distribution and may be exercised, during the lifetime of the Participant, only by the Participant. Any attempt by a Participant, directly or indirectly, to offer, transfer, sell, pledge, hypothecate or otherwise dispose of any Awards or any interest therein or any rights relating thereto other than as provided in the Plan shall be void and of no effect. If the Administrator makes an Award transferable, such Award shall contain such additional terms and conditions as the Administrator deems appropriate. Except to the extent required by law, no Award shall be subject to any lien, obligation or liability of the Participant.

ARTICLE XV.
**ADJUSTMENTS UPON CHANGES IN CAPITALIZATION,
CHANGE IN CONTROL**

15.1 *Changes in Capitalization.* In the event of any Adjustment Event affecting the Common Stock (including, without limitation, any Adjustment Event occurring after adoption of the Plan but prior to shareholder approval of the Plan), the Administrator shall make an equitable and proportionate anti-dilution adjustment to offset any resultant change in the per-share price of the Common Stock and preserve the intrinsic value of Options and any other Awards granted under the Plan. Such mandatory adjustment may include a change in any or all of (a) the number and kind of shares of Common Stock which thereafter may be awarded or optioned and sold under the Plan (including, but not limited to, adjusting any limits on the number and types of Awards that may be made under the Plan), (b) the number and kind of shares of Common Stock subject to outstanding Awards, and (c) the grant, exercise or conversion price with respect to any Award. In addition, the Administrator may make provisions for a cash payment to a Participant or a person who has an outstanding Award. The number of shares of Common Stock subject to any Award shall be rounded to the nearest whole number. Any such adjustment shall be consistent with Sections 424, 409A and 162(m) of the Code to the extent the Awards subject to adjustment are subject to such Sections of the Code.

15.2 *Accelerated Vesting and Payment Due to Change in Control.* Unless otherwise determined by the Administrator at or after the grant date, or unless the Administrator otherwise determines in the manner set forth in Section 15.4 below, upon the occurrence of a Change in Control, all Awards under the Plan will be unaffected by the Change in Control. In the sole discretion of the Administrator at or after the grant date, and without limiting the preceding sentence, the Administrator may provide the following for any Award in the event of a Change in Control: (i) Options and Stock Appreciation Rights may become immediately exercisable, (ii) the Restriction Period on all Restricted Stock, Restricted Stock Units and Performance Units may lapse immediately prior to such Change in Control, and (iii) shares of Common Stock underlying Awards of Restricted Stock Units (and, if applicable, Performance Units) may be issued to each Participant then holding such Award immediately prior to such Change in Control; *provided*, that, at the discretion of the Administrator (as constituted immediately prior to the Change in Control), each such Option, Stock Appreciation Right and/or Restricted Stock Unit may be canceled in exchange for an amount equal to the product of (A) (I) in the case of Options and Stock Appreciation Rights, the excess, if any, of the product of the Change in Control Price over the exercise price or base price for such Award, and (II) in the case of other such Awards, the Change in Control Price, multiplied by (B) the aggregate number of shares of Common Stock covered by such Award; *provided, further*, that where the Change in Control does not constitute a "change in control event" as defined under Section 409A of the Code, the shares to be issued, or the amount to be paid, for each Award that constitutes deferred compensation subject to Section 409A of the Code shall be paid at the time or schedule applicable to such Awards (assuming

for these payment purposes (but not the lapsing of the Restriction Period) that no such Change in Control had occurred). Notwithstanding the foregoing, the Administrator may, in its discretion, instead terminate any outstanding Options and Stock Appreciation Rights if either (x) the Company provides holders of such Options and Stock Appreciation Rights with reasonable advance notice to exercise their outstanding and unexercised Options and Stock Appreciation Rights or (y) the Administrator reasonably determines that the Change in Control Price is equal to or less than the exercise price for such Options and Stock Appreciation Rights.

15.3 *Timing of Payments.* Payment of any amounts calculated in accordance with Section 15.2 above shall be made in cash or, if determined by the Administrator (as constituted immediately prior to the Change in Control), in shares of the common stock of the Surviving Corporation having an aggregate fair market value equal to such amount and shall be payable in full, as soon as reasonably practicable, but in no event later than 30 days, following the Change in Control (subject to the payment timing restrictions contained in the second proviso of the second sentence of Section 15.2). For purposes hereof, the fair market value of one share of common stock of the Surviving Corporation shall be determined by the Administrator (as constituted immediately prior to the consummation of the transaction constituting the Change in Control), in good faith.

15.4 *Alternative Awards.* Notwithstanding the above, unless otherwise determined by the Administrator at or after the grant date, no cancellation, termination, acceleration of exercisability or vesting, lapse of any Restriction Period or settlement or other payment shall occur with respect to any outstanding Award, if the Administrator (as constituted immediately prior to the consummation of the transaction constituting the Change in Control) reasonably determines, in good faith, prior to the Change in Control that such outstanding Awards shall be honored or assumed, or new rights substituted therefor (such honored, assumed or substituted Award being hereinafter referred to as an “*Alternative Award*”) by the Surviving Corporation, provided, that any Alternative Award must:

- (i) be based on shares of Common Stock that are traded on an established U.S. securities market or another public market determined by the Administrator prior to the Change in Control;
- (ii) provide the Participant (or each Participant in a class of Participants) with rights and entitlements substantially equivalent to or better than the rights, terms and conditions applicable under such Award, including, but not limited to, an identical or better exercise or vesting schedule and identical or better timing and methods of payment (including liquidity rights with respect to shares of Common Stock received in settlement of such Award);
- (iii) have substantially equivalent economic value to such Award (determined at the time of the Change in Control);
- (iv) have terms and conditions which provide that in the event that the Participant suffers an involuntary termination without Cause within two years following the Change in Control, any conditions on the Participant’s rights under, or any restrictions on transfer or exercisability applicable to, each such Award held by such Participant shall be waived or shall lapse, as the case may be; and
- (v) not result in adverse tax consequences to the Participant under Section 409A of the Code.

ARTICLE XVI. DATE OF GRANT

The date of grant of an Award shall be, for all purposes, the date on which the Administrator makes the determination granting such Award, or such other later date as is determined by the Administrator. Notice of the determination shall be provided to each Participant within a reasonable time after the date of such grant.

ARTICLE XVII. AMENDMENT AND TERMINATION OF THE PLAN

17.1 *Amendment and Termination.* Subject to Section 17.2 below, the Board or Committee may at any time amend, alter, suspend or terminate the Plan.

17.2 *Shareholder Approval.* The Company shall obtain shareholder approval of any Plan amendment to the extent necessary and desirable to comply with Applicable Laws, and the adoption of any such amendment shall be contingent on such approval.

17.3 *Effect of Amendment or Termination.* No amendment, alteration, suspension or termination of the Plan shall impair the rights of any Participant, unless mutually agreed otherwise between the Participant and the Administrator, which agreement must be in writing and signed by the Participant and the Administrator. Termination of the Plan shall not affect the Administrator’s ability to exercise the powers granted to it hereunder with respect to Awards granted under the Plan prior to the date of such termination. Notwithstanding the foregoing, the Board or Committee or Administrator may take such actions as it deems appropriate to ensure that the Plan and any Awards may comply with any tax, securities or other applicable law. Nothing

herein shall restrict the Administrator’s ability to exercise its discretionary authority as provided in the Plan. Subject to other applicable provisions of the Plan, all Awards made under the Plan prior to such termination of the Plan shall remain in effect until such Awards have been satisfied or terminated in accordance with the Plan and the terms of such Awards. Except as otherwise determined by the Board, termination of the Plan shall not affect the Administrator’s ability to exercise the powers granted to it hereunder with respect to Awards granted under the Plan prior to the date of such termination. Following a Change in Control, no action shall be taken under the Plan that will cause any Award that has previously been determined to be (or is determined to be) subject to Section 409A of the Code to fail to comply in any respect with Section 409A of the Code without the written consent of the Participant.

17.4 *Expiration of Grant Authority for “Performance-Based Compensation.”* As required pursuant to Section 162(m) of the Code and the regulations promulgated thereunder, the Administrator’s authority to grant new Awards that are intended to qualify as “performance-based compensation” within the meaning of Section 162(m) of the Code (other than Options or Stock Appreciation Rights) shall terminate upon the first meeting of the Company’s stockholders that occurs in the fifth year following the year in which the Company’s shareholders last approved the Plan, subject to any subsequent extension that may be approved by shareholders.

ARTICLE XVIII. CONDITIONS UPON ISSUANCE OF SHARES

18.1 *Legal Compliance.* Shares shall not be issued pursuant to the exercise of an Award unless the exercise of such Award and the issuance and delivery of such Shares (or with respect to certain Restricted Stock Units, the cash equivalent thereof) shall comply with Applicable Laws and shall be further subject to the approval of counsel for the Company with respect to such compliance. The Company shall not be obligated by virtue of any provision of the Plan to recognize the exercise or settlement of any Award or to otherwise sell or issue shares of Common Stock in violation of any such Applicable Laws, and any postponement of the exercise or settlement of any Award under this provision shall not extend the term of such Awards. Neither the Company nor its directors or officers shall have any obligation or liability to a Participant with respect to any Award (or shares of Common Stock issuable thereunder) that shall lapse because of such postponement.

18.2 *Investment Representations.* As a condition to the exercise of an Award, the Company may require the person exercising such Award to represent and warrant at the time of any such exercise or receipt that the Shares are being purchased only for investment and without any present intention to sell or distribute such Shares if, in the opinion of counsel for the Company, such a representation is required.

ARTICLE XIX. INABILITY TO OBTAIN AUTHORITY

The inability of the Company to obtain authority from any regulatory body having jurisdiction, which authority is deemed by the Company’s counsel to be necessary to the lawful issuance and sale of any Shares (or with respect to certain Restricted Stock Units, the cash equivalent thereof) hereunder, shall relieve the Company of any liability in respect of the failure to issue or sell such Shares (or with respect to certain Restricted Stock Units, the cash equivalent thereof) as to which such requisite authority shall not have been obtained.

ARTICLE XX. RESERVATION OF SHARES

The Company, during the term of this Plan, will at all times reserve and keep available such number of Shares as shall be sufficient to satisfy the requirements of the Plan.

ARTICLE XXI. MISCELLANEOUS PROVISIONS

21.1 *Beneficiary Designation.* Each Participant under the Plan may, from time to time, name any beneficiary or beneficiaries (who may be named contingently or successively) to whom any benefit under the Plan is to be paid or by whom any right under the Plan is to be exercised in case of his or her death. Each designation will revoke all prior designations by the same Participant, shall be in a form prescribed by the Administrator, and will be effective only when filed by the Participant in writing with the Administrator during his or her lifetime. In the absence of any such designation, benefits remaining unpaid at the Participant’s death shall be paid to or exercised by the Participant’s surviving spouse, if any, or otherwise to or by his or her estate.

21.2 *No Guarantee of Employment or Participation.* Nothing in the Plan or any Award Agreement shall interfere with or limit in any way the right of the Company or any Parent, Subsidiary or Affiliate to terminate any Participant's employment at any time, nor to confer upon any Participant any right to continue in the employ of the Company or any Parent, Subsidiary or Affiliate (regardless of whether such termination results in (1) the failure of any Award to vest; (2) the forfeiture of any unvested or vested portion of any Award; and/or (3) any other adverse effect on the individual's interests under the Plan). No Service Provider shall have a right to be selected as a Participant, or, having been so selected, to receive any future Awards.

21.3 *Tax Withholding.* The Company shall have the right and power to deduct from all amounts paid to a Participant in cash or shares (whether under this Plan or otherwise) or to require a Participant to remit to the Company promptly upon notification of the amount due, an amount (which may include shares of Common Stock) to satisfy any applicable federal, state or local or foreign taxes or other obligations required by law to be withheld with respect thereto with respect to any Award under this Plan. In the case of any Award satisfied in the form of shares of Common Stock, no shares of Common Stock shall be issued unless and until arrangements satisfactory to the Administrator shall have been made to satisfy any applicable withholding tax obligations applicable with respect to such Award. The Company may defer payments of cash or issuance or delivery of Common Stock until such requirements are satisfied. Without limiting the generality of the foregoing, the Company shall have the right to retain, or the Administrator may, subject to such terms and conditions as it may establish from time to time, permit Participants to elect to tender, shares of Common Stock (including shares of Common Stock issuable in respect of an Award) to satisfy, in whole or in part, the amount to be withheld.

21.4 *Indemnification.* To the maximum extent provided by law and by the Company's Certificate of Incorporation and/or By-Laws, each person who is or shall have been a member of the Administrator or of the Board shall be indemnified and held harmless by the Company against and from any loss, cost, liability or expense that may be imposed upon or reasonably incurred by him or her in connection with or resulting from any claim, action, suit or proceeding to which he or she may be made a party or in which he or she may be involved by reason of any action taken or failure to act under the Plan and against and from any and all amounts paid by him or her in settlement thereof, with the Company's approval, or paid by him or her in satisfaction of any judgment in any such action, suit or proceeding against him or her, provided he or she shall give the Company an opportunity, at its own expense, to handle and defend the same before he or she undertakes to handle and defend it on his or her own behalf. The foregoing right of indemnification shall not be exclusive and shall be independent of any other rights of indemnification to which such persons may be entitled under the Company's Certificate of Incorporation or By-laws, by contract, as a matter of law, or otherwise.

21.5 *No Limitation on Compensation.* Nothing in the Plan shall be construed to limit the right of the Company to establish other plans or to pay compensation to its Service Providers, in cash or property, in a manner which is not expressly authorized under the Plan.

21.6 *Deferrals.* The Administrator may postpone the exercising of Awards, the issuance or delivery of Common Stock under any Award or any action permitted under the Plan to prevent the Company or any Parent, Subsidiary or Affiliate from being denied a Federal income tax deduction with respect to any Award other than an Award of Incentive Stock Options or to the extent required or permitted by applicable law. The Administrator may also require or permit Participants to elect to defer the issuance of Common Stock or the settlement of Awards in cash under such rules and procedures as it may establish under the Plan. The Administrator may also provide that deferred settlements include the payment or crediting of interest or other earnings on the deferral amounts, or the payment or crediting of dividend equivalents where the deferred amounts are denominated in shares of Common Stock.

21.7 *409A Compliance.* The Plan is intended to be administered in a manner consistent with the requirements, where applicable, of Section 409A of the Code. Where reasonably possible and practicable, the Plan shall be administered in a manner to avoid the imposition on Participants of immediate tax recognition and additional taxes pursuant to such Section 409A. Notwithstanding the foregoing, neither the Company nor the Administrator shall have any liability to any person in the event such Section 409A applies to any such Award in a manner that results in adverse tax consequences for the Participant or any of his beneficiaries or transferees.

Solely for purposes of determining the time and form of payments due under any Award that is considered nonqualified deferred compensation under Section 409A of the Code and that is not otherwise exempt from Section 409A of the Code, a Participant shall not be deemed to have incurred a termination of employment (or other term of similar import) unless and until he shall incur a "separation from service" within the meaning of Section 409A of the Code. Notwithstanding any other provision in this Plan, if as of Participant's separation from service, the Participant is a "specified employee" as determined by the Company, then to the extent any amount payable under any Award that is considered nonqualified deferred compensation under Section 409A of the Code and that is not otherwise exempt from Section 409A of the Code, for which payment is triggered by Participant's separation from service (other than on account of death), and that under the terms of the Award would be payable prior to the six-

month anniversary of the Participant's separation from service, such payment shall be delayed until the earlier to occur of (a) the six-month anniversary of such separation from service or (b) the date of the Participant's death.

21.8 *Governing Law.* The Plan shall be construed in accordance with and governed by the laws of the State of New Jersey without reference to principles of conflict of laws which would require application of the law of another jurisdiction, except to the extent that the corporate law of the State of New Jersey specifically and mandatorily applies.

21.9 *Severability; Blue Pencil.* In the event that any one or more of the provisions of this Plan shall be or become invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein shall not be affected thereby. If, in the opinion of any court of competent jurisdiction such covenants are not reasonable in any respect, such court shall have the right, power and authority to excise or modify such provision or provisions of these covenants as to the court shall appear not reasonable and to enforce the remainder of these covenants as so amended.

21.10 *No Impact On Benefits.* Except as may otherwise be specifically stated under any employee benefit plan, policy or program, no amount payable in respect of any Award shall be treated as compensation for purposes of calculating a Participant's right under any such plan, policy or program. No amount payable in respect of any Award pursuant to an Award shall be deemed part of a Participant's regular, recurring compensation for purposes of any termination, indemnity or severance pay laws.

21.11 *No Constraint on Corporate Action.* Nothing in this Plan shall be construed (i) to limit, impair or otherwise affect the Company's right or power to make adjustments, reclassifications, reorganizations or changes of its capital or business structure, or to merge or consolidate, or dissolve, liquidate, sell, or transfer all or any part of its business or assets or (ii) to limit the right or power of the Company, or any Parent, Subsidiary or Affiliate to take any action which such entity deems to be necessary or appropriate.

21.12 *Headings and Captions.* The headings and captions herein are provided for reference and convenience only, shall not be considered part of this Plan, and shall not be employed in the construction of this Plan.

21.13 *No Trust or Fund Created.* Neither the Plan nor any Award shall create or be construed to create a trust or separate fund of any kind or a fiduciary relationship between the Company and a grantee or any other person. To the extent that any grantee or other person acquires a right to receive payments from the Company pursuant to an Award, such right shall be no greater than the right of any unsecured general creditor of the Company.

21.14 *Fractional Shares.* No fractional shares of Common Stock shall be issued or delivered pursuant to the Plan or any Award, and the Administrator shall determine whether cash, other securities or other property shall be paid or transferred in lieu of any fractional shares, or whether such fractional shares or any rights thereto shall be canceled, terminated or otherwise eliminated.

21.15 *Code Section 83(b) Elections.* The Company, its Affiliates and the Administrator have no responsibility for any Participant's election, attempt to elect or failure to elect to include the value of a Restricted Stock Award or other Award subject to Section 83 of the Code in the participant's gross income for the year of payment pursuant to Section 83(b) of the Code. Any participant who makes an election pursuant to Section 83(b) of the Code will promptly provide the Administrator with a copy of the election form.

21.16 *No Obligation to Exercise Awards; No Right to Notice of Expiration Date.* The grant of an Award of an Option, Stock Appreciation Right or Stock Purchase Right will impose no obligation upon the Participant to exercise the Award. The Company, its Affiliates and the Administrator have no obligation to inform a Participant of the date on which any Award lapses except in the Award Agreement.

21.17 *Right to Offset.* Notwithstanding any provisions of the Plan to the contrary, and to the extent permitted by Applicable Laws, the Company may offset any amounts to be paid to a Participant (or, in the event of the Participant's death, to his beneficiary or estate) under the Plan against any amounts that such Participant may owe to the Company or its Affiliates.

21.18 *Furnishing Information.* A Participant will cooperate with the Administrator by furnishing any and all information requested by the Administrator and take such other actions as may be requested in order to facilitate the administration of the Plan and the payments of benefits hereunder, including but not limited to taking such physical examinations as the Administrator may deem necessary when eligibility or entitlement to any compensation or benefit based on Disability is at issue.

21.19 *Clawback Policy.* The Awards granted under the Plan are subject to the terms of the Company's recoupment, clawback or similar policy as it may be in effect from time to time, as well as any similar provisions of applicable law, any of which could in certain circumstances require repayment or forfeiture of Awards or any shares of Common Stock or other cash or property received with respect to the Awards (including any value received from a disposition of the shares).

21.20 *Administrator Discretion.* Notwithstanding Section 4.5, the Minimum Vesting Requirement shall not limit or restrict the Administrator's discretion to accelerate the vesting of any Award in circumstances it determines to be appropriate (whether in connection with a transaction, termination of employment or for any other reason).

EMCORE Corporation 2012 Equity Incentive Plan
Performance-Based Restricted Stock Unit Award Agreement

To: **[]**

EMCORE Corporation, a New Jersey corporation (the “**Company**”), has granted you an award (the “**Award**”) of a target number of **[]** performance-based restricted stock units (the “**Restricted Stock Units**”) under the EMCORE Corporation 2012 Equity Incentive Plan, as adopted effective January 25, 2012, and as further amended from time to time (the “**Plan**”), conditioned upon your agreement to the terms and conditions described below. Each Restricted Stock Unit represents, on the books of the Company, a unit which is equivalent to one share of the Company’s common stock, no par value per share (the “**Common Stock**”). The effective “**Grant Date**” will be **[]**, subject to your promptly signing and returning a copy of this Agreement (as defined below) to the Company.

This Performance-Based Restricted Stock Unit Award Agreement (the “**Agreement**”) evidences the Award of the Restricted Stock Units. This Agreement and the Award of the Restricted Stock Units are made in consideration of your employment or service relationship with the Company or an Affiliate of the Company (as applicable, your “**Employer**”). The Award is subject in all respects to and incorporates by reference the terms and conditions of the Plan and any terms and conditions relating to Restricted Stock Units and specifies other applicable terms and conditions of your Restricted Stock Units.

A copy of the Plan and the Prospectus for the Plan, as amended from time to time (the “**Prospectus**”), is being provided or made available to you in connection with the Award. By executing this Agreement, you acknowledge that you have received a copy of the Plan and the Prospectus. You may request additional copies of the Plan or Prospectus by contacting EMCORE Corporation, Attn: Chief Financial Officer, 2015 West Chestnut Street, Alhambra, CA 91803. You also may request from the Secretary of the Company copies of the other documents that make up a part of the Prospectus (described more fully at the end of the Prospectus), as well as all reports, proxy statements and other communications distributed to the Company’s security holders generally.

1. **Terminology; Conflicts.** The Glossary at the end of this Agreement includes definitions of certain capitalized words used in this Agreement. All terms not defined in this Agreement (including the Glossary) have the meanings given in the Plan. Unless otherwise specifically provided in this Agreement, in the event of any conflict, ambiguity or inconsistency between or among any defined term in this Agreement or the Plan, the provisions of, first, the Plan and second, this Agreement, will control in that order of priority, except in the case of Section 14 of this Agreement, which will control in all cases.

2. **Terms and Conditions of Award.** The following terms and conditions will apply:

(a) **Performance Vesting Condition.** Your target number of Restricted Stock Units shall be subject to the performance-based forfeiture and vesting provisions below:

(i) All of the Restricted Stock Units are nonvested and forfeitable as of the Grant Date.

(ii) Subject to earlier termination as provided in this Agreement, your Restricted Stock Units are subject to a vesting requirement based on the Company’s Total Shareholder Return achieved relative to the Total Shareholder Return for the Index. The Company’s Total Shareholder Return will be measured over a three-year performance period that will begin on **[]** and end on **[]** (the “**Performance Period**”). Total Shareholder Return performance for the Performance Period will be determined with reference to the goals set forth in the table below:

Total Shareholder Return for the Performance Period Relative to the Total Shareholder Return for the Index	% of Target Number of Units Becoming Vested and Nonforfeitable
<50% of Index	0%
50% of Index	0%
60% of Index	20%
80% of Index	60%
100% of Index	100%
120% of Index	140%
140% of Index	180%
150% of Index	200%
>150 of Index%	200%

Except as described below, all of your Restricted Stock Units will terminate for no consideration at the end of the Performance Period if the Company achieves a Total Shareholder Return that is equal to or less than fifty percent (50%) of the Total Shareholder Return for the Index. If the Company achieves a Total Shareholder Return relative to the Index for the Performance Period between the percentages listed in the table above, the percentage of your Restricted Stock Units that will be eligible to become vested and nonforfeitable will be pro-rated on a straight-line basis between the closest two percentages listed in the table above. The maximum percentage of your Restricted Stock Units that may be eligible to become vested and nonforfeitable is the maximum percentage listed in the table above. Any of your Restricted Stock Units that do not become eligible to become vested and nonforfeitable at the end of the Performance Period based on the Company's Total Shareholder Return for the Performance Period will automatically terminate for no consideration at the end of the Performance Period.

(iii) The Restricted Stock Units are intended to qualify as "performance based compensation" under Section 162(m) of the Code. Accordingly, the Administrator shall follow any procedures determined by it from time to time to be necessary or appropriate to ensure qualification of the Restricted Stock Units under Section 162(m) of the Code (including, without limitation, certifying in writing the achievement of the Total Shareholder Return for the Performance Period relative to the Index before any payment is made with respect to any Restricted Stock Units).

(b) *Continued Service Vesting Condition.* In addition to achievement of the Total Shareholder Return performance-vesting requirements set forth above, in order for any of your Restricted Stock Units to become vested and nonforfeitable, you must continue to be a Service Provider through the last day of the Performance Period. Unless this Agreement provides to the contrary, none of the Restricted Stock Units will become vested and nonforfeitable after you cease to be a Service Provider, and any Restricted Stock Units that are nonvested and forfeitable as of the date you cease to be a Service Provider shall terminate for no consideration.

(c) *Change in Control.* If a Change in Control occurs while any of your Restricted Stock Units are outstanding, the following provisions shall apply:

(i) If the Change in Control occurs after the end of the Performance Period but before any Restricted Stock Units that have become vested and nonforfeitable based on the Company's Total Shareholder Return performance for the completed Performance Period have been paid, such vested and nonforfeitable Restricted Stock Units will be paid as provided for in Section 2(e) below.

(ii) If the Change in Control occurs during the Performance Period while any of your Restricted Stock Units are outstanding, the Performance Period (an "**Adjusted Performance Period**") will be deemed to end on the day immediately preceding the Change in Control and performance will be measured based on the Company's Total Shareholder Return relative to the Index through the date of the Change in Control, provided that (1) instead of using an average stock price to measure the Company's Total Shareholder Return at the end of the Adjusted Performance Period, the Company's Total Shareholder Return at the end of the Adjusted Performance Period will be measured using the price per share of Common Stock to be paid in the Change in Control in accordance with the definitive agreement governing the transaction constituting the Change in Control (or, in the absence of such agreement, the closing price per share of Common Stock on the last trading day prior to the Change in Control, as reported at the close of regular trading on the principal exchange on which the Common Stock is listed), and (2) the Total Shareholder Return for the Index shall be determined in accordance with the definition of Total Shareholder Return, but using the day immediately preceding the Change in Control as the last day of the Adjusted Performance

Period. Any Restricted Stock Units that become eligible to become vested and nonforfeitable based on the Company's Total Shareholder Return performance for the Adjusted Performance Period (or if you are a party to an employment agreement with the Company (an "**Employment Agreement**") that entitles you to vest in a minimum of the target number of Restricted Stock Units for the Adjusted Performance Period as a result of a Change in Control or qualifying termination of employment following a Change in Control, the target number of Restricted Stock Units if greater) shall be referred to as "**Adjusted Performance Period Units**"). For the avoidance of doubt, if you are party to an Employment Agreement that entitles you to vest in a specified percentage of your outstanding equity awards as a result of a Change in Control or qualifying termination of employment following a Change in Control, the Employment Agreement shall entitle you to vest in the Adjusted Performance Period Units as determined above.

(iii) Any Restricted Stock Units for the Adjusted Performance Period that do not become Adjusted Performance Period Units shall terminate at the end of the Adjusted Performance Period for no consideration.

(iv) If you are a party to an Employment Agreement that entitles you to vest in the Adjusted Performance Period Units for the Adjusted Performance Period solely as a result of a Change in Control, you will be entitled to vest in the number of Adjusted Performance Period Units becoming vested and nonforfeitable pursuant to the terms of your Employment Agreement (the "**Accelerated Adjusted Units**"). The Accelerated Adjusted Units will be paid as provided for in Section 2(e) below.

(v) Any Adjusted Performance Period Units for the Adjusted Performance Period that are not Accelerated Adjusted Units (the "**Time-Based Adjusted Units**"), will become vested and nonforfeitable on the last day of the original Performance Period (before any adjustment), subject to you continuing to be a Service Provider through such date. In addition, (1) if you suffer an involuntary termination without Cause (which shall have the same meaning as in your Employment Agreement, or if you are not party to an Employment Agreement, shall have the same meaning as in the Plan) within two years following the Change in Control and prior to the last day of the original Performance Period, all of your unvested Time-Based Adjusted Units will become vested and nonforfeitable as of the date of your termination without Cause, and (2) if you are party to an Employment Agreement that entitles you to vest in any Time-Based Adjusted Units as a result of a qualifying termination of employment following a Change in Control and you experience a qualifying termination of employment prior to the last day of the original Performance Period, the applicable number of Time-Based Adjusted Units becoming vested pursuant to the terms of your Employment Agreement will become vested and nonforfeitable as of the date of your qualifying termination of employment. Any Time-Based Adjusted Units becoming vested and nonforfeitable will be paid as provided for in Section 2(e) below.

(vi) Notwithstanding anything to the contrary in this Agreement or the Plan, in the event of a Change in Control in which the Restricted Stock Units are not honored, assumed or substituted with an Alternative Award, all of the Adjusted Performance Period Units shall become vested and nonforfeitable as of the last day of the Adjusted Performance Period and will be paid as provided for in Section 2(e) below. For the avoidance of doubt and notwithstanding anything to the contrary in the Plan, any Restricted Stock Units for an Adjusted Performance Period that do not become Adjusted Performance Period Units shall terminate at the end of the Adjusted Performance Period.

(d) *Termination of Service.* If you cease to be a Service Provider for any reason, all Restricted Stock Units that are not then vested and nonforfeitable will, after giving effect to any accelerated vesting as a result of your ceasing to be a Service Provider, be immediately forfeited for no consideration.

(e) *Settlement.* Any Restricted Stock Units subject to this Award that become vested and nonforfeitable shall be paid in an equivalent number of whole shares of Common Stock (with any fractional Restricted Stock Units rounded down to the nearest whole number of shares of Common Stock) as soon as practicable following the applicable vesting date, but in any event no later than the 15th day of the third calendar month following the end of the calendar year in which the vesting date occurs; provided that any Restricted Stock Units that become vested and nonforfeitable in connection with or following a Change in Control will be paid no later than the 30th day following the applicable vesting date. Upon issuance, such shares of Common Stock may be sold, transferred, pledged, assigned or otherwise alienated or hypothecated in compliance with Applicable Law, this Agreement and any other agreement to which such shares are subject. Your settlement rights pursuant to this Agreement shall be no greater than the right of any unsecured general creditor of the Company. The Company will not be required to issue fractional shares of Common Stock upon settlement of the Restricted Stock Units.

3. **Restrictions on Transfer.** You may not sell, assign, transfer, pledge, hedge, hypothecate, encumber or dispose of in any way (whether by operation of law or otherwise) any Restricted Stock Units, and Restricted Stock Units may not be subject to execution, attachment or similar process. Any sale or transfer, or purported sale or transfer, shall be null and void. The Company will not be required to recognize on its books any action taken in contravention of these restrictions.

4. Issuance of Shares.

(a) Notwithstanding any other provision of this Agreement, you may not sell the shares of Common Stock acquired upon vesting of the Restricted Stock Units unless such shares are registered under the Securities Act, or, if such shares are not then so registered, such sale would be exempt from the registration requirements of the Securities Act. The sale of such shares must also comply with other Applicable Law and any applicable insider trading policy of the Company governing the Common Stock and you may not sell the shares of Common Stock if the Company determines that such sale would not be in material compliance with such Applicable Law or insider trading policy.

(b) The shares of Common Stock issued in settlement of the Restricted Stock Units shall be registered in your name. The Company will deliver a share certificate to you, or deliver shares electronically or in certificate form to your designated broker on your behalf. If you are deceased (or in case of your Disability and if necessary) at the time that a delivery of share certificates is to be made, the certificates will be delivered to your executor, administrator, legally authorized guardian or personal representative. The Company may at any time place legends referencing any Applicable Law restrictions on all certificates representing shares of Common Stock issued pursuant to this Agreement, and the certificate shall bear such restrictive legends or restrictions as the Company, in its sole discretion, shall require. You will, at the request of the Company, promptly present to the Company any and all certificates representing shares acquired pursuant to this Agreement in your possession in order to carry out the provisions of this Section 4(b).

(c) The grant of the Restricted Stock Units and the shares of Common Stock issued in settlement of the Restricted Stock Units will be subject to and in compliance with all applicable requirements of Applicable Law with respect to such securities. No shares of Common Stock may be issued hereunder if the issuance of such shares would constitute a violation of any Applicable Law. The inability of the Company to obtain from any regulatory body having jurisdiction the authority, if any, deemed by the Company's legal counsel to be necessary to the lawful issuance of any shares subject to the Restricted Stock Units shall relieve the Company of any liability in respect of the failure to issue such shares as to which such requisite authority shall not have been obtained. As a condition to the settlement of the Restricted Stock Units, the Company may require you to satisfy any qualifications that may be necessary or appropriate, to evidence compliance with any Applicable Law and to make any representation or warranty with respect thereto as may be requested by the Company.

(d) *Postponement of Delivery.* The Company may postpone the issuance and delivery of any shares of Common Stock provided for under this Agreement for so long as the Company determines to be necessary or advisable to satisfy the following:

- (i) the completion or amendment of any registration of such shares or satisfaction of any exemption from registration under any Applicable Law;
- (ii) compliance with any requests for representations; and
- (iii) receipt of proof satisfactory to the Company that a person seeking such shares on your behalf upon your Disability (if necessary), or upon your estate's behalf after your death, is appropriately authorized.

5. Tax Withholding. The Company or the Employer shall be entitled to require a cash payment by or on your behalf (including, without limitation, subject to such procedures as the Administrator may adopt, pursuant to a broker-assisted "cashless" arrangement with a third party who facilitates the sale of shares of Common Stock deliverable upon any payment of Restricted Stock Units) and/or to deduct from other compensation payable to you any sums required by federal, state or local tax law to be withheld with respect to the grant, vesting or payment of the Restricted Stock Units in whole or in part. The Company may, in its discretion, agree that it will, upon any payment of shares of Common Stock in respect of the Restricted Stock Units, automatically reduce the number of shares to be delivered by (or otherwise reacquire) the appropriate number of whole shares, valued at their then Fair Market Value, to satisfy any withholding obligations of the Company and the Employer with respect to such distribution of shares at the applicable withholding rates.

6. Adjustments for Corporate Transactions and Other Events.

(a) *Adjustment Events.* Upon an Adjustment Event, the number of Restricted Stock Units and the number of such Restricted Stock Units that are nonvested and forfeitable will, without further action of the Administrator, be adjusted to reflect such event pursuant to the provisions of Section 15.1 of the Plan. The Administrator may make adjustments, in its discretion, to address the treatment of fractional shares with respect to the Restricted Stock Units as a result of the Adjustment Event. Adjustments under this Section 6 will be made by the Administrator, whose determination as to what adjustments, if any, will be made and the extent thereof will be final, binding and conclusive. No fractional Restricted Stock Units will result from any such adjustments. Any such adjustment shall be consistent with section 162(m) of the Code to the extent the Restricted Stock Units are subject to such section of the Code.

(b) *Binding Nature of Agreement.* The terms and conditions of this Agreement will apply with equal force to any additional and/or substitute securities received by you in exchange for, or by virtue of your granting of, the Restricted Stock Units, whether as a result of any Adjustment Event or other similar event, except as otherwise determined by the Administrator. If the Restricted Stock Units are converted into or exchanged for, or stockholders of the Company receive by reason of any distribution in total or partial liquidation or pursuant to any merger of the Company or acquisition of

its assets, securities of another entity, or other property (including cash), then the rights of the Company under this Agreement will inure to the benefit of the Company's successor, and this Agreement will apply to the securities or other property received upon such conversion, exchange or distribution in the same manner and to the same extent as the Restricted Stock Units.

7. Dividend Equivalent Rights. As of each date that the Company pays an ordinary cash dividend on its outstanding Common Stock for which the related record date occurs after the Grant Date and prior to the date all Restricted Stock Units subject to the Award have either been paid or have terminated, the Company shall credit you with an additional number of Restricted Stock Units equal to (a) the amount of the ordinary cash dividend paid by the Company on a single share of Common Stock on that date, multiplied by (b) the number of Restricted Stock Units subject to the Award outstanding and unpaid as of such record date (including any Restricted Stock Units previously credited under this Section 7 and with such total number subject to adjustment pursuant to Section 15.1 of the Plan and this Agreement), divided by (c) the closing price of a share of Common Stock on that date. Any Restricted Stock Units credited pursuant to the foregoing provisions of this Section 7 will be subject to the same vesting, payment, termination and other terms, conditions and restrictions as the original Restricted Stock Units to which they relate. No crediting of Restricted Stock Units will be made pursuant to this Section 7 with respect to any Restricted Stock Units which, as of the related record date, have either been paid or have terminated.

8. No Right to Continued Employment or Service. The Award shall not confer upon you any right to be retained as a Service Provider, nor restrict in any way the right of your Employer, which right is hereby expressly reserved, to terminate your employment or service relationship at any time with or without Cause (regardless of whether such termination results in (a) the failure of any Award to vest; (b) the forfeiture of any unvested or vested portion of any Award; and/or (c) any other adverse effect on your interests under the Plan). Nothing in the Plan or this Agreement shall confer on you the right to receive any future Awards under the Plan.

9. No Rights as Stockholder. You shall not have any rights as a stockholder of the Company with respect to any shares of Common Stock corresponding to the Restricted Stock Units granted hereby unless and until shares of Common Stock are issued to you in respect thereof. No adjustment shall be made for dividends, distributions or other rights for which the record date is prior to the date such certificate or certificates are issued, except as provided in Section 6 and Section 7 of this Agreement.

10. The Company's Rights. The existence of the Restricted Stock Units does not affect in any way the right or power of the Company or its stockholders to make or authorize any or all adjustments, recapitalizations, reorganizations or other changes in the Company's capital structure or its business, including that of its Affiliates, or any merger or consolidation of the Company or any Affiliate, or any issue of bonds, debentures, preferred or other stocks with preference ahead of or convertible into, or otherwise affecting the Common Stock or the rights thereof, or the dissolution or liquidation of the Company or any Affiliate, or any sale or transfer of all or any part of the Company's or any Affiliate's assets or business, or any other corporate act or proceeding, whether of a similar character or otherwise.

11. Entire Agreement. This Agreement, inclusive of the Plan incorporated into this Agreement, contains the entire agreement between you, your Employer and the Company with respect to the Restricted Stock Units. Any and all existing oral or written agreements, representations, warranties, written inducements, or other communications made prior to the execution of this Agreement by any person with respect to the Award or the Restricted Stock Units are superseded by this Agreement and are void and ineffective for all purposes.

12. Conformity with Plan. This Agreement is intended to conform in all respects with, and is subject to all applicable provisions of, the Plan. In the event of any ambiguity in this Agreement or any matters as to which this Agreement is silent, the Plan will govern.

13. Amendment. This Agreement may be amended from time to time by the Administrator in its discretion; provided, however, that this Agreement may not be modified in a manner that would have a materially adverse effect on the Restricted Stock Units as determined in the discretion of the Administrator, except as provided in the Plan or in any other written document signed by you and the Company. This Agreement may not be amended, modified or supplemented orally.

14. Governing Law. The validity, interpretation, construction and performance of this Agreement shall be governed by the laws of the State of New Jersey applicable to contracts executed and to be performed entirely within such state, without regard to the conflict of law provisions thereof.

15. Severability. If a court of competent jurisdiction determines that any portion of this Agreement is in violation of any statute or public policy, then only the portions of this Agreement which violate such statute or public policy shall be stricken, and all portions of this Agreement which do not violate any statute or public policy shall continue in full force and effect. Further,

it is the parties' intent that any court order striking any portion of this Agreement should modify the terms as narrowly as possible to give as much effect as possible to the intentions of the parties' under this Agreement.

16. Further Assurances. You agree to use your reasonable and diligent best efforts to proceed promptly with the transactions contemplated herein, to fulfill the conditions precedent for your benefit or to cause the same to be fulfilled and to execute such further documents and other papers and perform such further acts as may be reasonably required or desirable to carry out the provisions hereof and the transactions contemplated herein. The Company may require you to furnish or execute such other documents as the Company shall reasonably deem necessary (a) to evidence such exercise or (b) to comply with or satisfy the requirements of Applicable Law.

17. Investment Representation. If at the time of settlement of all or part of the Restricted Stock Units, the Common Stock is not registered under the Securities Act and/or there is no current prospectus in effect under the Securities Act with respect to the Common Stock, you shall execute, prior to the issuance of any shares of Common Stock in settlement of the Restricted Stock Units to you by the Company, an agreement (in such form as the Administrator may specify) in which you, among other things, represent, warrant and agree that you are acquiring the shares acquired under this Agreement for your own account, for investment only and not with a view to the resale or distribution thereof, that you have knowledge and experience in financial and business matters, that you are capable of evaluating the merits and risks of owning any shares of Common Stock acquired under this Agreement, that you are a person who is able to bear the economic risk of such ownership and that any subsequent offer for sale or distribution of any of such shares shall be made only pursuant to (a) a registration statement on an appropriate form under the Securities Act, which registration statement has become effective and is current with regard to the shares being offered or sold, or (b) a specific exemption from the registration requirements of the Securities Act, it being understood that to the extent any such exemption is claimed, you shall, prior to any offer for sale or sale of such shares, obtain a prior favorable written opinion, in form and substance satisfactory to the Administrator, from counsel for or approved by the Administrator, as to the applicability of such exemption thereto.

18. Headings. Section headings are used in this Agreement for convenience of reference only and shall not affect the meaning of any provision of this Agreement.

19. Binding Effect; Benefits. This Agreement shall be binding upon and inure to the benefit of the parties to this Agreement and their respective successors and assigns. Nothing in this Agreement, express or implied, is intended or shall be construed to give any person other than the parties to this Agreement or their respective successors or assigns any legal or equitable right, remedy or claim under or in respect of any agreement or any provision contained herein.

20. Section 409A. It is intended that the terms of the Award will not result in the imposition of any tax liability pursuant to Section 409A of the Code. This Agreement shall be construed and interpreted consistent with that intent.

21. Interpretation. The Administrator shall have full power and discretion to construe and interpret the Plan (and any rules and regulations issued thereunder) and this Award. Any determination or interpretation by the Administrator under or pursuant to the Plan or this Award shall be final and binding and conclusive on all persons affected hereby.

22. Authorization to Share Personal Data. You authorize any Affiliate of the Company that employs or retains you or that otherwise has or lawfully obtains personal data relating to you to divulge or transfer such personal data to the Company or to a third party, in each case in any jurisdiction, if and to the extent appropriate in connection with this Agreement or the administration of the Plan.

23. Notices. All notices and other communications required or permitted to be given under this Agreement shall be in writing and shall be deemed to have been given if delivered personally or sent by certified or express mail, return receipt requested, postage prepaid, or by any recognized international equivalent of such delivery, to the Company or you, as the case may be, at the following addresses or to such other address as the Company or you, as the case may be, shall specify by notice to the other:

- (i) if to the Company, to it at:
EMCORE Corporation

2015 West Chestnut Street

Alhambra, CA 91803

Attention: Chief Financial Officer

Fax: (626) 293-3424

- (ii) if to you, to your most recent address as shown on the books and records of the Company or Affiliate employing or retaining you.

All such notices and communications shall be deemed to have been received on the date of delivery if delivered personally or on the third business day after the mailing thereof.

24. Limitation on Rights; No Right to Future Grants; Extraordinary Item of Compensation. By entering into this Agreement and accepting the Awards evidenced hereby, you acknowledge: (a) that the Plan is discretionary in nature and may be suspended or terminated by the Company at any time; (b) that the Award does not create any contractual or other right to receive future grants of Awards; (c) that participation in the Plan is voluntary; (d) that the value of the Awards is not part of normal or expected compensation for purposes of calculating any severance, resignation, redundancy, end of service payments, bonuses, long-service awards, pension or retirement benefits or similar payments; and (e) that the future value of the Common Stock is unknown and cannot be predicted with certainty.

25. Consent to Electronic Delivery. By entering into this Agreement and accepting the Award evidenced hereby, you hereby consent to the delivery of information (including, without limitation, information required to be delivered to you pursuant to Applicable Law) regarding the Company and its Affiliates, the Plan, this Agreement and the Award via Company web site or other electronic delivery.

26. Clawback Policy. The Restricted Stock Units are subject to the terms of the Company's recoupment, clawback or similar policy as it may be in effect from time to time, as well as any similar provisions of Applicable Law, any of which could in certain circumstances require repayment or forfeiture of the Restricted Stock Units or any shares of Common Stock or other cash or property received with respect to the Restricted Stock Units (including any value received from a disposition of the shares acquired upon payment of the Restricted Stock Units).

27. Counterparts. This Agreement may be executed in counterparts (including electronic signatures or facsimile copies), each of which will be deemed an original, but all of which together will constitute the same instrument.

{The Glossary follows on the next page.}

GLOSSARY

(a) “**Index**” means the Russell Microcap Index.

(b) “**Total Shareholder Return**” means the total shareholder return over the Performance Period for either the Company or the Index assuming that any dividends are reinvested in a company’s stock on the payment date. Except as provided in Section 2(c)(ii)), (1) total shareholder return for the Company shall be calculated using (i) the average Company stock price at the close of regular trading on the principal exchange on which the stock is listed or traded for the 30-trading-day period ending with the last day on which the applicable exchange is open for trading preceding the first day of the Performance Period, and (ii) the average Company stock price at the close of regular trading on the principal exchange on which the stock is listed or traded for the 30-trading-day period ending with the last trading day of the Performance Period, and (2) total shareholder return for the Index will be measured over the same 30-trading day periods as for the Company.

(c) “**Securities Act**” means the Securities Act of 1933 and the rules promulgated thereunder, as amended.

(d) “**You**”; “**Your**”. You means the recipient of the Restricted Stock Units as reflected in the first paragraph of this Agreement. Whenever the word “you” or “your” is used in any provision of this Agreement under circumstances where the provision should logically be construed, as determined by the Administrator, to apply to the estate, personal representative, or beneficiary to whom the Restricted Stock Units may be transferred by will or by the laws of descent and distribution, the words “you” and “your” will be deemed to include such person.

{The signature page follows.}

IN WITNESS WHEREOF, the Company has caused this Agreement to be executed by its duly authorized officer as of [Date].

EMCORE CORPORATION

By:

Date:

The undersigned hereby represents that he/she has read the Prospectus and is familiar with the Plan’s terms. The undersigned hereby acknowledges that he/she has carefully read this Agreement and agrees, on behalf of himself/herself and on behalf of his/her beneficiaries, estate and permitted assigns, to be bound by all of the provisions set forth herein, and that the Award and Restricted Stock Units are subject to all of the terms and provisions of this Agreement, and of the Plan under which it is granted, as the Plan and this Agreement may be amended in accordance with their respective terms. The undersigned agrees to accept as binding, conclusive, and final all decisions or interpretations of the Administrator concerning any questions arising under this Agreement or the Plan with respect to the Award or Restricted Stock Units.

WITNESS

AWARD RECIPIENT

Date:

EMCORE Corporation 2012 Equity Incentive Plan

Restricted Stock and Restricted Stock Unit Award Agreement

To: Jeffrey Rittichier

On October 18, 2016 (the “**Grant Date**”), EMCORE Corporation, a New Jersey corporation (the “**Company**”), granted you an award (the “**Award**”) of 70,000 shares. The Award consists of 8,154 restricted shares (the “**Restricted Stock**”) of the Company’s common stock, no par value per share (the “**Common Stock**”), and 61,846 restricted stock units (the “**Restricted Stock Units**”) under the EMCORE Corporation 2012 Equity Incentive Plan, as adopted effective January 25, 2012, and as further amended from time to time (the “**Plan**”). Each Restricted Stock Unit represents, on the books of the Company, a unit which is equivalent to one share of Common Stock.

This Restricted Stock and Restricted Stock Unit Award Agreement (the “**Agreement**”) evidences the Award of the Restricted Stock and Restricted Stock Units. This Agreement and the Award of the Restricted Stock and Restricted Stock Units are made in consideration of your employment or service relationship with the Company or an Affiliate of the Company (as applicable, your “**Employer**”). The Award is subject in all respects to and incorporates by reference the terms and conditions of the Plan and any terms and conditions relating to Restricted Stock and Restricted Stock Units and specifies other applicable terms and conditions of your Restricted Stock and Restricted Stock Units. This Agreement hereby supersedes and replaces the prior award agreement evidencing the Award, and you shall have no further rights under such prior agreement.

A copy of the Plan and the Prospectus for the Plan, as amended from time to time (the “**Prospectus**”), is being provided or made available to you in connection with the Award. By executing this Agreement, you acknowledge that you have received a copy of the Plan and the Prospectus. You may request additional copies of the Plan or Prospectus by contacting EMCORE Corporation, Attn: Chief Financial Officer, 2015 West Chestnut Street, Alhambra, CA 91803. You also may request from the Secretary of the Company copies of the other documents that make up a part of the Prospectus (described more fully at the end of the Prospectus), as well as all reports, proxy statements and other communications distributed to the Company’s security holders generally.

1. Terminology; Conflicts. The Glossary at the end of this Agreement includes definitions of certain capitalized words used in this Agreement. All terms not defined in this Agreement (including the Glossary) have the meanings given in the Plan. Unless otherwise specifically provided in this Agreement, in the event of any conflict, ambiguity or inconsistency between or among any defined term in this Agreement or the Plan, the provisions of, first, the Plan and second, this Agreement, will control in that order of priority, except in the case of Section 14 of this Agreement, which will control in all cases.

2. Terms and Conditions of Award. The following terms and conditions will apply:

(a) *Vesting Condition.* All of the Restricted Stock and Restricted Stock Units are nonvested and forfeitable as of the Grant Date. So long as you continue to be a Service Provider through the applicable date upon which vesting is scheduled to occur, 17,500 Restricted Stock Units will vest and become nonforfeitable on the first anniversary of the Grant Date, 17,500 Restricted Stock Units will vest and become nonforfeitable on the second anniversary of the Grant Date, 17,500 Restricted Stock Units will vest and become nonforfeitable on the third anniversary of the Grant Date, and 9,346 Restricted Stock Units will vest and become nonforfeitable on the fourth anniversary of the Grant Date. So long as you continue to be a Service Provider through the applicable date upon which vesting is scheduled to occur, all 8,154 shares of Restricted Stock will vest and become nonforfeitable on the fourth anniversary of the Grant Date.

(b) *Continued Service Vesting Condition.* In order for any of your Restricted Stock and Restricted Stock Units to become vested and nonforfeitable, you must continue to be a Service Provider through the applicable vesting date. Unless this Agreement provides to the contrary, none of the Restricted Stock and Restricted Stock Units will become vested and nonforfeitable after you cease to be a Service Provider, and any Restricted Stock and Restricted

Stock Units that are nonvested and forfeitable as of the date you cease to be a Service Provider shall terminate for no consideration and any unvested and forfeited shares of Restricted Stock shall be automatically transferred to the Company as of such date, without any other action by you.

(c) *Change in Control.* If a Change in Control occurs while any of your Restricted Stock and Restricted Stock Units are outstanding, the following provisions shall apply:

(i) Your Restricted Stock and Restricted Stock Units shall be subject to the provisions of the Plan, including, without limitation, Article XV of the Plan.

(ii) If you are a party to an employment agreement with the Company (an “*Employment Agreement*”) that entitles you to vest in any Restricted Stock and/or Restricted Stock Units solely as a result of a Change in Control, you will be entitled to vest in the number of Restricted Stock and/or Restricted Stock Units becoming vested and nonforfeitable pursuant to the terms of your Employment Agreement. Similarly, if you are party to an Employment Agreement that entitles you to vest in any Restricted Stock and/or Restricted Stock Units as a result of a qualifying termination of employment following a Change in Control and you experience a qualifying termination of employment while any Restricted Stock or Restricted Stock Units are outstanding, the applicable number of Restricted Stock and/or Restricted Stock Units becoming vested pursuant to the terms of your Employment Agreement will become vested and nonforfeitable as of the date of your qualifying termination of employment. Any Restricted Stock and/or Restricted Stock Units becoming vested and nonforfeitable pursuant to the terms of your Employment Agreement will be released or paid as provided for in Section 2(e) below.

(d) *Termination of Service.* If you cease to be a Service Provider for any reason, all Restricted Stock and Restricted Stock Units that are not then vested and nonforfeitable will, after giving effect to any accelerated vesting as a result of your ceasing to be a Service Provider, be immediately forfeited for no consideration and any unvested and forfeited shares of Restricted Stock shall be automatically transferred to the Company as of the date you cease to be a Service Provider, without any other action by you.

(e) *Settlement.* Any shares of Restricted Stock subject to this Award that become vested and nonforfeitable shall no longer be Restricted Stock and shall immediately thereafter become unrestricted shares of Common Stock and may be sold, transferred, pledged, assigned or otherwise alienated or hypothecated in compliance with Applicable Law, this Agreement and any other agreement to which such shares are subject. Any Restricted Stock Units subject to this Award that become vested and nonforfeitable shall be paid in an equivalent number of whole shares of Common Stock (with any fractional Restricted Stock Units rounded down to the nearest whole number of shares of Common Stock) as soon as practicable following the applicable vesting date, but in any event no later than the 15th day of the third calendar month following the end of the calendar year in which the vesting date occurs; provided that any Restricted Stock Units that become vested and nonforfeitable in connection with or following a Change in Control will be paid no later than the 30th day following the applicable vesting date. Upon issuance, such shares of Common Stock may be sold, transferred, pledged, assigned or otherwise alienated or hypothecated in compliance with Applicable Law, this Agreement and any other agreement to which such shares are subject. Your settlement rights pursuant to this Agreement shall be no greater than the right of any unsecured general creditor of the Company. The Company will not be required to issue fractional shares of Common Stock upon settlement of the Restricted Stock Units.

3. Restrictions on Transfer. You may not sell, assign, transfer, pledge, hedge, hypothecate, encumber or dispose of in any way (whether by operation of law or otherwise) any unvested Restricted Stock or Restricted Stock Units, and unvested Restricted Stock and Restricted Stock Units may not be subject to execution, attachment or similar process. Any sale or transfer, or purported sale or transfer, shall be null and void. The Company will not be required to recognize on its books any action taken in contravention of these restrictions.

4. Issuance of Shares.

(a) Notwithstanding any other provision of this Agreement, you may not sell the shares of Common Stock acquired upon vesting of the Restricted Stock and Restricted Stock Units unless such shares are registered under the Securities Act, or, if such shares are not then so registered, such sale would be exempt from the registration requirements of the Securities Act. The sale of such shares must also comply with other Applicable Law and any applicable insider trading policy of the Company governing the Common Stock and you may not sell the shares of Common Stock if the Company determines that such sale would not be in material compliance with such Applicable Law or insider trading policy.

(b) The Company shall issue shares of Restricted Stock subject to the Award either: (a) in certificate form as provided in Section 4(c) below; or (b) in book entry form, registered in your name with notations regarding the applicable restrictions on transfer imposed under this Agreement. Concurrently with the execution and delivery of this Agreement, you shall deliver to the Company an executed stock power in the form attached hereto as Exhibit A, in blank, with respect to such shares.

(c) Any certificates representing shares of Restricted Stock that may be delivered to you by the Company prior to vesting shall be redelivered to the Secretary of the Company to be held until the restrictions on such shares shall have lapsed and the shares shall thereby have become vested or the shares represented thereby have been forfeited hereunder. Such certificates shall bear the following legend and any other legends the Company may determine to be necessary or advisable to comply with all Applicable Laws:

“THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO THE TERMS AND CONDITIONS (INCLUDING FORFEITURE) CONTAINED IN THE EMCORE CORPORATION 2012 EQUITY INCENTIVE PLAN AND THE RELATED AWARD AGREEMENT AND NEITHER THIS CERTIFICATE NOR THE SHARES REPRESENTED BY IT ARE ASSIGNABLE OR OTHERWISE TRANSFERABLE EXCEPT IN ACCORDANCE WITH SUCH PLAN, A COPY OF WHICH IS ON FILE WITH THE SECRETARY OF THE COMPANY.”

(d) Promptly after the vesting of any shares of Restricted Stock pursuant to this Agreement and the satisfaction of any and all related tax withholding obligations pursuant to Section 5, the Company shall, as applicable, either remove the notations on any shares of Restricted Stock issued in book entry form which have vested or deliver to you, or your designated broker on your behalf, the shares electronically or a certificate or certificates evidencing the number of shares of Restricted Stock which have vested (or, in either case, such lesser number of shares as may result after giving effect to Section 5).

(e) The shares of Common Stock issued in settlement of the Restricted Stock Units shall be registered in your name. The Company will deliver a share certificate to you, or deliver shares electronically or in certificate form to your designated broker on your behalf.

(f) If you are deceased (or in case of your Disability and if necessary) at the time that a delivery of share certificates pursuant to this Section 4 is to be made, the certificates will be delivered to your executor, administrator, legally authorized guardian or personal representative. The Company may at any time place legends referencing any Applicable Law restrictions on all certificates representing shares of Common Stock issued pursuant to this Agreement, and the certificate shall bear such restrictive legends or restrictions as the Company, in its sole discretion, shall require. You will, at the request of the Company, promptly present to the Company any and all certificates representing shares acquired pursuant to this Agreement in your possession in order to carry out the provisions of this Section 4(f).

(g) The grant of the Award and the shares of Common Stock issued in settlement of the Award will be subject to and in compliance with all applicable requirements of Applicable Law with respect to such securities. No shares of Common Stock may be issued hereunder if the issuance of such shares would constitute a violation of any Applicable Law. The inability of the Company to obtain from any regulatory body having jurisdiction the authority, if any, deemed by the Company's legal counsel to be necessary to the lawful issuance of any shares subject to the Award shall relieve the Company of any liability in respect of the failure to issue such shares as to which such requisite authority shall not have been obtained. As a condition to the issuance of shares of Common Stock hereunder, the Company may require you to satisfy any qualifications that may be necessary or appropriate, to evidence compliance with any Applicable Law and to make any representation or warranty with respect thereto as may be requested by the Company.

(h) *Postponement of Delivery.* The Company may postpone the issuance and delivery of any shares of Common Stock provided for under this Agreement for so long as the Company determines to be necessary or advisable to satisfy the following:

- (i) the completion or amendment of any registration of such shares or satisfaction of any exemption from registration under any Applicable Law;
- (ii) compliance with any requests for representations; and
- (iii) receipt of proof satisfactory to the Company that a person seeking such shares on your behalf upon your Disability (if necessary), or upon your estate's behalf after your death, is appropriately authorized.

5. **Tax Withholding.** Upon any vesting of the Restricted Stock or any payment of shares of Common Stock in respect of the Restricted Stock Units, the Company shall automatically reduce the number of shares to be delivered by (or otherwise reacquire) the appropriate number of whole shares, valued at their then Fair Market Value, to satisfy any withholding obligations of the Company and the Employer with respect to such vesting or distribution of shares at the applicable withholding rates. In the event that the Company cannot legally satisfy, such withholding obligations by such reduction of shares, or in the event of a cash payment or any other withholding event in respect of the Restricted Stock and Restricted Stock Units, the Company or the Employer shall be entitled to require a cash payment by or on your behalf and/or to deduct from other compensation payable to you any sums required by federal, state or local tax law to be withheld with respect to such vesting, distribution or payment.

6. **Adjustments for Corporate Transactions and Other Events.**

(a) *Adjustment Events.* Upon an Adjustment Event, the number of shares of Restricted Stock and Restricted Stock Units and the number of such shares of Restricted Stock and Restricted Stock Units that are nonvested and forfeitable will, without further action of the Administrator, be adjusted to reflect such event pursuant to the provisions of Section 15.1 of the Plan. The Administrator may make adjustments, in its discretion, to address the treatment of fractional shares with respect to the Restricted Stock and Restricted Stock Units as a result of the Adjustment Event. Adjustments under this Section 6 will be made by the Administrator, whose determination as to what adjustments, if any, will be made and the extent thereof will be final, binding and conclusive. No fractional shares of Restricted Stock and Restricted Stock Units will result from any such adjustments. Any such adjustment shall be consistent with section 162(m) of the Code to the extent the Restricted Stock and Restricted Stock Units are subject to such section of the Code.

(b) *Binding Nature of Agreement.* The terms and conditions of this Agreement will apply with equal force to any additional and/or substitute securities received by you in exchange for, or by virtue of your granting of, the Restricted Stock and Restricted Stock Units, whether as a result of any Adjustment Event or other similar event, except as otherwise determined by the Administrator. If the Restricted Stock and Restricted Stock Units are converted into or exchanged for, or stockholders of the Company receive by reason of any distribution in total or partial liquidation or pursuant to any merger of the Company or acquisition of its assets, securities of another entity, or other property (including cash), then the rights of the Company under this Agreement will inure to the benefit of the Company's successor, and this Agreement will apply to the securities or other property received upon such conversion, exchange or distribution in the same manner and to the same extent as the Restricted Stock and Restricted Stock Units.

7. **Dividend Rights.**

(a) No ordinary cash dividends payable with respect to a share of Restricted Stock subject to this Award shall be paid until and unless such share becomes vested and transferable (the "**Accumulated Dividends**"). As of each date that the Company pays any Accumulated Dividends, the Company shall credit the Accumulated Dividends to a bookkeeping account on the Company's records that shall have a value equal to a number of shares of Common Stock equal to (a) the amount of the Accumulated Dividends paid on such date, divided by (b) the closing price of a share of Common Stock on that date. Any Accumulated Dividends credited pursuant to the foregoing provisions of this Section 7(a) will be subject to the same vesting, payment, termination and other terms, conditions and restrictions as the original Restricted Stock to which they relate and shall be paid on or within ten (10) days after the date the shares of Restricted Stock vest. Shares of Restricted Stock subject to this Award and any Accumulated Dividends with respect to such shares shall be forfeited and all your rights to such shares and Accumulated Dividends shall terminate, without further obligation on the part of the Company, unless such shares of Restricted Stock become vested pursuant to this Agreement.

(b) As of each date that the Company pays an ordinary cash dividend on its outstanding Common Stock for which the related record date occurs after the Grant Date and prior to the date all Restricted Stock Units subject to the Award have either been paid or have terminated, the Company shall credit you with an additional number of Restricted Stock Units equal to (a) the amount of the ordinary cash dividend paid by the Company on a single share of Common Stock on that date, multiplied by (b) the number of Restricted Stock Units subject to the Award outstanding and unpaid as of such record date (including any Restricted Stock Units previously credited under this Section 7(b) and with such total number subject to adjustment pursuant to Section 15.1 of the Plan and this Agreement), divided by (c) the closing price of a share of Common Stock on that date. Any Restricted Stock Units credited pursuant to the foregoing provisions of this Section 7(b) will be subject to the same vesting, payment, termination and other terms, conditions and restrictions as the original Restricted Stock Units to which they relate. No crediting of Restricted Stock

Units will be made pursuant to this Section 7(b) with respect to any Restricted Stock Units which, as of the related record date, have either been paid or have terminated.

8. No Right to Continued Employment or Service. The Award shall not confer upon you any right to be retained as a Service Provider, nor restrict in any way the right of your Employer, which right is hereby expressly reserved, to terminate your employment or service relationship at any time with or without Cause (regardless of whether such termination results in (a) the failure of any Award to vest; (b) the forfeiture of any unvested or vested portion of any Award; and/or (c) any other adverse effect on your interests under the Plan). Nothing in the Plan or this Agreement shall confer on you the right to receive any future Awards under the Plan.

9. Rights as Stockholder. Except as set forth in Section 7(a), you shall have the same rights as a stockholder of the Company with respect to the shares of Restricted Stock subject to the Award, including voting rights, provided that such rights shall terminate immediately as to any shares of Restricted Stock that are forfeited pursuant to this Agreement. You shall not have any rights as a stockholder of the Company with respect to any shares of Common Stock corresponding to the Restricted Stock Units granted hereby unless and until shares of Common Stock are issued to you in respect thereof. No adjustment shall be made for dividends, distributions or other rights for which the record date is prior to the date such certificate or certificates are issued with respect to the Restricted Stock Units, except as provided in Section 6 and Section 7(b) of this Agreement.

10. The Company's Rights. The existence of the Restricted Stock and Restricted Stock Units does not affect in any way the right or power of the Company or its stockholders to make or authorize any or all adjustments, recapitalizations, reorganizations or other changes in the Company's capital structure or its business, including that of its Affiliates, or any merger or consolidation of the Company or any Affiliate, or any issue of bonds, debentures, preferred or other stocks with preference ahead of or convertible into, or otherwise affecting the Common Stock or the rights thereof, or the dissolution or liquidation of the Company or any Affiliate, or any sale or transfer of all or any part of the Company's or any Affiliate's assets or business, or any other corporate act or proceeding, whether of a similar character or otherwise.

11. Entire Agreement. This Agreement, inclusive of the Plan incorporated into this Agreement, contains the entire agreement between you, your Employer and the Company with respect to the Restricted Stock and Restricted Stock Units. Any and all existing oral or written agreements, representations, warranties, written inducements, or other communications made prior to the execution of this Agreement by any person with respect to the Award or the Restricted Stock and Restricted Stock Units are superseded by this Agreement and are void and ineffective for all purposes.

12. Conformity with Plan. This Agreement is intended to conform in all respects with, and is subject to all applicable provisions of, the Plan. In the event of any ambiguity in this Agreement or any matters as to which this Agreement is silent, the Plan will govern.

13. Amendment. This Agreement may be amended from time to time by the Administrator in its discretion; provided, however, that this Agreement may not be modified in a manner that would have a materially adverse effect on the Restricted Stock and Restricted Stock Units as determined in the discretion of the Administrator, except as provided in the Plan or in any other written document signed by you and the Company. This Agreement may not be amended, modified or supplemented orally.

14. Governing Law. The validity, interpretation, construction and performance of this Agreement shall be governed by the laws of the State of New Jersey applicable to contracts executed and to be performed entirely within such state, without regard to the conflict of law provisions thereof.

15. Severability. If a court of competent jurisdiction determines that any portion of this Agreement is in violation of any statute or public policy, then only the portions of this Agreement which violate such statute or public policy shall be stricken, and all portions of this Agreement which do not violate any statute or public policy shall continue in full force and effect. Further, it is the parties' intent that any court order striking any portion of this Agreement should modify the terms as narrowly as possible to give as much effect as possible to the intentions of the parties' under this Agreement.

16. Further Assurances. You agree to use your reasonable and diligent best efforts to proceed promptly with the transactions contemplated herein, to fulfill the conditions precedent for your benefit or to cause the same to be fulfilled and to execute such further documents and other papers and perform such further acts as may be reasonably required or desirable to carry out the provisions hereof and the transactions contemplated herein. The Company may require you to furnish or execute such other documents as the Company shall reasonably deem necessary (a) to evidence such exercise or (b) to comply with or satisfy the requirements of Applicable Law.

17. Investment Representation. If at the time of settlement of all or part of the Restricted Stock Units, the Common Stock is not registered under the Securities Act and/or there is no current prospectus in effect under the Securities Act with respect to the Common Stock, you shall execute, prior to the issuance of any shares of Common Stock in settlement of the Restricted Stock Units to you by the Company, an agreement (in such form as the Administrator may specify) in which you, among other things, represent, warrant and agree that you are acquiring the shares acquired under this Agreement for your own account, for investment only and not with a view to the resale or distribution thereof, that you have knowledge and experience in financial and business matters, that you are capable of evaluating the merits and risks of owning any shares of Common Stock acquired under this Agreement, that you are a person who is able to bear the economic risk of such ownership and that any subsequent offer for sale or distribution of any of such shares shall be made only pursuant to (a) a registration statement on an appropriate form under the Securities Act, which registration statement has become effective and is current with regard to the shares being offered or sold, or (b) a specific exemption from the registration requirements of the Securities Act, it being understood that to the extent any such exemption is claimed, you shall, prior to any offer for sale or sale of such shares, obtain a prior favorable written opinion, in form and substance satisfactory to the Administrator, from counsel for or approved by the Administrator, as to the applicability of such exemption thereto.

18. Headings. Section headings are used in this Agreement for convenience of reference only and shall not affect the meaning of any provision of this Agreement.

19. Binding Effect; Benefits. This Agreement shall be binding upon and inure to the benefit of the parties to this Agreement and their respective successors and assigns. Nothing in this Agreement, express or implied, is intended or shall be construed to give any person other than the parties to this Agreement or their respective successors or assigns any legal or equitable right, remedy or claim under or in respect of any agreement or any provision contained herein.

20. Section 409A. It is intended that the terms of the Award will not result in the imposition of any tax liability pursuant to Section 409A of the Code. This Agreement shall be construed and interpreted consistent with that intent.

21. Interpretation. The Administrator shall have full power and discretion to construe and interpret the Plan (and any rules and regulations issued thereunder) and this Award. Any determination or interpretation by the Administrator under or pursuant to the Plan or this Award shall be final and binding and conclusive on all persons affected hereby.

22. Authorization to Share Personal Data. You authorize any Affiliate of the Company that employs or retains you or that otherwise has or lawfully obtains personal data relating to you to divulge or transfer such personal data to the Company or to a third party, in each case in any jurisdiction, if and to the extent appropriate in connection with this Agreement or the administration of the Plan.

23. Notices. All notices and other communications required or permitted to be given under this Agreement shall be in writing and shall be deemed to have been given if delivered personally or sent by certified or express mail, return receipt requested, postage prepaid, or by any recognized international equivalent of such delivery, to the Company or you, as the case may be, at the following addresses or to such other address as the Company or you, as the case may be, shall specify by notice to the other:

- (i) if to the Company, to it at:
EMCORE Corporation

2015 West Chestnut Street

Alhambra, CA 91803

Attention: Chief Financial Officer

Fax: (626) 293-3424

- (ii) if to you, to your most recent address as shown on the books and records of the Company or Affiliate employing or retaining you.

All such notices and communications shall be deemed to have been received on the date of delivery if delivered personally or on the third business day after the mailing thereof.

24. Limitation on Rights; No Right to Future Grants; Extraordinary Item of Compensation. By entering into this Agreement and accepting the Awards evidenced hereby, you acknowledge: (a) that the Plan is discretionary in

nature and may be suspended or terminated by the Company at any time; (b) that the Award does not create any contractual or other right to receive future grants of Awards; (c) that participation in the Plan is voluntary; (d) that the value of the Awards is not part of normal or expected compensation for purposes of calculating any severance, resignation, redundancy, end of service payments, bonuses, long-service awards, pension or retirement benefits or similar payments; and (e) that the future value of the Common Stock is unknown and cannot be predicted with certainty.

25. Consent to Electronic Delivery. By entering into this Agreement and accepting the Award evidenced hereby, you hereby consent to the delivery of information (including, without limitation, information required to be delivered to you pursuant to Applicable Law) regarding the Company and its Affiliates, the Plan, this Agreement and the Award via Company web site or other electronic delivery.

26. Clawback Policy. The Restricted Stock and Restricted Stock Units are subject to the terms of the Company's recoupment, clawback or similar policy as it may be in effect from time to time, as well as any similar provisions of Applicable Law, any of which could in certain circumstances require repayment or forfeiture of the Restricted Stock and Restricted Stock Units or any shares of Common Stock or other cash or property received with respect to the Restricted Stock and Restricted Stock Units (including any value received from a disposition of the shares acquired upon vesting or payment of the Restricted Stock and Restricted Stock Units).

27. Counterparts. This Agreement may be executed in counterparts (including electronic signatures or facsimile copies), each of which will be deemed an original, but all of which together will constitute the same instrument.

{The Glossary follows on the next page.}

GLOSSARY

(a) “**Securities Act**” means the Securities Act of 1933 and the rules promulgated thereunder, as amended.

(b) “**You**”; “**Your**”. You means the recipient of the Restricted Stock and Restricted Stock Units as reflected in the first paragraph of this Agreement. Whenever the word “you” or “your” is used in any provision of this Agreement under circumstances where the provision should logically be construed, as determined by the Administrator, to apply to the estate, personal representative, or beneficiary to whom the Restricted Stock and Restricted Stock Units may be transferred by will or by the laws of descent and distribution, the words “you” and “your” will be deemed to include such person.

{The signature page follows.}

IN WITNESS WHEREOF, the Company has caused this Agreement to be executed by its duly authorized officer as of October __, 2017.

EMCORE CORPORATION

By:

Name:

Title:

The undersigned hereby represents that he/she has read the Prospectus and is familiar with the Plan's terms. The undersigned hereby acknowledges that he/she has carefully read this Agreement and agrees, on behalf of himself/herself and on behalf of his/her beneficiaries, estate and permitted assigns, to be bound by all of the provisions set forth herein, and that the Award and Restricted Stock and Restricted Stock Units are subject to all of the terms and provisions of this Agreement, and of the Plan under which it is granted, as the Plan and this Agreement may be amended in accordance with their respective terms. The undersigned agrees to accept as binding, conclusive, and final all decisions or interpretations of the Administrator concerning any questions arising under this Agreement or the Plan with respect to the Award or Restricted Stock and Restricted Stock Units.

WITNESS

AWARD RECIPIENT

Date:

STOCK POWER

FOR VALUE RECEIVED and pursuant to that certain Restricted Stock and Restricted Stock Unit Award Agreement between EMCORE Corporation, a New Jersey corporation (the “**Company**”), and the individual named below (the “**Individual**”) dated as of _____, _____, the Individual, hereby sells, assigns and transfers to the Company, an aggregate 8,154 shares of Common Stock of the Company, standing in the Individual’s name on the books of the Company and represented by stock certificate number(s) _____ to which this instrument is attached, and hereby irrevocably constitutes and appoints _____ as his or her attorney in fact and agent to transfer such shares on the books of the Company, with full power of substitution in the premises.

Dated _____, _____

Signature

Print Name

(Instruction: Please do not fill in any blanks other than the signature line. The purpose of the assignment is to enable the Company to exercise its sale/purchase option set forth in the Restricted Stock and Restricted Stock Unit Award Agreement without requiring additional signatures on the part of the Individual.)

EMCORE Corporation 2012 Equity Incentive Plan

Performance-Based Restricted Stock and Restricted Stock Unit Award Agreement

To: Jeffrey Rittichier

On October 18, 2016 (the “**Grant Date**”), EMCORE Corporation, a New Jersey corporation (the “**Company**”), granted you an award (the “**Award**”) of a target number of 100,000 performance-based shares. The Award consists of a target number of 33,333 performance-based restricted shares (the “**Restricted Stock**”) of the Company’s common stock, no par value per share (the “**Common Stock**”) and a target number of 66,667 performance-based restricted stock units (the “**Restricted Stock Units**”) under the EMCORE Corporation 2012 Equity Incentive Plan, as adopted effective January 25, 2012, and as further amended from time to time (the “**Plan**”). Each Restricted Stock Unit represents, on the books of the Company, a unit which is equivalent to one share of Common Stock.

This Performance-Based Restricted Stock and Restricted Stock Unit Award Agreement (the “**Agreement**”) evidences the Award of the Restricted Stock and Restricted Stock Units. This Agreement and the Award of the Restricted Stock and Restricted Stock Units are made in consideration of your employment or service relationship with the Company or an Affiliate of the Company (as applicable, your “**Employer**”). The Award is subject in all respects to and incorporates by reference the terms and conditions of the Plan and any terms and conditions relating to Restricted Stock and Restricted Stock Units and specifies other applicable terms and conditions of your Restricted Stock and Restricted Stock Units. This Agreement hereby supersedes and replaces the prior award agreement evidencing the Award, and you shall have no further rights under such prior agreement.

A copy of the Plan and the Prospectus for the Plan, as amended from time to time (the “**Prospectus**”), is being provided or made available to you in connection with the Award. By executing this Agreement, you acknowledge that you have received a copy of the Plan and the Prospectus. You may request additional copies of the Plan or Prospectus by contacting EMCORE Corporation, Attn: Chief Financial Officer, 2015 West Chestnut Street, Alhambra, CA 91803. You also may request from the Secretary of the Company copies of the other documents that make up a part of the Prospectus (described more fully at the end of the Prospectus), as well as all reports, proxy statements and other communications distributed to the Company’s security holders generally.

1. Terminology; Conflicts. The Glossary at the end of this Agreement includes definitions of certain capitalized words used in this Agreement. All terms not defined in this Agreement (including the Glossary) have the meanings given in the Plan. Unless otherwise specifically provided in this Agreement, in the event of any conflict, ambiguity or inconsistency between or among any defined term in this Agreement or the Plan, the provisions of, first, the Plan and second, this Agreement, will control in that order of priority, except in the case of Section 14 of this Agreement, which will control in all cases.

2. Terms and Conditions of Award. The following terms and conditions will apply:

(a) *Performance Vesting Condition.* Your target number of Restricted Stock and Restricted Stock Units shall be subject to the performance-based forfeiture and vesting provisions below:

(i) All of the Restricted Stock and Restricted Stock Units are nonvested and forfeitable as of the Grant Date. 33,333 of the target number of Restricted Stock Units shall be “**First Tranche Target Units**,” 33,334 of the target number of Restricted Stock Units shall be “**Second Tranche Target Units**” and all of the 33,333 target number of shares of Restricted Stock shall be “**Third Tranche Target Shares**,” with each such tranche of Restricted Stock and Restricted Stock Units subject to the vesting conditions described below.

(ii) Subject to earlier termination as provided in this Agreement, your First Tranche Target Units, Second Tranche Target Units and Third Tranche Target Shares are each subject to a vesting requirement based on the Company’s Total Shareholder Return achieved relative to the Total Shareholder Return for the Index. The Company’s Total Shareholder Return percentile ranking will be measured over a three-year performance period as follows: (a) the first performance period will begin on October 18, 2016

and end on October 17, 2017 (the “**First Performance Period**”) and will be the performance measurement period applicable to the First Tranche Target Units, (b) the second performance period will begin on October 18, 2016 and end on October 17, 2018 (the “**Second Performance Period**”) and will be the performance measurement period applicable to the Second Tranche Target Units, and (c) the third performance period will begin on October 18, 2016 and end on October 17, 2019 (the “**Third Performance Period**,” and together with the First Performance Period and the Second Performance Period, each a “**Performance Period**”) and will be the performance measurement period applicable to the Third Tranche Target Shares. Total Shareholder Return performance for each Performance Period will be determined with reference to the goals set forth in the table below:

Total Shareholder Return for the Performance Period Relative to the Total Shareholder Return for the Index	% of Target Number of Awards in Applicable Tranche Becoming Vested and Nonforfeitable
<50% of Index	0%
50% of Index	0%
60% of Index	20%
80% of Index	60%
100% of Index	100%
120% of Index	140%
140% of Index	180%
150% of Index	200%
>150 of Index%	200%

Except as described below, all of your First Tranche Target Units, Second Tranche Target Units and Third Tranche Target Shares will terminate for no consideration at the end of the applicable Performance Period if the Company achieves a Total Shareholder Return that is equal to or less than fifty percent (50%) of the Total Shareholder Return for the Index. If the Company achieves a Total Shareholder Return relative to the Index for any applicable Performance Period between the percentages listed in the table above, the percentage of your First Tranche Target Units, Second Tranche Target Units and Third Tranche Target Shares, as applicable, that will be eligible to become vested and nonforfeitable will be pro-rated on a straight-line basis between the closest two percentages listed in the table above. The maximum percentage of your First Tranche Target Units, Second Tranche Target Units and Third Tranche Target Shares that may be eligible to become vested and nonforfeitable is the maximum percentage listed in the table above. Any of your First Tranche Target Units, Second Tranche Target Units and Third Tranche Target Shares that do not become eligible to become vested and nonforfeitable at the end of the applicable Performance Period based on the Company’s Total Shareholder Return for the applicable Performance Period will automatically terminate for no consideration at the end of the applicable Performance Period and any unvested and forfeited shares of Restricted Stock shall be automatically transferred to the Company as of such date, without any other action by you.

(iii) The Restricted Stock and Restricted Stock Units are intended to qualify as “performance based compensation” under Section 162(m) of the Code. Accordingly, the Administrator shall follow any procedures determined by it from time to time to be necessary or appropriate to ensure qualification of the Restricted Stock and Restricted Stock Units under Section 162(m) of the Code (including, without limitation, certifying in writing the achievement of the Total Shareholder Return for each applicable Performance Period relative to the Index before any vesting and/or payment is made with respect to any Restricted Stock and Restricted Stock Units).

(b) *Continued Service Vesting Condition.* In addition to achievement of the Total Shareholder Return performance-vesting requirements set forth above, in order for any of your Restricted Stock and Restricted Stock Units to become vested and nonforfeitable, you must continue to be a Service Provider through the last day of the applicable Performance Period. Unless this Agreement provides to the contrary, none of the Restricted Stock and Restricted Stock Units will become vested and nonforfeitable after you cease to be a Service Provider, and any Restricted Stock and Restricted Stock Units that are nonvested and forfeitable as of the date you cease to be a Service Provider shall terminate for no consideration and any unvested and forfeited shares of Restricted Stock shall be automatically transferred to the Company as of such date, without any other action by you.

(c) *Change in Control.* If a Change in Control occurs during any Performance Period while any of your Restricted Stock and Restricted Stock Units are outstanding, the following provisions shall apply:

(i) If the Change in Control occurs after the end of any applicable Performance Period but before any Restricted Stock Units that have become vested and nonforfeitable based on the Company's Total Shareholder Return performance for the completed Performance Period have been paid, such vested and nonforfeitable Restricted Stock Units will be paid as provided for in Section 2(e) below.

(ii) If the Change in Control occurs during any in-progress performance period while any of your Restricted Stock and Restricted Stock Units are outstanding, the applicable Performance Period (each, an "**Adjusted Performance Period**") will be deemed to end on the day immediately preceding the Change in Control and performance will be measured based on the Company's Total Shareholder Return relative to the Index through the date of the Change in Control, provided that (1) instead of using an average stock price to measure the Company's Total Shareholder Return at the end of any Adjusted Performance Period, the Company's Total Shareholder Return at the end of any Adjusted Performance Period will be measured using the price per share of Common Stock to be paid in the Change in Control in accordance with the definitive agreement governing the transaction constituting the Change in Control (or, in the absence of such agreement, the closing price per share of Common Stock on the last trading day prior to the Change in Control, as reported at the close of regular trading on the principal exchange on which the Common Stock is listed), and (2) the Total Shareholder Return for the Index shall be determined in accordance with the definition of Total Shareholder Return, but using the day immediately preceding the Change in Control as the last day of each Adjusted Performance Period. Any Restricted Stock and Restricted Stock Units that become eligible to become vested and nonforfeitable based on the Company's Total Shareholder Return performance for any applicable Adjusted Performance Period (or if you are a party to an employment agreement with the Company (an "**Employment Agreement**") that entitles you to vest in a minimum of the target number of Restricted Stock and Restricted Stock Units for any applicable Adjusted Performance Period as a result of a Change in Control or qualifying termination of employment following a Change in Control, the target number of Restricted Stock and Restricted Stock Units if greater) shall be referred to as "**Adjusted Performance Period Awards**"). For the avoidance of doubt, if you are party to an Employment Agreement that entitles you to vest in a specified percentage of your outstanding equity awards as a result of a Change in Control or qualifying termination of employment following a Change in Control, the Employment Agreement shall entitle you to vest in the Adjusted Performance Period Awards as determined above.

(iii) Any Restricted Stock and Restricted Stock Units for an Adjusted Performance Period that do not become Adjusted Performance Period Awards shall terminate at the end of the applicable Adjusted Performance Period for no consideration and any unvested and forfeited shares of Restricted Stock shall be automatically transferred to the Company as of such date, without any other action by you.

(iv) If you are a party to an Employment Agreement that entitles you to vest in any Adjusted Performance Period Awards for any applicable Adjusted Performance Period solely as a result of a Change in Control, you will be entitled to vest in the number of Adjusted Performance Period Awards becoming vested and nonforfeitable pursuant to the terms of your Employment Agreement (the "**Accelerated Adjusted Awards**"). The Accelerated Adjusted Awards will be released or paid as provided for in Section 2(e) below.

(v) Any Adjusted Performance Period Awards for each applicable Adjusted Performance Period that are not Accelerated Adjusted Awards (the "**Time-Based Adjusted Awards**"), will become vested and nonforfeitable on the last day of the applicable original Performance Period (before any adjustment), subject to you continuing to be a Service Provider through such date. In addition, (1) if you suffer an involuntary termination without Cause (which shall have the same meaning as in your Employment Agreement, or if you are not party to an Employment Agreement, shall have the same meaning as in the Plan) within two years following the Change in Control and prior to the last day of any applicable original Performance Period, all of your unvested Time-Based Adjusted Awards will become vested and nonforfeitable as of the date of your termination without Cause, and (2) if you are party to an Employment Agreement that entitles you to vest in any Time-Based Adjusted Awards as a result of a qualifying termination of employment following a Change in Control and you experience a qualifying termination of employment prior to the last day of any applicable original Performance Period, the applicable number of Time-Based Adjusted Awards becoming vested pursuant to the terms of your Employment Agreement will become vested and nonforfeitable as of the date of your qualifying termination of employment. Any Time-

Based Adjusted Awards becoming vested and nonforfeitable will be released or paid as provided for in Section 2(e) below.

(vi) Notwithstanding anything to the contrary in this Agreement or the Plan, in the event of a Change in Control in which the Restricted Stock and Restricted Stock Units are not honored, assumed or substituted with an Alternative Award, all of the Adjusted Performance Period Awards shall become vested and nonforfeitable as of the last day of the applicable Adjusted Performance Period and will be released or paid as provided for in Section 2(e) below. For the avoidance of doubt and notwithstanding anything to the contrary in the Plan, any Restricted Stock and Restricted Stock Units for an Adjusted Performance Period that do not become Adjusted Performance Period Awards shall terminate at the end of the applicable Adjusted Performance Period and any unvested and forfeited shares of Restricted Stock shall be automatically transferred to the Company as of such date, without any other action by you.

(d) *Termination of Service.* If you cease to be a Service Provider for any reason, all Restricted Stock and Restricted Stock Units that are not then vested and nonforfeitable will, after giving effect to any accelerated vesting as a result of your ceasing to be a Service Provider, be immediately forfeited for no consideration and any unvested and forfeited shares of Restricted Stock shall be automatically transferred to the Company as of the date you cease to be a Service Provider, without any other action by you.

(e) *Settlement.* Any shares of Restricted Stock subject to this Award that become vested and nonforfeitable shall no longer be Restricted Stock and shall immediately thereafter become unrestricted shares of Common Stock and may be sold, transferred, pledged, assigned or otherwise alienated or hypothecated in compliance with Applicable Law, this Agreement and any other agreement to which such shares are subject. Any Restricted Stock Units subject to this Award that become vested and nonforfeitable shall be paid in an equivalent number of whole shares of Common Stock (with any fractional Restricted Stock Units rounded down to the nearest whole number of shares of Common Stock) as soon as practicable following the applicable vesting date, but in any event no later than the 15th day of the third calendar month following the end of the calendar year in which the vesting date occurs; provided that any Restricted Stock Units that become vested and nonforfeitable in connection with or following a Change in Control will be paid no later than the 30th day following the applicable vesting date. Upon issuance, such shares of Common Stock may be sold, transferred, pledged, assigned or otherwise alienated or hypothecated in compliance with Applicable Law, this Agreement and any other agreement to which such shares are subject. Your settlement rights pursuant to this Agreement shall be no greater than the right of any unsecured general creditor of the Company. The Company will not be required to issue fractional shares of Common Stock upon settlement of the Restricted Stock Units.

3. Restrictions on Transfer. You may not sell, assign, transfer, pledge, hedge, hypothecate, encumber or dispose of in any way (whether by operation of law or otherwise) any unvested Restricted Stock or Restricted Stock Units, and unvested Restricted Stock and Restricted Stock Units may not be subject to execution, attachment or similar process. Any sale or transfer, or purported sale or transfer, shall be null and void. The Company will not be required to recognize on its books any action taken in contravention of these restrictions.

4. Issuance of Shares.

(a) Notwithstanding any other provision of this Agreement, you may not sell the shares of Common Stock acquired upon vesting of the Restricted Stock and Restricted Stock Units unless such shares are registered under the Securities Act, or, if such shares are not then so registered, such sale would be exempt from the registration requirements of the Securities Act. The sale of such shares must also comply with other Applicable Law and any applicable insider trading policy of the Company governing the Common Stock and you may not sell the shares of Common Stock if the Company determines that such sale would not be in material compliance with such Applicable Law or insider trading policy.

(b) The Company shall issue shares of Restricted Stock subject to the Award either: (a) in certificate form as provided in Section 4(c) below; or (b) in book entry form, registered in your name with notations regarding the applicable restrictions on transfer imposed under this Agreement. Concurrently with the execution and delivery of this Agreement, you shall deliver to the Company an executed stock power in the form attached hereto as Exhibit A, in blank, with respect to such shares.

(c) Any certificates representing shares of Restricted Stock that may be delivered to you by the Company prior to vesting shall be redelivered to the Secretary of the Company to be held until the restrictions on such shares shall have lapsed and the shares shall thereby have become vested or the shares represented thereby have been

forfeited hereunder. Such certificates shall bear the following legend and any other legends the Company may determine to be necessary or advisable to comply with all Applicable Laws:

“THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO THE TERMS AND CONDITIONS (INCLUDING FORFEITURE) CONTAINED IN THE EMCORE CORPORATION 2012 EQUITY INCENTIVE PLAN AND THE RELATED AWARD AGREEMENT AND NEITHER THIS CERTIFICATE NOR THE SHARES REPRESENTED BY IT ARE ASSIGNABLE OR OTHERWISE TRANSFERABLE EXCEPT IN ACCORDANCE WITH SUCH PLAN, A COPY OF WHICH IS ON FILE WITH THE SECRETARY OF THE COMPANY.”

(d) Promptly after the vesting of any shares of Restricted Stock pursuant to this Agreement and the satisfaction of any and all related tax withholding obligations pursuant to Section 5, the Company shall, as applicable, either remove the notations on any shares of Restricted Stock issued in book entry form which have vested or deliver to you, or your designated broker on your behalf, the shares electronically or a certificate or certificates evidencing the number of shares of Restricted Stock which have vested (or, in either case, such lesser number of shares as may result after giving effect to Section 5).

(e) The shares of Common Stock issued in settlement of the Restricted Stock Units shall be registered in your name. The Company will deliver a share certificate to you, or deliver shares electronically or in certificate form to your designated broker on your behalf.

(f) If you are deceased (or in case of your Disability and if necessary) at the time that a delivery of share certificates pursuant to this Section 4 is to be made, the certificates will be delivered to your executor, administrator, legally authorized guardian or personal representative. The Company may at any time place legends referencing any Applicable Law restrictions on all certificates representing shares of Common Stock issued pursuant to this Agreement, and the certificate shall bear such restrictive legends or restrictions as the Company, in its sole discretion, shall require. You will, at the request of the Company, promptly present to the Company any and all certificates representing shares acquired pursuant to this Agreement in your possession in order to carry out the provisions of this Section 4(f).

(g) The grant of the Award and the shares of Common Stock issued in settlement of the Award will be subject to and in compliance with all applicable requirements of Applicable Law with respect to such securities. No shares of Common Stock may be issued hereunder if the issuance of such shares would constitute a violation of any Applicable Law. The inability of the Company to obtain from any regulatory body having jurisdiction the authority, if any, deemed by the Company's legal counsel to be necessary to the lawful issuance of any shares subject to the Award shall relieve the Company of any liability in respect of the failure to issue such shares as to which such requisite authority shall not have been obtained. As a condition to the issuance of shares of Common Stock hereunder, the Company may require you to satisfy any qualifications that may be necessary or appropriate, to evidence compliance with any Applicable Law and to make any representation or warranty with respect thereto as may be requested by the Company.

(h) *Postponement of Delivery.* The Company may postpone the issuance and delivery of any shares of Common Stock provided for under this Agreement for so long as the Company determines to be necessary or advisable to satisfy the following:

- (i) the completion or amendment of any registration of such shares or satisfaction of any exemption from registration under any Applicable Law;
- (ii) compliance with any requests for representations; and
- (iii) receipt of proof satisfactory to the Company that a person seeking such shares on your behalf upon your Disability (if necessary), or upon your estate's behalf after your death, is appropriately authorized.

5. **Tax Withholding.** Upon any vesting of the Restricted Stock or any payment of shares of Common Stock in respect of the Restricted Stock Units, the Company shall automatically reduce the number of shares to be delivered by (or otherwise reacquire) the appropriate number of whole shares, valued at their then Fair Market Value, to satisfy any withholding obligations of the Company and the Employer with respect to such vesting or distribution of shares at the applicable withholding rates. In the event that the Company cannot legally satisfy, such withholding obligations by such reduction of shares, or in the event of a cash payment or any other withholding event in respect of the Restricted Stock and Restricted Stock Units, the Company or the Employer shall be entitled to require a cash payment by or on your behalf and/or to deduct from other compensation payable to you any sums required by federal, state or local tax law to be withheld with respect to such vesting, distribution or payment.

6. Adjustments for Corporate Transactions and Other Events.

(a) *Adjustment Events.* Upon an Adjustment Event, the number of shares of Restricted Stock and Restricted Stock Units and the number of such shares of Restricted Stock and Restricted Stock Units that are nonvested and forfeitable will, without further action of the Administrator, be adjusted to reflect such event pursuant to the provisions of Section 15.1 of the Plan. The Administrator may make adjustments, in its discretion, to address the treatment of fractional shares with respect to the Restricted Stock and Restricted Stock Units as a result of the Adjustment Event. Adjustments under this Section 6 will be made by the Administrator, whose determination as to what adjustments, if any, will be made and the extent thereof will be final, binding and conclusive. No fractional shares of Restricted Stock and Restricted Stock Units will result from any such adjustments. Any such adjustment shall be consistent with section 162(m) of the Code to the extent the Restricted Stock and Restricted Stock Units are subject to such section of the Code.

(b) *Binding Nature of Agreement.* The terms and conditions of this Agreement will apply with equal force to any additional and/or substitute securities received by you in exchange for, or by virtue of your granting of, the Restricted Stock and Restricted Stock Units, whether as a result of any Adjustment Event or other similar event, except as otherwise determined by the Administrator. If the Restricted Stock and Restricted Stock Units are converted into or exchanged for, or stockholders of the Company receive by reason of any distribution in total or partial liquidation or pursuant to any merger of the Company or acquisition of its assets, securities of another entity, or other property (including cash), then the rights of the Company under this Agreement will inure to the benefit of the Company's successor, and this Agreement will apply to the securities or other property received upon such conversion, exchange or distribution in the same manner and to the same extent as the Restricted Stock and Restricted Stock Units.

7. Dividend Rights.

(a) No ordinary cash dividends payable with respect to a share of Restricted Stock subject to this Award shall be paid until and unless such share becomes vested and transferable (the "**Accumulated Dividends**"). As of each date that the Company pays any Accumulated Dividends, the Company shall credit the Accumulated Dividends to a bookkeeping account on the Company's records that shall have a value equal to a number of shares of Common Stock equal to (a) the amount of the Accumulated Dividends paid on such date, divided by (b) the closing price of a share of Common Stock on that date. Any Accumulated Dividends credited pursuant to the foregoing provisions of this Section 7(a) will be subject to the same vesting, payment, termination and other terms, conditions and restrictions as the original Restricted Stock to which they relate and shall be paid on or within ten (10) days after the date the shares of Restricted Stock vest. Shares of Restricted Stock subject to this Award and any Accumulated Dividends with respect to such shares shall be forfeited and all your rights to such shares and Accumulated Dividends shall terminate, without further obligation on the part of the Company, unless such shares of Restricted Stock become vested pursuant to this Agreement.

(b) As of each date that the Company pays an ordinary cash dividend on its outstanding Common Stock for which the related record date occurs after the Grant Date and prior to the date all Restricted Stock Units subject to the Award have either been paid or have terminated, the Company shall credit you with an additional number of Restricted Stock Units equal to (a) the amount of the ordinary cash dividend paid by the Company on a single share of Common Stock on that date, multiplied by (b) the number of Restricted Stock Units subject to the Award outstanding and unpaid as of such record date (including any Restricted Stock Units previously credited under this Section 7(b) and with such total number subject to adjustment pursuant to Section 15.1 of the Plan and this Agreement), divided by (c) the closing price of a share of Common Stock on that date. Any Restricted Stock Units credited pursuant to the foregoing provisions of this Section 7(b) will be subject to the same vesting, payment, termination and other terms, conditions and restrictions as the original Restricted Stock Units to which they relate. No crediting of Restricted Stock Units will be made pursuant to this Section 7(b) with respect to any Restricted Stock Units which, as of the related record date, have either been paid or have terminated.

8. No Right to Continued Employment or Service. The Award shall not confer upon you any right to be retained as a Service Provider, nor restrict in any way the right of your Employer, which right is hereby expressly reserved, to terminate your employment or service relationship at any time with or without Cause (regardless of whether such termination results in (a) the failure of any Award to vest; (b) the forfeiture of any unvested or vested portion of any Award; and/or (c) any other adverse effect on your interests under the Plan). Nothing in the Plan or this Agreement shall confer on you the right to receive any future Awards under the Plan.

9. Rights as Stockholder. Except as set forth in Section 7(a), you shall have the same rights as a stockholder of the Company with respect to the shares of Restricted Stock subject to the Award, including voting rights, provided that such rights shall terminate immediately as to any shares of Restricted Stock that are forfeited pursuant to this Agreement. You shall not have any rights as a stockholder of the Company with respect to any shares of Common Stock corresponding to the Restricted Stock Units granted hereby unless and until shares of Common Stock are issued to you in respect thereof. No adjustment shall be made for dividends, distributions or other rights for which the record date is prior to the date such certificate or certificates are issued with respect to the Restricted Stock Units, except as provided in Section 6 and Section 7(b) of this Agreement.

10. The Company's Rights. The existence of the Restricted Stock and Restricted Stock Units does not affect in any way the right or power of the Company or its stockholders to make or authorize any or all adjustments, recapitalizations, reorganizations or other changes in the Company's capital structure or its business, including that of its Affiliates, or any merger or consolidation of the Company or any Affiliate, or any issue of bonds, debentures, preferred or other stocks with preference ahead of or convertible into, or otherwise affecting the Common Stock or the rights thereof, or the dissolution or liquidation of the Company or any Affiliate, or any sale or transfer of all or any part of the Company's or any Affiliate's assets or business, or any other corporate act or proceeding, whether of a similar character or otherwise.

11. Entire Agreement. This Agreement, inclusive of the Plan incorporated into this Agreement, contains the entire agreement between you, your Employer and the Company with respect to the Restricted Stock and Restricted Stock Units. Any and all existing oral or written agreements, representations, warranties, written inducements, or other communications made prior to the execution of this Agreement by any person with respect to the Award or the Restricted Stock and Restricted Stock Units are superseded by this Agreement and are void and ineffective for all purposes.

12. Conformity with Plan. This Agreement is intended to conform in all respects with, and is subject to all applicable provisions of, the Plan. In the event of any ambiguity in this Agreement or any matters as to which this Agreement is silent, the Plan will govern.

13. Amendment. This Agreement may be amended from time to time by the Administrator in its discretion; provided, however, that this Agreement may not be modified in a manner that would have a materially adverse effect on the Restricted Stock and Restricted Stock Units as determined in the discretion of the Administrator, except as provided in the Plan or in any other written document signed by you and the Company. This Agreement may not be amended, modified or supplemented orally.

14. Governing Law. The validity, interpretation, construction and performance of this Agreement shall be governed by the laws of the State of New Jersey applicable to contracts executed and to be performed entirely within such state, without regard to the conflict of law provisions thereof.

15. Severability. If a court of competent jurisdiction determines that any portion of this Agreement is in violation of any statute or public policy, then only the portions of this Agreement which violate such statute or public policy shall be stricken, and all portions of this Agreement which do not violate any statute or public policy shall continue in full force and effect. Further, it is the parties' intent that any court order striking any portion of this Agreement should modify the terms as narrowly as possible to give as much effect as possible to the intentions of the parties' under this Agreement.

16. Further Assurances. You agree to use your reasonable and diligent best efforts to proceed promptly with the transactions contemplated herein, to fulfill the conditions precedent for your benefit or to cause the same to be fulfilled and to execute such further documents and other papers and perform such further acts as may be reasonably required or desirable to carry out the provisions hereof and the transactions contemplated herein. The Company may require you to furnish or execute such other documents as the Company shall reasonably deem necessary (a) to evidence such exercise or (b) to comply with or satisfy the requirements of Applicable Law.

17. Investment Representation. If at the time of settlement of all or part of the Restricted Stock Units, the Common Stock is not registered under the Securities Act and/or there is no current prospectus in effect under the Securities Act with respect to the Common Stock, you shall execute, prior to the issuance of any shares of Common Stock in settlement of the Restricted Stock Units to you by the Company, an agreement (in such form as the Administrator may specify) in which you, among other things, represent, warrant and agree that you are acquiring the shares acquired under this Agreement for your own account, for investment only and not with a view to the resale or distribution thereof, that you have knowledge and experience in financial and business matters, that you are capable of evaluating the merits and risks of owning any shares of Common Stock acquired under this Agreement, that you are a person who is able to bear the economic risk of such ownership and that any subsequent offer for sale or distribution of any of such shares shall be made only pursuant to (a) a registration statement on an appropriate form under the Securities Act, which registration statement has become effective and is current with regard to the shares being offered or sold, or (b) a specific exemption from the registration requirements of the Securities Act, it being understood that to the extent any such

exemption is claimed, you shall, prior to any offer for sale or sale of such shares, obtain a prior favorable written opinion, in form and substance satisfactory to the Administrator, from counsel for or approved by the Administrator, as to the applicability of such exemption thereto.

18. Headings. Section headings are used in this Agreement for convenience of reference only and shall not affect the meaning of any provision of this Agreement.

19. Binding Effect; Benefits. This Agreement shall be binding upon and inure to the benefit of the parties to this Agreement and their respective successors and assigns. Nothing in this Agreement, express or implied, is intended or shall be construed to give any person other than the parties to this Agreement or their respective successors or assigns any legal or equitable right, remedy or claim under or in respect of any agreement or any provision contained herein.

20. Section 409A. It is intended that the terms of the Award will not result in the imposition of any tax liability pursuant to Section 409A of the Code. This Agreement shall be construed and interpreted consistent with that intent.

21. Interpretation. The Administrator shall have full power and discretion to construe and interpret the Plan (and any rules and regulations issued thereunder) and this Award. Any determination or interpretation by the Administrator under or pursuant to the Plan or this Award shall be final and binding and conclusive on all persons affected hereby.

22. Authorization to Share Personal Data. You authorize any Affiliate of the Company that employs or retains you or that otherwise has or lawfully obtains personal data relating to you to divulge or transfer such personal data to the Company or to a third party, in each case in any jurisdiction, if and to the extent appropriate in connection with this Agreement or the administration of the Plan.

23. Notices. All notices and other communications required or permitted to be given under this Agreement shall be in writing and shall be deemed to have been given if delivered personally or sent by certified or express mail, return receipt requested, postage prepaid, or by any recognized international equivalent of such delivery, to the Company or you, as the case may be, at the following addresses or to such other address as the Company or you, as the case may be, shall specify by notice to the other:

- (i) if to the Company, to it at:
EMCORE Corporation

2015 West Chestnut Street

Alhambra, CA 91803

Attention: Chief Financial Officer

Fax: (626) 293-3424

- (ii) if to you, to your most recent address as shown on the books and records of the Company or Affiliate employing or retaining you.

All such notices and communications shall be deemed to have been received on the date of delivery if delivered personally or on the third business day after the mailing thereof.

24. Limitation on Rights; No Right to Future Grants; Extraordinary Item of Compensation. By entering into this Agreement and accepting the Awards evidenced hereby, you acknowledge: (a) that the Plan is discretionary in nature and may be suspended or terminated by the Company at any time; (b) that the Award does not create any contractual or other right to receive future grants of Awards; (c) that participation in the Plan is voluntary; (d) that the value of the Awards is not part of normal or expected compensation for purposes of calculating any severance, resignation, redundancy, end of service payments, bonuses, long-service awards, pension or retirement benefits or similar payments; and (e) that the future value of the Common Stock is unknown and cannot be predicted with certainty.

25. Consent to Electronic Delivery. By entering into this Agreement and accepting the Award evidenced hereby, you hereby consent to the delivery of information (including, without limitation, information required to be delivered to you pursuant to Applicable Law) regarding the Company and its Affiliates, the Plan, this Agreement and the Award via Company web site or other electronic delivery.

26. Clawback Policy. The Restricted Stock and Restricted Stock Units are subject to the terms of the Company's recoupment, clawback or similar policy as it may be in effect from time to time, as well as any similar provisions of Applicable

Law, any of which could in certain circumstances require repayment or forfeiture of the Restricted Stock and Restricted Stock Units or any shares of Common Stock or other cash or property received with respect to the Restricted Stock and Restricted Stock Units (including any value received from a disposition of the shares acquired upon vesting or payment of the Restricted Stock and Restricted Stock Units).

27. Counterparts. This Agreement may be executed in counterparts (including electronic signatures or facsimile copies), each of which will be deemed an original, but all of which together will constitute the same instrument.

{The Glossary follows on the next page.}

GLOSSARY

(a) “**Index**” means the Russell Microcap Index.

(b) “**Total Shareholder Return**” means the total shareholder return over the applicable Performance Period for either the Company or the Index assuming that any dividends are reinvested in a company’s stock on the payment date. Except as provided in Section 2(c)(ii)), (1) total shareholder return for the Company shall be calculated using (i) the average Company stock price at the close of regular trading on the principal exchange on which the stock is listed or traded for the 30-trading-day period ending with the last day on which the applicable exchange is open for trading preceding the first day of the applicable Performance Period, and (ii) the average Company stock price at the close of regular trading on the principal exchange on which the stock is listed or traded for the 30-trading-day period ending with the last trading day of the applicable Performance Period, and (2) total shareholder return for the Index will be measured over the same 30-trading day periods as for the Company.

(c) “**Securities Act**” means the Securities Act of 1933 and the rules promulgated thereunder, as amended.

(d) “**You**”; “**Your**”. You means the recipient of the Restricted Stock and Restricted Stock Units as reflected in the first paragraph of this Agreement. Whenever the word “you” or “your” is used in any provision of this Agreement under circumstances where the provision should logically be construed, as determined by the Administrator, to apply to the estate, personal representative, or beneficiary to whom the Restricted Stock and Restricted Stock Units may be transferred by will or by the laws of descent and distribution, the words “you” and “your” will be deemed to include such person.

{The signature page follows.}

IN WITNESS WHEREOF, the Company has caused this Agreement to be executed by its duly authorized officer as of October ____, 2017.

EMCORE CORPORATION

By:

Name:

Title:

Date:

The undersigned hereby represents that he/she has read the Prospectus and is familiar with the Plan's terms. The undersigned hereby acknowledges that he/she has carefully read this Agreement and agrees, on behalf of himself/herself and on behalf of his/her beneficiaries, estate and permitted assigns, to be bound by all of the provisions set forth herein, and that the Award and Restricted Stock and Restricted Stock Units are subject to all of the terms and provisions of this Agreement, and of the Plan under which it is granted, as the Plan and this Agreement may be amended in accordance with their respective terms. The undersigned agrees to accept as binding, conclusive, and final all decisions or interpretations of the Administrator concerning any questions arising under this Agreement or the Plan with respect to the Award or Restricted Stock and Restricted Stock Units.

WITNESS

AWARD RECIPIENT

Date:

STOCK POWER

FOR VALUE RECEIVED and pursuant to that certain Performance-Based Restricted Stock and Restricted Stock Unit Award Agreement between EMCORE Corporation, a New Jersey corporation (the “**Company**”), and the individual named below (the “**Individual**”) dated as of _____, _____, the Individual, hereby sells, assigns and transfers to the Company, an aggregate 66,666 shares of Common Stock of the Company, standing in the Individual’s name on the books of the Company and represented by stock certificate number(s) _____ to which this instrument is attached, and hereby irrevocably constitutes and appoints _____ as his or her attorney in fact and agent to transfer such shares on the books of the Company, with full power of substitution in the premises.

Dated _____, _____

Signature

Print Name

(Instruction: Please do not fill in any blanks other than the signature line. The purpose of the assignment is to enable the Company to exercise its sale/purchase option set forth in the Performance-Based Restricted Stock and Restricted Stock Unit Award Agreement without requiring additional signatures on the part of the Individual.)

EMCORE Corporation Subsidiaries*

Corona Optical Systems, Inc., A Delaware corporation
EMCORE Hong Kong, Limited, a Hong Kong corporation
Langfang EMCORE Optoelectronics Company, Limited, a Chinese corporation
EMCORE Optoelectronics (Beijing) Company, Limited

*As of December 5, 2017

Consent of Independent Registered Public Accounting Firm

The Board of Directors
EMCORE Corporation:

We consent to the incorporation by reference in the registration statement Nos. 333-160368, 333-37306, 333-60816, 333-118076, 333-132317, 333-160360, 333-132318, 333-159769, 333-27507, 333-36445, 333-118074, 333-39547, 333-45827, 333-171929, 333-175777, 333-185699, 333-185698, 333-189451, 333-197179, 333-211192 and 333-217799 on Form S-8 of EMCORE Corporation of our report dated December 5, 2017, with respect to the consolidated balance sheets of EMCORE Corporation as of September 30, 2017 and 2016, and the related consolidated statements of operations and comprehensive income, shareholders' equity and cash flows, for each of the years in the three-year period ended September 30, 2017, and the effectiveness of internal control over financial reporting as of September 30, 2017, which reports appear in the September 30, 2017 annual report on Form 10-K of EMCORE Corporation.

/s/ KPMG LLP

Irvine, California
December 5, 2017

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

I, Jeffrey Rittichier certify that:

1. I have reviewed this Annual Report on Form 10-K 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: **December 5, 2017**

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, Jikun Kim, certify that:

1. I have reviewed this Annual Report on Form 10-K 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: December 5, 2017

By: /s/ Jikun Kim

Jikun Kim

Chief Financial 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 Annual Report on Form 10-K of EMCORE Corporation (the "Company") for the quarterly period ended September 30, 2017, 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: **December 5, 2017**

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 Annual Report on Form 10-K of EMCORE Corporation (the "Company") for the quarterly period ended September 30, 2017, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Jikun Kim, Chief Financial 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: **December 5, 2017**

By: **/s/ Jikun Kim**

Jikun Kim

Chief Financial 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.