

EMCORE CORPORATION
FORM 10-K
FISCAL YEAR 2022
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CAUTIONARY NOTE 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, and Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). These forward-looking statements are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These forward-looking statements are based on 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 future results included in our Exchange Act reports and statements about 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 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 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 the industries in which we operate to be materially different from those expressed or implied by any forward-looking statements. You are urged to carefully review the disclosures we make concerning risks and other factors that may affect our business and future financial performance, including those made below under “[Summary Risk Factors](#)” and in [Part I, Item 1A, “Risk Factors](#)” of this Annual Report on Form 10-K as such risks and other factors may be amended, supplemented, or superseded from time to time by subsequent reports we file with the Securities and Exchange Commission (“SEC”).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 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 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 do not intend to update any forward-looking statement to conform such statements to actual results or to changes in expectations, except as required by applicable law or regulation.

SUMMARY RISK FACTORS

Our business is subject to varying degrees of risk and uncertainty. Investors should consider the risks and uncertainties summarized below, as well as the risks and uncertainties discussed in [Part I, Item 1A, “Risk Factors](#)” of this Annual Report on Form 10-K. Additional risks not presently known to us or that we currently deem immaterial may also affect us. If any of these risks occur, our business, financial condition, or results of operations could be materially and adversely affected.

Our business is subject to the following principal risks and uncertainties:

- our small size results in volatility in our cash flow, results of operations, and growth prospects, and we could experience revenue fluctuations due to our dependence on a few products for our success;
- we are substantially dependent on revenues from a small number of customers and may experience fluctuations in the mix of products and customers in any period;
- we are subject to the cyclical nature of the markets in which we compete and any future downturn or decline in spending for optical communications networks may reduce demand for our products and revenue;
- we are subject to risks related to our acquisitions, including that (a) the revenues and net operating results obtained from the Inertial Navigation Systems business acquired from KVH Industries, Inc., the Space and Navigation business acquired from L3Harris Technologies, Inc., or any other acquired business may not meet our expectations, (b) the costs and cash expenditures for integration of these businesses' operations or any other acquired business may be higher than expected, (c) there could be losses and liabilities arising from the acquisitions of these businesses or any other acquired business that we will not be able to recover from any source, and (d) we may not realize sufficient scale from any acquisition and will need to take additional steps, including making additional acquisitions, to achieve our growth objectives;
- we may not be able to obtain capital when desired on favorable terms, if at all, or without dilution to our shareholders;
- our secured credit facility contains restrictions that may limit our ability to pursue business opportunities as well as covenants that we may not satisfy, and that, if not satisfied, could result in the acceleration of outstanding indebtedness and limit our ability to borrow additional funds;

- customer demand is difficult to forecast and if we are unable to match production with customer demand, our results of operations could be negatively impacted;
- our operating results could be harmed if we are unable to obtain timely delivery of sufficient materials or components or if the prices of such materials or components increase;
- we face lengthy sales and qualification cycles for our new products due to the complexity of our products, and, in many cases, must invest a substantial amount of time and money before we receive orders;
- 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;
- if we do not keep pace with rapid technological change, our products may not be competitive, and increased spending to develop and improve our technology may adversely impact our financial results;
- pressure from competitors may result in price reductions and periods of reduced demand for our products;
- a failure to attract and retain managerial, technical, and other key personnel could reduce our revenue and operational effectiveness;
- our ability to achieve operational and material cost reductions and realize production efficiencies is critical to our ability to achieve long-term profitability;
- the failure of our CMs to timely deliver qualified products at reasonable prices could adversely affect our business;
- shifts in industry demand and inventories could result in significant inventory write-downs;
- any defects in our products may cause us to incur significant costs, divert management’s attention, or result in a loss of customers or product liability claims;
- our operations in China and significant international sales may expose us to risks inherent in doing business in these geographies;
- our business may be materially harmed if we fail to protect our intellectual property and other proprietary rights or are unable to successfully defend against claims of infringement of the rights of others;
- we could be subject to legal consequences if we fail to comply with the Modified Partial Award issued in connection with the proceedings commenced against us by Phoenix Navigation Components, LLC (“Phoenix”);
- a cyberattack or other failure or security breach of our information technology infrastructure, or the theft, loss or misuse of personal data, could adversely affect our business and operations;
- our costs of compliance, or failure to comply, with applicable state, federal, and international legal and regulatory requirements could increase our operating costs and adversely affect our business;
- our government contracts are subject to risks of budgetary constraints or spending reductions and may subject us to governmental audits, investigations, or other scrutiny that could adversely affect our business;
- we may undergo an “ownership change” within the meaning of Section 382 of the Internal Revenue 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; and
- the effects of the COVID-19 pandemic and other potential future public health crises, epidemics, pandemics, or similar events are uncertain and could have a material and adverse effect on our business, financial condition, operating results, and cash flows.

PART I.

ITEM 1. Business.

Organization

EMCORE Corporation, together with its subsidiaries (referred to herein as the “Company,” “we,” “our,” or “EMCORE”), was established in 1986 as a New Jersey corporation. We became publicly traded in 1997 and are listed on the Nasdaq Stock Exchange under the ticker symbol EMKR. Our headquarters and principal executive offices are located in Alhambra, California. For specific information about products or the markets served please visit our website at <https://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 SEC.

Description of the Business

We are a leading provider of sensors for navigation in the aerospace and defense market as well as a manufacturer of chips, laser components, and optical subsystems for use in the Broadband and Cable TV (“CATV”) industries. We pioneered the linear fiber optic transmission technology that enabled the world’s first delivery of CATV directly on fiber, and today are a leading provider of advanced mixed-signal products serving the aerospace and defense and broadband communications markets. The mixed-signal technology, at the heart of our broadband communications products, is shared with our fiber optic gyroscopes (“FOGs”) and other inertial sensors to provide the aerospace and defense markets with state-of-the-art navigation systems technology.

Over the last three years, EMCORE has expanded its scale and portfolio of inertial sensor products through the acquisitions of Systron Donner Inertial, Inc. (“SDI”) in June 2019, the Space and Navigation business of L3Harris Technologies, Inc. (“S&N”) in April 2022, and the FOG and Inertial Navigation Systems business of KVH Industries, Inc. (“EMCORE Chicago”) in August 2022.

We have fully vertically-integrated manufacturing capability at our headquarters in Alhambra, CA, and at our facilities in Budd Lake, NJ, Concord, CA, and Tinley Park, IL. These facilities support our vertically-integrated manufacturing strategy for quartz, FOG, and Ring Laser Gyro (“RLG”) products for navigation systems, and for our chip, laser, transmitter, and receiver products for broadband applications. We design and manufacture industry-leading QMEMS, lithium niobate, and InP chip-level technology to deliver state-of-the-art component and system-level products across our end-market applications. Our best-in-class components and systems support a broad array of applications including navigation and inertial sensing, defense optoelectronics, broadband communications, optical sensing, and specialty chips for telecom and data center applications.

We utilize metal organic chemical vapor deposition systems capable of processing a wide range of compound semiconductor-based materials. Operations include wafer fabrication, device design and production, fiber optic module, subsystem, and system design and manufacture, and Quartz MEMS (“QMEMS”) gyroscope, accelerometer, and inertial measurement units (“IMU”) and inertial navigation systems (“INS”) design and manufacture. Operations in our Broadband segment beyond wafer fabrication are already largely and increasingly manufactured with our electronics manufacturing service providers and other contract manufacturers (collectively, “CMs”). We are vertically integrated in the manufacture of FOGs, QMEMS gyroscopes, accelerometers, IMU and INS within our own facilities. Many of our manufacturing operations are computer monitored or controlled to enhance production output and statistical control. Our manufacturing processes involve extensive quality assurance systems and performance testing. Our CMs also maintain comprehensive quality assurance and delivery systems that are monitored for compliance. Our facilities have achieved and continue to maintain certification status for quality management systems. Our manufacturing facilities maintain ISO 9001 quality management certification, and we are AS9100 aerospace quality certified at our facilities in Concord, CA and Budd Lake, NJ.

Principal Products and Markets

Our reporting segments are as follows: (a) Aerospace and Defense and (b) Broadband. Aerospace and Defense is comprised of two product lines: (i) Inertial Navigation and (ii) Defense Optoelectronics. Broadband is comprised of three product lines: (i) CATV Optical Transmitters and Components, (ii) Data Center Chips, and (iii) Optical Sensing. Our Aerospace and Defense products primarily serve the navigation and defense optoelectronics markets. Our Broadband products primarily serve the CATV, optical sensing, telecom, and data center markets.

Aerospace and Defense

Inertial Navigation

Through our vertically-integrated infrastructure, we have adapted the same technologies, chip designs, and production assets applicable to our CATV products to our FOG products, which have broad application within the aerospace and defense markets for land, sea, air, and space navigation for lower volume, higher value added product. In the fiscal year ended September 30, 2022, we further expanded our Inertial Navigation product portfolio with the acquisitions of S&N and EMCORE Chicago.

FOG Products - Our FOG technologies have received multiple U.S. patents and have been qualified for several key military programs for applications including unmanned aerial systems, line-of-site stabilization, aviation, and aeronautics. All FOG products feature advanced optics with three components for simplified assembly and higher accuracy, lower noise, and greater efficiency. Our FOG products range from tactical to strategic grade gyros, IMUs and INSs where specifications for fiber length, angle random walk and drift rate improve, giving customers flexibility to choose the product and performance level that best meets the customer's application. Our FOG based IMUs and INS provide compelling size, weight, and power ("SWaP") performance compared to competing systems and deliver high precision with up to ten times better performance than competing units in compact, portable form factors.

TACNAV Products - Our TACNAV tactical navigation product line employs digital compass sensors and our FOGs to offer vehicle-based navigation and pointing systems with a range of capabilities, including Global Positioning Systems / Global Navigation Satellite System (GPS/GNSS) backup and enhancement, vehicle position, hull azimuth and navigation displays. Because our digital compass products measure the earth's magnetic field rather than detect satellite signals from the GPS/GNSS, they are not susceptible to GPS/GNSS jamming devices. TACNAV systems vary in size and complexity to suit a wide range of vehicles. Our TACNAV digital compass products have been sold for use aboard U.S. Army, Marine Corps, and Navy vehicles as well as to many foreign countries, including Australia, the United Kingdom, Canada, Germany, Italy, New Zealand, Saudi Arabia, Spain, Sweden, Taiwan, Malaysia, and Switzerland. We believe that we are among the leading manufacturers of such systems. Our standard TACNAV products can be customized to our customers' specifications. At customer request, we offer training and other services.

RLG Products - EMCORE's line of INSs includes the advanced RLG-based products of S&N, which provide increased performance, reliability, and quality pointing and position capability for land navigation systems including Artillery/Radar Positioning & Pointing Systems and Battlefield/Artillery Survey Systems. Partnered with the U.S. Army and deployed on key programs including the Multiple Launch Rocket System (MLRS) and High-Mobility Artillery Rocket System (HIMARS), our combat-proven precision Ring Laser Gyro product family delivers mission-critical information such as survey, pointing, and position to the U.S. military for precise, indirect mass fires and counter-fire operations.

QMEMS Products - Our QMEMS gyroscopes, accelerometers, IMUs, and INS products deliver SWaP performance and cost advantages over alternative technologies. With our experience in these technologies, we are developing leading edge disciplines which are enabling advanced performance capabilities in mission critical applications worldwide. Our QMEMS products have no moving parts, no friction, no known modes of wear out, and require no recalibration or rebuilding. They deliver industry leading reliability under demanding conditions through dedicated engineering technology and manufacturing operations excellence, including AS9100 Aerospace Quality System Certification. Our QMEMS products provide precision system solutions and establish high standards for price and/or performance characteristics across guidance, navigation, control, pointing, and stabilization applications in commercial and military aircraft, unmanned autonomous vehicles, land vehicles, precision guided weapons, and industrial and marine platforms.

Defense Optoelectronics

We have an established history as a pioneer of innovative radio frequency ("RF") over fiber solutions for high performance fiber optic links in the terrestrial portion of satellite communications networks. Satellite/microwave band components and complete systems transport an ultra broadband frequency range including IF, L, S, C, X, DBS, Ku, K, Ka, Q/V and ultra-wideband signal transport. A number of high-dynamic-range applications are supported, including: satellite antenna remoting and signal distribution, inter- and intra-facility links, site diversity systems, high performance super trunking links, electronic warfare systems, and radar testing. The complete line of satellite and microwave components, subassemblies, and systems eliminates the distance limitation of copper based coaxial systems. The rack mount Optiva platform RF and microwave fiber optic transport system features a wide range of 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. We also offer 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 customers with high frequency, dynamic range, compact form factors, and extreme temperature, shock, and vibration tolerance.

Broadband

CATV Optical Transmitters and Components

We are a leader in providing 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 networks with less noise and power consumption. This empowers cable service operators to meet the growing demand for high speed internet, HDTV, ultra HDTV, 4K, video streaming, and other advanced services. Our products include forward and return path 1310 nm and 1550 nm distributed feedback (“DFB”) analog lasers, optical receivers optimized for CATV, data over cable service interface specification (“DOCSIS”) 3.1, and wireless broadband photodiodes used in forward and return path broadband subassembly components, analog fiber-optic transmitters, quadrature amplitude modulation transmitters, and CATV fiber amplifiers. Our latest series of CATV transmitters feature linear externally-modulated laser, or L-EML, technology that enables long distance optical link performance approaching traditional lithium niobate based externally modulated transmitters and is more cost-effective and far exceeds the performance of DFB laser-based systems. CATV transmitter products are offered on an original equipment manufacturing and original design manufacturing basis for integration into complete CATV transmission systems. We also offer our own branded line of EMCORE Medallion Series rack-mount CATV transmitters, optical switches, and fiber amplifiers. Our Medallion Series products include DOCSIS 3.1, 1550 nm externally-modulated transmitters, and 1550 nm directly-modulated transmitters.

Optical Sensing

EMCORE lasers for Optical Sensing support a broad array of technologies including Light Detecting and Ranging (“LiDAR”), strain measurement, tracking, terahertz-spectroscopy, interferometry, position and interference measurement, and free space communications. EMCORE’s optical sensing components can be custom designed in a variety of form factors to integrate into a wide range of industrial applications including autonomous vehicles, oil and gas exploration, materials characterization, aerospace, astronomy, and more.

Data Center Chips

EMCORE’s Specialty Data Center & Telecom Chips program provides design and manufacturing services for custom chip devices tailored to specific customer requirements and applications. EMCORE has a long history of innovation in highly linear, coherent laser sources. Our device scientists have developed innovative chip devices that have achieved leading performance in diverse applications including Cloud-Data Center, Telecom Modules, gigabit passive optical network, or GPON, CATV Networks, Wireless Networks, Industrial Sensing, and LiDAR.

Strategic Plan

Our strategy is to continue pioneering development of sensing and linear optical systems serving aerospace and defense and broadband communications markets. We aim to design and build innovative products that are valued by our customers with the intention to grow our sensing and linear product lines using innovative technology, both organically and through future acquisitions. We seek solutions that maximize performance in transformative aerospace and defense systems and high-speed communications networks.

Our industry is characterized by rapid changes in process technologies with increasing levels of functional integration. Research and development efforts focus on maintaining our technological competitive edge to improve the quality and features of existing products. We strive to design new proprietary production technologies and products, improving the performance of existing materials, components, and subsystems, and reducing costs in the product manufacturing process. Many 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.

Distribution Methods

We sell products worldwide through multiple channels made up of our direct sales force, application engineers, third party sales representatives, and distributors. Our sales force is aligned according to product line to maximize expertise. We communicate with customers’ engineering, manufacturing, and purchasing personnel throughout the sales cycle to provide optimized customer solutions through product design, qualifications, performance, and price. As a result, we develop strategic and long-

lasting customer relationships with tailored products and services. Marketing efforts are focused on increasing brand awareness, communicating our technological advantages, and generating leads. We use a variety of marketing methods including our website, participation at trade shows, and selective advertising to achieve these goals.

Competitive Business Conditions, Our Competitive Position in the Industry, and Methods of Competition

The markets we serve are extremely competitive, characterized by rapid technological change. Primary competitive factors are product cost, yield, throughput, performance, reliability, breadth of product line, product reputation, customer satisfaction, and customer loyalty to competitors' technologies. Certain product lines are subject to frequent introduction of new products, short product life cycles, and significant price erosion. We face competition from numerous domestic and international companies, who may have significant engineering, manufacturing, marketing, and financial resources. In addition, competitors may develop enhancements to, or future generations of, products that offer superior price and performance characteristics.

Although our markets are competitive, there are substantial barriers to entry. These barriers include significant dependence on 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 sell products to current and future potential 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") and certain countries throughout the world, political and legal arrangements encourage the purchase of domestically produced goods, which places us at a disadvantage in those regions or countries.

Sources and Availability of Raw Materials and Principal Suppliers

We depend on a limited number of suppliers for certain raw materials, components, and equipment. Supplier relationships are reviewed to mitigate risks and lower costs, especially where we depend on a few suppliers for critical components or raw materials. Communications with suppliers are ongoing to prevent interruptions and our supply chain management is focused on maintaining quality while lowering purchase prices through standardized purchasing efficiencies and design requirements. We strive to limit inventories to levels sufficient to meet near-term needs. In the fiscal year ended September 30, 2022, the majority of production for our Broadband segment was through our CMs, while all our Navigation-related production was through our vertically-integrated manufacturing operations.

Dependence on Major Customers

Our major customers include: Arris Technology, Inc., Cisco Systems, Inc., and Lockheed Martin Space Systems, each of whom represented greater than 10% of consolidated revenue in the fiscal year ended September 30, 2022. See [Note 13 – Segment and Revenue Information](#) in the Notes to Consolidated Financial Statements for additional information about significant customers.

Patents and Trademarks

As of September 30, 2022, we held approximately 52 U.S. patents and approximately 57 foreign patents and approximately 36 additional patent applications are pending. The issued patents cover various products in the major markets we serve. Our U.S. patents will expire on varying dates between 2021 and 2038. 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 register our trademarks in the United States and other key international markets where we do business.

Effect of Governmental Regulations on the Business

We operate globally and are subject to numerous U.S. federal, state, and foreign laws and regulations covering a wide variety of subject matters. These laws and regulations are subject to change, and any such change may require us to improve our technologies, incur expenditures, or both, in order to comply with such laws and regulations. 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 the ability to verify the origin of any "conflict minerals" used in our products. For information about governmental regulations applicable to our business, refer to [Item 1A, "Risk Factors"](#) included elsewhere in this Annual Report.

Costs and Effects of Compliance with Environmental Laws (Federal, State, and Local)

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 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.

Human Capital Resources

Our ability to attract and retain qualified personnel is essential to continued success. Competition is intense in recruiting personnel within the semiconductor and fiber optics industries. We are focused on retaining key contributors, developing staff, and cultivating their continued commitment. As of September 30, 2022, we had approximately 469 employees, of which approximately 439 employees are located in the U.S., and approximately 436 are full-time employees.

Available Information

We are subject to the information requirements of 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. Available free of charge on the SEC website as well as our Investor Relations website at <https://investor.emcore.com/> is a link to the 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.

ITEM 1A. Risk Factors.

You should carefully consider the risks described below, some of which have manifested and any of which may occur in the future, in addition to the other information contained in this report before making an investment decision with respect to any of our securities. Our business, results of operations, and financial condition could be materially and adversely impacted by any of these risks, which could in turn adversely affect our stock price. Additional risks not currently known to us or other factors not perceived by us as material risks could also present significant risks to our business.

Risks Related to Demand, Competition, Product Development and Manufacture, and Operations

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

For the fiscal year ended September 30, 2022, we incurred a loss from operations of \$24.3 million. Our operating results for future periods are subject to numerous uncertainties and we cannot be certain that we will 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 a small company and dependent on a few products for success.

We are a small company with a narrow, focused portfolio of products. Our small size could cause our cash flow, results of operations, 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 a small number of customers. 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.

A small number of customers account for a significant portion of our revenue, and 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, 2022, sales to three customers accounted for an aggregate of 54% of total consolidated revenues and for the fiscal year ended September 30, 2021, sales to three customers accounted for an aggregate of 70% of total consolidated revenues. Revenue from any major customer may decline or fluctuate significantly in the future. We may not be able to offset any decline in sales from existing major customers with sales from new customers or other existing customers. Because of

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. If there is consolidation among our customer base, customers may be able to command increased leverage in negotiating prices and other terms of sale, which could adversely affect profitability. If we are required to reduce pricing, 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 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, success will depend on our continued ability to develop and manage relationships with significant customers, and we expect that the majority of sales will continue to depend on sales of our products to a limited number of customers for the foreseeable future.

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

- increases or decreases in the markets for customers' products;
- discontinuation by 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 suppliers;
- product liability claims;
- other conditions affecting the timing of customer orders;
- reductions in prices for our products or increases in the costs of 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;
- pandemics, including COVID-19;
- 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 (including tariffs imposed on our products or raw materials, equipment, or components used in the production of our products), import/export, and other regulations of the countries in which we do business;
- the occurrence of merger and acquisition activities; and
- acts of terrorism or violence and international conflicts or crises.

In addition, the limited lead times with which many customers order our products restrict the ability to forecast revenue. We may also experience a delay in generating or recognizing revenue for a number of reasons. For example, in certain of our product lines, 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 revenue objectives. Failure to ship these products by the end of a quarter may adversely affect results of operations and cash flows.

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

The acquisitions of EMCORE Chicago and S&N, and acquisitions of other companies or investments in joint ventures with other companies could adversely affect operating results, dilute shareholders' equity, or cause us to incur additional debt or assume contingent liabilities.

To increase business, maintain 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. For example, in August 2022, we acquired EMCORE Chicago from KVVH Industries, Inc. and in April 2022, we acquired S&N from L3Harris Technologies, Inc. The acquisitions of EMCORE Chicago and S&N, and any other acquisitions, joint ventures and similar transactions that we may enter into from time to time, involve a number of risks that could harm our business and result in EMCORE Chicago, S&N, and/or any other acquired business or joint venture not performing as expected, including:

- problems integrating the acquired operations, personnel, technologies, or products with the existing business and products;
- failure to achieve cost savings or other financial or operating objectives with respect to an acquisition;
- possible adverse short-term effects on cash flows or operating results, and the use of cash and other resources for the acquisition that might affect liquidity, and that could have been used for other purposes;
- diversion of management's time and attention from our existing 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;
- difficulties in the integration of financial reporting systems, which could cause a delay in the issuance of, or impact the reliability of the consolidated financial statements;
- failure to comply with Section 404 of the Sarbanes-Oxley Act of 2002, including a delay in or failure to successfully integrate these businesses into our internal control over financial reporting;
- insufficient experience with technologies and markets in which the acquired business is involved, which may be necessary to successfully operate and integrate the business;
- 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, environmental liabilities, regulatory liabilities, 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 ("EPS") 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 shareholders' equity, or require us to incur indebtedness.

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 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 of Directors and 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 management resources to analyzing and pursuing such a transaction, which could negatively impact 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 strategic alternative in the future, we cannot be certain that we would fully realize the anticipated benefits of such a transaction and cannot predict the impact that such strategic transaction might have on our operations or stock price.

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

We operate in industries that makes our prospects difficult to evaluate and predict. 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 to execute on our current or future business strategies, including to:

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

Our secured credit facility contains financial and restrictive covenants that we may not satisfy, and that, if not satisfied, could result in the acceleration of any outstanding indebtedness and limit our ability to borrow additional funds. The credit facility also imposes restrictions that may limit our ability to pursue business opportunities.

Our Credit Agreement, dated as of August 9, 2022 (the “Credit Agreement”), among the Company, S&N, the lenders party thereto and Wingspire Capital LLC (“Wingspire”), as administrative agent for the lenders, subjects us to various financial and other affirmative and negative covenants with which we must comply on an ongoing or periodic basis. These include financial covenants pertaining to a minimum fixed charge coverage ratio and covenants requiring the mandatory prepayment of amounts outstanding under the revolver under specified circumstances. The agreements also subject us to various restrictions on our ability to engage in certain activities, such as raising capital or acquiring businesses. These restrictions may limit or restrict our cash flow and our ability to pursue business opportunities or strategies that we would otherwise consider to be in our best interests. In addition, the Credit Agreement contains a cash dominion provision, requiring us to maintain a minimum amount of liquidity. As of September 30, 2022, this minimum amount of liquidity that we needed to maintain was \$12.5 million. If we fall below this minimum amount of liquidity for a period of three consecutive days, or if there occurs an event of default under the Credit Agreement, then our lender can exercise certain rights, including taking control of our bank accounts and cash resources. In addition, if an event of default occurs under the Credit Agreement, our lenders can accelerate the maturity of our indebtedness under that agreement to make it due and payable immediately. If we trigger the cash dominion provision or if an event of default occurs under the Credit Agreement and if in either case our lenders elect to exercise their rights, we may not be able to pay our debts and other monetary obligations as they come due, and our ability to continue to operate as a going concern could be impaired, which could in turn cause a significant decline in our stock price and could result in a significant loss of value for our shareholders.

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 estimates of customer demand. While 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 customer commitments and the possibility of unexpected changes in demand for their products limit the ability to accurately predict future customer demand. On occasion, customers have required rapid increases in production, which has strained resources. We may not have sufficient capacity at any given time to meet the volume demands of customers, or one or more 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, 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 gross margin, results of operations, and cash flow. During an industry downturn, there is also a higher risk that a larger portion of trade receivables would be uncollectible. In addition, certain 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.

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 the 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 competitors, or the industries in which we operate and compete, changes in market valuation or earnings of competitors, legislation or regulatory policies, practices, or actions, sales of our common stock by 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 the 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 industries in particular, could have the effect of diverting management's attention and could materially harm our business.

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 in our Broadband segment 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 customers, could result in a significant reduction in revenue and may also increase the volatility of the price of our common stock.

In addition, the Broadband 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 workforce and inventories, and take a cautious approach to acquiring new equipment and technologies, any of which could cause results of operations to fluctuate from period to period and harm our business.

Operating results could be harmed if we are unable to obtain timely deliveries of sufficient materials, components, or services of acceptable quality from sole or limited sources, or if the prices of materials, components, or services 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. For example, during the fiscal year ended September 30, 2022, COVID-19 driven component shortages and delays required us to

source critical components from alternative sources and, in some cases, to design in alternative parts and qualify them with customers on short schedules. 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 suppliers, we risk serious disruption to 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, or if import tariffs are imposed on these materials. 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 results of operations and cash flows. In addition, reliance on these suppliers may adversely affect 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.

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 the 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 as part of the development and qualification process 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 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 allocated production capacity, our business, financial condition, results of operations, and cash flows may be adversely affected.

Historical and future budgets for operating expenses, capital expenditures, operating leases, and service contracts are based upon 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.

Our products are difficult to manufacture. Production could be disrupted and results of operations and cash flows could suffer if 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 are often 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 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 gross margins. Because the majority of our manufacturing costs are fixed, achieving planned production yields is critical to 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 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 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 customer requirements, manufacturing facilities, or processes or those of third-party CMs and

component suppliers have historically caused, and may in the future cause, significantly reduced manufacturing yields, negatively impacting the gross margins on, and production capacity for, those products. 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 suppliers.

We also have substantial risk of interruption in manufacturing resulting from fire, natural disaster, equipment failures, acts of government, or similar events, because we manufacture most of our products using few facilities, and do not have back-up facilities available for manufacturing these products. We could also incur significant costs to repair 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, may not be readily available from multiple vendors, and would be difficult to repair or replace if they 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 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.

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. 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 competitors, to develop products that effectively compete with competitors' products used in new applications, such as remote physical layer, 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. Future performance will depend on 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 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 research and development efforts, our business, financial condition, results of operations, and cash flows may be adversely affected.

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

We may increase research and development and/or capital expenditures and expenses above our historical run-rate model in order to attempt to improve existing technology and develop new technology. Increasing 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 financial results. If we are unable to fund these types of expenditures, we may be unable to improve 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 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, 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 current and potential customers who may attempt to integrate their operations by producing their own components and subsystems or acquiring a competitor, 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 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 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.

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

Future success depends, in part, on the ability to attract and retain certain key personnel, including scientific, operational, financial, and managerial personnel. In addition, 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, senior managers, and executives) is intense. Because of this competition for skilled employees, we may be unable to retain existing personnel or attract additional qualified employees in the future to keep up with 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 workforce and other cost reduction efforts.

If spending for optical communications networks declines, revenues and financial performance may decline.

A material portion of revenues depend on continued capital investment in 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 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 communications networks and bandwidth consumption are not realized and investment in communications networks does not grow as anticipated, revenues, results of operations, and gross margins could be harmed.

Ability to achieve operational and material cost reductions and to realize production efficiencies for operations is critical to 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 customers to accept and qualify the new designs, potentially creating a competitive disadvantage for our products. These initiatives can be time-consuming, disruptive to operations, and costly in the short-term. Successfully implementing these and other cost-reduction initiatives throughout operations is critical to 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.

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

We use CMs as a less-expensive alternative to manufacture certain products. CMs in Asia currently manufacture our CATV Laser and Transmitter products and components and a CM in the U.S. currently manufactures a significant portion of our Defense Optoelectronics products. In some cases, we supply inventory to CMs, and we bear the risk of loss, theft, or damage to inventory while it is held in their facilities.

If these CMs do not fulfill their obligations to us, or if we do not properly manage these relationships and the transition of production to these CMs, 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 CMs, or if any of the CMs experience financial difficulty, delays, disruptions, capacity constraints, or quality control problems in their operations, the ability to ship products to customers could be impaired and our competitive position and reputation could be harmed.

The use of CMs located outside of the U.S. also subjects us to the following additional risks that could significantly impair the ability to source 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;
- trade and travel restrictions; and
- the outbreak of infectious diseases which could result in travel restrictions or the closure of the facilities of our CMs.

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

In addition, certain CMs 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 CMs 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 customer relationships, any of which could harm our business, financial condition, results of operations, and cash flows.

Our products may contain defects that could 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 customers and us. However, defects may occur from time to time. 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. 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, 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 engineering personnel from 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 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 or entirely cover costs that may arise from defects in 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.

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

The life cycles of some 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 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 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 manufacturing cost or net realizable market value.

If future demand or market conditions are less favorable than 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.

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

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

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

These risks are increased by the fact that our customers include large, sophisticated companies that 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.

The majority of our development contracts are for a fixed price, and 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 estimated cost to perform the work, either of which could adversely affect results of operations. Some fixed price development contracts include initial production units in their scope of work. Successful performance of these contracts depends on the ability to meet production specifications and delivery rates. If we are unable to meet these contract requirements, revenue from these contracts could be reduced through the incorporation of liquidated damages, the contract could be terminated for default, and we could be subject to other financially significant consequences. We use our 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 used to prepare the consolidated financial statements are appropriate, future events could result in unfavorable adjustments to those estimates which in turn would adversely affect results of operations.

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.

Risks Related to International Sales and Operations

We currently have operations in China with respect to our Broadband business, which exposes us to risks inherent in doing business in China.

In an effort to keep costs down, we currently operate certain logistic functions with respect to our Broadband business 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 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. Laws and regulations remain 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. These uncertainties may impede the ability to enforce the contracts we have entered into with 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. 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, failure to comply with applicable laws and regulations or inability to enforce applicable Chinese laws and regulations. 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, including import tariffs as described in more detail above, 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, results of operations and cash flows could be adversely affected.

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

For the fiscal years ended September 30, 2022 and 2021, sales to customers located outside the U.S. accounted for approximately 14.2% and 12.0%, respectively, of consolidated revenue, with revenue assigned to geographic regions based on

customers' billing address. Sales to customers in Asia represent the majority of international sales. We believe that international sales will continue to account for a significant percentage of revenue as we seek international expansion opportunities. In addition, certain sales to customers with a U.S. billing address may be physically shipped to a location outside of the U.S. 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 the foreign countries where customers are located may inhibit export of 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 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 or may reduce gross margin on these products;
- 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 customers may damage 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, which we may incorporate into certain products, could prevent us from selling these products in these regions;
- 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 the 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").

Risks Related to Intellectual Property Rights, Litigation, and Cybersecurity

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 industries are held by others, including competitors and certain academic institutions. 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 results of operations and cash flows.

For example, in June 2018, Phoenix commenced an arbitration against us with the American Arbitration Association ("AAA") in New York and a special proceeding against us in the New York Supreme Court, Commercial Division. In June 2019, an interim award (the "Interim Award") was issued in connection with certain of the claims in the AAA proceeding and in October 2019, the arbitrator issued a Modified Partial Final Award, which incorporated by reference the terms of the Interim Award and ordered and awarded, among other items, (a) an award to Phoenix of attorneys' fees and costs in the amount of approximately \$3.8 million, (b) an award to Phoenix of \$1.0 million in damages owing for unpaid royalties through June 30, 2019, (c) an award to Phoenix of \$0.1 million in prejudgment interest, calculated at the New York statutory rate of 9% simple interest; and (d) payment to Phoenix of a royalty of 7.5% of the sale price on (i) future customer payments for certain EMCORE product

contracts entered into prior to the Interim Award and (ii) customer payments for future sales of any product using any of the five trade secret subparts deemed in the Interim Award to have been misappropriated by EMCORE (collectively, the “Deemed Trade Secrets”), in each case payable in a single lump sum within one month of completion of the calendar quarter in which payment has been received from the customer, subject to certain limitations, until such time as EMCORE has in good faith determined, and can so document, that it has completely ceased use of the Deemed Trade Secrets.

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 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.

Success depends to a significant degree on the 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 U.S. and selected international jurisdictions, most of which have been issued. We cannot guarantee that pending applications will be approved by the applicable governmental authorities. Moreover, 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 U.S. or other foreign countries may limit the 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, as well as contractual provisions. We enter into confidentiality and invention assignment agreements with 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 employees or those of our CMs end their employment or engagement with us or with them, 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 the 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 customers and vendors for claims that our intellectual property infringes the rights of others, which may result in substantial expense to us.

We may be required to indemnify customers or vendors for intellectual property claims made against them for products incorporating our technology. As such, claims against 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 business relationships and result in substantial costs to us.

We face certain litigation risks that could harm our business.

We may become subject to various legal proceedings and claims that arise in or outside the ordinary course of business. The results of legal proceedings are difficult to predict. Moreover, complaints that may be filed against us may not specify the amount of damages that plaintiffs seek, and we therefore may be unable to estimate the possible range of damages that might be incurred should these lawsuits be resolved against us. If any litigation is resolved against us, we could be subject to substantial damages. Thus, an unfavorable outcome or settlement of one or more lawsuits may have an adverse effect on our business, financial condition, results of operations, and cash flows. Even if litigation is 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.

Costs of defending litigation have been significant in the past, may continue, and may not be covered by our insurance policies. The defense of litigation could also result in diversion of management's time and attention away from business operations, which could harm our business.

We could be subject to legal consequences if we fail to comply with the Modified Partial Final Award issued in connection with the Phoenix legal proceedings.

In the Interim Award incorporated by reference into the Modified Partial Final Award the arbitrator determined and ordered that we are required to pay Phoenix a royalty of 7.5% of the sale price on (a) future customer payments for certain of our product contracts previously entered into at the time the Interim Award was issued and (b) customer payments for future sales of any product using any Deemed Trade Secret, in each case payable in a single lump sum within one month of completion of the calendar quarter in which payment has been received from the customer, and we are required to concurrently submit to Phoenix a written report that sets forth the calculation of the amount of the royalty payment in a form similar to previous royalty reports, provided that following the first \$1.0 million of royalty payments on our EMP-1 product only, inclusive of payments made to date, we are required to pay to Phoenix a royalty of 2.25% of the sale price (net of any warranty work, returns, rebates, discounts, or credits) with respect to subsequent sales of our EMP-1 product. We are required to continue to make royalty payments in this manner until such time as we have in good faith determined, and can so document, that we have completely ceased use of the Deemed Trade Secrets, and must provide notice of this determination to Phoenix. It is possible that additional legal proceedings will follow in connection with delivery of this notice to Phoenix, which would require us to incur additional costs and divert management's attention. If we fail to comply with these obligations, we could be subject to additional claims, penalties, or judgments, which could harm our business, financial condition, results of operations, and cash flows. In addition, we could be subject to significant legal costs and expenses in connection with the interpretation of certain of the obligations pursuant to the Interim Award, which could harm 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 the ability to expand and update this infrastructure in response to 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. In addition, we may be subject to a heightened risk of potential security breaches due to our sales to, and work with, government customers and the technologies that we develop for the defense industry.

The secure maintenance of this information is critical to our business and reputation. Despite implementation of security measures, 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. These types of attacks have increased, in general, as more businesses implement remote working environments. 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. Customers' network and storage applications may be subject to similar disruptions. It is often difficult to anticipate or immediately detect such incidents and the damage caused by such incidents. Data breaches and any unauthorized access or disclosure of information, employee information, or intellectual property could compromise our intellectual property, trade secrets, and other sensitive business information, any of which could result in legal action against us, exposure of our intellectual property to competitors, damages, fines, and other adverse effects. A data security breach could also lead to public exposure of personal information of employees, customers, and others. Any such 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.

Cyber-attacks, such as computer viruses, or other forms of cyber terrorism, may disrupt access to our network or storage applications. Such disruptions could result in delays or cancellations of customer orders or delays or interruptions in the production or shipment of products. Data security breaches involving data center customers could affect their financial condition and ability to continue to purchase our products. In addition, cyber-attacks may cause us to incur significant remediation costs, result in product development delays, disrupt key business operations, and divert attention of management and key information technology resources. These incidents could also subject us to liability, expose us to significant expense, and cause significant harm to our reputation and our business.

In addition, our technology infrastructure and systems are vulnerable to damage or interruption from natural disasters, power loss, and telecommunications failures. 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 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 employees, customers, or other third parties, which could increase 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, 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 business practices.

Risks Related to Governmental Regulation

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

Exports of certain products are subject to export controls imposed by the U.S. government and administered by the U.S. 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 (“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 (“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 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 failure to comply with applicable regulations could subject us to penalties that may restrict the ability to conduct business.

As a contractor and/or subcontractor to the U.S. government, we are subject to and must comply with various government regulations that impact 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 FCPA 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.

Failure to comply with applicable regulations, rules and approvals, or misconduct by any employee, could result in the imposition of fines and penalties, the loss of government contracts, or 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 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 for the foreseeable future the growth of our Inertial Navigation product line will depend, to a certain degree, on the ability to win government contracts and subcontracts, in particular from the Department of Defense. Many 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, budget cutbacks at these agencies, or government shutdowns. 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 or government shutdowns. 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, U.S. government contracts generally permit the government to terminate the contract without prior notice, at the government's convenience, or for default based on performance. Government customers can also decline to exercise previously disclosed contract options. A termination arising out of our default could expose us to liability and adversely affect our ability to obtain future contracts and orders. Furthermore, on contracts for which we are a subcontractor and not the prime contractor, the U.S. government could terminate the prime contract for convenience or otherwise, irrespective of our performance as a subcontractor. Also, sales to the U.S. government and its contractors as well as foreign military and government customers, either directly or as a subcontractor to other contractors, often use a competitive bidding process and have unique purchasing and delivery requirements, which often makes the timing of sales to these customers unpredictable.

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 administrative processes and business systems are found not to comply with the applicable requirements, we may be subject to increased government scrutiny or required to obtain additional governmental approvals that could delay or otherwise adversely affect the 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.

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 increase 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 production activities. If 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 operations and incur substantial remediation and other costs or liabilities. We are also subject to a number of federal and state laws and regulations related to safety, including the Occupational Safety and Health Administration (“OSHA”) and comparable state statutes, the purpose of which are to protect the health and safety of workers. Failure to comply with OSHA requirements and other related state regulations, including general industry standards, record keeping requirements, and monitoring and control of occupational exposure to regulated substances, could have a material adverse effect on results of operations and financial condition if we are subjected to significant penalties, fines, or compliance costs. 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 EU’s 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 the ability to export products to the EU and could adversely affect our business, financial condition, results of operations, and cash flows. In addition, we purchase certain chemicals from Europe and Asia that are unique, nearing the end of life, and could be subject to future changes to environmental regulations in the country of origin and/or the U.S. In the event new restrictions are placed on any such chemicals, they may be difficult to replace, and may require us to re-design or re-validate existing products that use such chemicals in their production.

In connection with compliance with such environmental laws and regulations, as well as compliance with industry environmental initiatives, the standards of business conduct required by some customers, and 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 operations. In addition, in recent 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 the 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 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 component suppliers fail to timely comply with applicable legislation, customers may refuse to purchase 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.

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 the ability to utilize these chemicals or the costs of doing so.

We are subject to anti-corruption laws in the jurisdictions in which we operate, including the FCPA. 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 anti-corruption laws. Although we have implemented policies and procedures designed to ensure that we, our employees, and other intermediaries comply with the FCPA and other anti-corruption 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 employees and other intermediaries with respect to our business or any businesses that we may acquire.

We have logistics operations with respect to our Broadband business in China and other jurisdictions, many of which pose elevated risks of anti-corruption violations, and we export 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 anti-corruption 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.

If we identify deficiencies in our current system of internal controls or fail to remediate them, we may not be able to accurately report 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 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 internal controls that need improvement.

We have devoted significant resources to remediate and improve 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 financial processes and reporting in the future. Any failure to implement required, new, or improved controls, or difficulties encountered in their implementation, could harm operating results or cause us to fail to meet 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 the Board of Directors 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 and goodwill recorded on the balance sheet. If we make changes in our business strategy or if market or other conditions adversely affect business operations, we may be forced to record an impairment charge related to these assets, which would adversely impact 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 assumptions as to prices, costs, holding periods, or other factors that may result in changes in 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 property, plant and equipment on an ongoing basis, and test goodwill annually or more frequently as indicated, and significant changes in any one assumption could produce a significantly different result. In such a circumstance, we may incur substantial impairment charges, which would adversely affect financial results. In any period where our stock price, as determined by market capitalization, is less than book value, this too could indicate a potential impairment and we may be required to record an impairment charge in that period.

Compliance with regulations related to conflict minerals and other regulations with respect to our supply chains 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 us. We may determine, as part of compliance efforts, that certain products or components we obtain from suppliers contain conflict minerals. If we are unable to conclude that all 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 products be certified as conflict free, which could place us at a competitive disadvantage. 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 suppliers, including the ability to obtain products or components in sufficient quantities and/or at competitive prices. Certain customers are requiring additional information from us regarding the origin of raw materials and complying with these customer requirements may cause us to incur additional costs. Our supply chain is complex and we may be unable to verify the origins for all metals used in products.

In addition, the U.S. federal government has issued policies for federal procurement focused on eradicating the practice of forced labor and human trafficking, and the United Kingdom and the State of California have issued laws that require us to disclose our policy and practices for identifying and eliminating forced labor and human trafficking in our supply chain. Several customers, as well as the Electronic Industry Citizenship Coalition, have also issued expectations to eliminate these practices that may impact us. While we have a policy and management systems to identify and avoid these practices in our supply chain, we cannot guarantee that suppliers will always be in conformance to these laws and expectations. We may face enforcement liability and reputational challenges if we are unable to sufficiently meet these expectations. Moreover, we are likely to encounter challenges with customers if we cannot satisfy their forced and trafficked labor policies and they may choose a competitor's product.

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 Code, as amended 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.

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 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 common stock. For example, our amended and restated certificate of incorporation and amended and restated bylaws:

- provide that directors may be removed at any time, but only for cause and only by the affirmative vote of the holders of at least a majority of outstanding shares of capital stock entitled to vote generally in the election of directors cast at a meeting of shareholders called for that purpose;
- provide that a super majority vote of 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% or more of the outstanding shares of capital stock entitled to vote generally in the election of directors for certain business combinations unless these transactions meet certain fair price criteria and procedural requirements or are approved by two-thirds of continuing directors;
- authorize the issuance of preferred stock, without any requirement of vote or class vote of shareholders, commonly referred to as "blank check" preferred stock, which shares of preferred stock may have rights senior to those of common stock;
- limit the persons who can call special shareholder meetings; shareholders do not have authority to call a special meeting of shareholders;
- establish advance notice requirements that must be complied with by shareholders to nominate persons for election to the 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 the 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 the Board of Directors to affect the rights of shareholders in a number of ways, including making it difficult for shareholders to replace members of the Board of Directors. Because the Board of Directors is responsible for approving the appointment of members of the 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 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

avored by a majority of unaffiliated shareholders. Certain of these measures may be adopted without any further vote or action by shareholders and this could depress the price of our common stock.

General Risk Factors

The full effects of COVID-19 and other potential future public health crises, epidemics, pandemics or similar events are uncertain and could have a material and adverse effect on our business, financial condition, operating results, and cash flows.

The COVID-19 pandemic has negatively affected the U.S. and global economy, disrupted global supply chains, significantly restricted travel and transportation, resulted in mandated closures and orders to “shelter-in-place,” and created significant disruption of the financial markets.

Further facility closures, work slowdowns or temporary stoppages could occur, which could delay our development efforts and our deliveries to customers. Other countries have different practices and policies that can affect our international operations and the operations of our suppliers and customers. If significant portions of our workforce are unable to work effectively, including because of illness, quarantines, absenteeism, government actions, facility closures, travel restrictions or other restrictions in connection with the COVID-19 pandemic, our operations will be negatively impacted.

As described elsewhere in Item 1A, Risk Factors of this Annual Report on Form 10-K for the fiscal year ended September 30, 2022, we rely on other companies to provide materials, major components and products, and to perform a portion of the services that are provided to our customers under the terms of most of our contracts where we rely on these third parties. Many of our suppliers have at times temporarily ceased or limited their operations as a result of COVID-19 and failed to deliver parts or components to us. For example, COVID-19 driven component shortages and delays have required us to spend significant time sourcing critical components from alternative sources and, in some cases, forced us to design in alternative parts and qualify them with customers on short schedules. These or similar actions may continue in the future, and an extended period of global supply chain disruption caused by the response to COVID-19 could impact our ability to perform on our contracts and, if we are not able to implement alternatives or other mitigations, product deliveries could be adversely impacted.

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 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 revenues. We cannot predict the timing, strength, or duration of any economic slowdown or subsequent economic recovery, worldwide or within our industries. 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 operations and financial performance. Such events could result in physical damage to one or more facilities, the temporary closure of one or more 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 transportation of goods from overseas, and delays in the delivery of goods. Public health issues, such as the COVID-19 pandemic, whether occurring in the U.S. 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 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 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 may not pay dividends on our common stock and, consequently, the only opportunity to achieve a return on an investment in our common stock may be an increase in the price of our common stock.

We may not pay dividends in the future. The terms of our loan and security agreement with our financial institution restrict our ability to pay dividends. Consequently, the only opportunity to achieve a return on an investment in our common stock may be through an increase in the market price of our common stock over the price paid, of which there is no guarantee.

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.

None.

ITEM 2. Properties.

We lease building space consisting of corporate, manufacturing, research and development, and other facilities. We currently lease facilities in Alhambra and Concord, California, Budd Lake, New Jersey, Middletown, Rhode Island, Tinley Park, Illinois, and Beijing, China.

The facility in Tinley Park, Illinois, with approximately 100,415 square feet, is leased through 2034 and is utilized for manufacturing and research and development for our Aerospace and Defense segment.

Approximately 50,000 square feet of the facility in Alhambra, California is leased through 2031 and approximately 18,000 square feet of this facility is leased through September 2026, in each case with an option to extend. This facility is utilized for corporate headquarters, manufacturing, and research and development for our Aerospace and Defense and Broadband segments.

The facility in Concord, California, with approximately 110,000 square feet, is leased through 2035 with an option to extend and is utilized for manufacturing and research and development for our Aerospace and Defense segment.

The facility in Budd Lake, New Jersey, with approximately 112,000 square feet, is leased through May 2025 and is utilized for manufacturing and research and development for our Aerospace and Defense segment.

The facility in Middletown, Rhode Island, with approximately 5,000 square feet, is leased through September 2024 with an option to extend through September 2026 and is utilized for sales, administrative and research and development for our Aerospace and Defense segment.

One facility in Beijing, China with approximately 5,000 square feet is leased through January 2025 and is utilized for research and development for our Broadband segment.

ITEM 3. Legal Proceedings.

See [Note 11 - Commitments and Contingencies](#) in the Notes to Consolidated Financial Statements for disclosures related to legal proceedings, which disclosures are incorporated herein by reference.

ITEM 4. Mine Safety Disclosures.

Not applicable.

PART II.

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

Market Information

Our common stock is traded on the Nasdaq Global Market and is quoted under the symbol "EMKR".

Holders

As of December 9, 2022, we had 58 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.

Dividends

We expect to retain all earnings to finance the expansion and development of our business and we do not currently intend to pay any cash dividends on capital stock in the foreseeable future. In addition, we are prohibited from paying cash dividends under the terms of the Credit Agreement without obtaining Wingspire's consent.

ITEM 6. [Reserved]

ITEM 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

The following discussion of financial condition and results of operations should be read in conjunction with the financial statements and the notes thereto included in [Financial Statements and Supplementary Data under Part II, Item 8](#) within this Annual Report. The following discussion contains forward-looking statements that reflect plans, estimates, and beliefs. Actual results could differ materially from those discussed in the forward-looking statements. See [Cautionary Note Regarding Forward-Looking Statements](#).

Business Overview

We are a leading provider of sensors for navigation in the aerospace and defense market as well as a manufacturer of chips, laser components, and optical subsystems for use in the Broadband and Cable TV ("CATV") industries. We pioneered the linear fiber optic transmission technology that enabled the world's first delivery of CATV directly on fiber, and today are a leading provider of advanced mixed-signal products serving the aerospace and defense and broadband communications markets. The mixed-signal technology, at the heart of our broadband communications products, is shared with our fiber optic gyroscopes ("FOGs") and other inertial sensors to provide the aerospace and defense markets with state-of-the-art navigation systems technology.

Over the last three years, we have expanded our scope and portfolio of inertial sensor products through the acquisitions of Systron Donner Inertial, Inc. ("SDI") in June 2019, the Space and Navigation business of L3Harris Technologies, Inc. ("S&N") in April 2022, and the FOG and Inertial Navigation Systems business of KVH Industries, Inc. in August 2022 ("EMCORE Chicago").

We have fully vertically-integrated manufacturing capability at our headquarters in Alhambra, CA, and at our facilities in Budd Lake, NJ, Concord, CA, and Tinley Park, IL. These facilities support our vertically-integrated manufacturing strategy for quartz and FOG products for navigation systems, and for our chip, laser, transmitter, and receiver products for broadband applications. We design and manufacture industry-leading QMEMS, lithium niobate, and InP chip-level technology to deliver state-of-the-art component and system-level products across our end-market applications. Our best-in-class components and systems support a broad array of applications including navigation and inertial sensing, defense optoelectronics, broadband communications, optical sensing, and specialty chips for telecom and data center applications.

Our reporting segments are as follows: (a) Aerospace and Defense and (b) Broadband. Aerospace and Defense is comprised of two product lines: (i) Inertial Navigation and (ii) Defense Optoelectronics. Broadband is comprised of three product lines: (i) CATV Optical Transmitters and Components, (ii) Data Center Chips, and (iii) Optical Sensing.

Recent Developments

Acquisition of KVH Industries, Inc. FOG and Inertial Navigation Systems Business

On August 9, 2022, we completed the acquisition of the KVH Industries, Inc. (“KVH”) FOG and Inertial Navigation Systems business (“EMCORE Chicago”) pursuant to that certain Asset Purchase Agreement entered into as of August 9, 2022 by and among the Company, Delta Acquisition Sub, Inc., a wholly owned subsidiary of the Company, and KVH, pursuant to which we acquired substantially all of KVH's assets and liabilities primarily related to the segment, including property interests in the Tinley Park facility located at 8412 West 185th St., Tinley Park, Illinois (the “Tinley Park Facility”), for aggregate consideration of approximately \$55.0 million, exclusive of transaction costs and expenses and subject to certain post-closing working capital adjustments.

Tinley Park Sale and Leaseback Transaction

On December 13, 2022, EMCORE Chicago consummated the sale of its real property interest in the Tinley Park Facility to 8400 W 185TH STEET INVESTORS, LLC (the “Tinley Park Buyer”), resulting in net proceeds of approximately \$10.3 million. The sale was made pursuant to the terms of that certain Purchase and Sale Agreement (the “Tinley Park Purchase Agreement”) dated as of November 1, 2022, by and between EMCORE Chicago and HSRE Fund VII Holding Company, LLC, an affiliate of the Tinley Park Buyer. In connection with the sale of the real property interests in the Tinley Park Facility, after considering multiple transaction structures, EMCORE Chicago entered into a long-term Single-Tenant Triple Net Lease (the “Lease Agreement”) with Buyer pursuant to which EMCORE Chicago leased back the Tinley Park Facility for a twelve (12) year term commencing on December 13, 2022, unless earlier terminated or extended in accordance with the terms of the Lease Agreement.

Wingspire Credit Agreement

On August 9, 2022, the Company and EMCORE Space & Navigation Corporation, our wholly-owned subsidiary (“S&N”), entered into that certain Credit Agreement, dated as of August 9, 2022, among the Company, S&N, the lenders party thereto and Wingspire Capital LLC, as administrative agent for the lenders (“Wingspire”), as amended pursuant to that First Amendment to Credit Agreement, dated as of October 25, 2022, among the Company, S&N, EMCORE Chicago Inertial Corporation, our wholly-owned subsidiary (together with the Company and S&N, the “Borrowers”), the lenders party thereto and Wingspire, to add EMCORE Chicago as a Borrower and include certain of its assets in the borrowing base (as amended, the “Credit Agreement”). The Credit Agreement provides for two credit facilities: (a) an asset-based revolving credit facility in an aggregate principal amount of up to \$40.0 million, subject to a borrowing base consisting of eligible accounts receivable and eligible inventory (subject to certain reserves), and (b) a term loan facility in an aggregate principal amount of \$5,965,000. The proceeds of the loans made under the Credit Agreement may be used for general corporate purposes. Borrowings under the Credit Agreement will mature on August 8, 2025, and will bear interest, at a rate per annum equal to term SOFR plus a margin of (i) 3.75% or 5.50% in the case of revolving loans, depending on the applicable assets corresponding to the borrowing base pursuant to which the applicable loans are made and (ii) 5.50% in the case of term loans. In addition, the Borrowers will be responsible for the Agent's annual collateral monitoring fees as well as the lenders' fees and expenses. The Borrowers may also be required to pay an unused line fee of 0.50% in respect of the undrawn portion of the revolving commitments, which is generally based on average daily usage of the revolving facility during the immediately preceding month.

The Credit Agreement contains representations and warranties, reporting and other affirmative covenants, and negative covenants that are generally customary for credit facilities of this type. Among others, the Credit Agreement contains various covenants that, subject to agreed-upon exceptions, limit the Borrowers' and their respective subsidiaries' ability to incur indebtedness, grant liens, enter into sale and leaseback transactions, enter into swap agreements, make loans, acquisitions and investments, change the nature of their business, acquire or sell assets or consolidate or merge with or into other persons or entities, declare or pay dividends or make other restricted payments, enter into transactions with affiliates, enter into burdensome agreements, change fiscal year, amend organizational documents, and use proceeds to fund any activities of or business with any person that is the subject of governmental sanctions. In addition, the Credit Agreement requires that, for any period commencing upon the occurrence of an event of default or excess availability under the Credit Agreement being less than the greater of \$5.0 million and 15% of the revolving commitments until such time as no event of default is continuing and excess availability under the Credit Agreement is at least the greater of \$5.0 million and 15% of the revolving commitments for a period of 60 consecutive days, the Borrowers satisfy a consolidated fixed charge coverage ratio of not less than 1.10:1.00. The Credit Agreement also includes customary events of default, the occurrence of which, following any applicable grace period, would permit the lenders to, among other things, declare the principal, accrued interest and other obligations of the Borrowers under the Credit Agreement to be immediately due and payable, and exercise rights and remedies available to the lenders under the Credit Agreement or applicable law or equity.

In connection with the Credit Agreement, the Borrowers entered into a pledge and security agreement pursuant to which the obligations under the Credit Agreement are secured on a senior secured basis (subject to permitted liens) by substantially all assets of the Borrowers and substantially all assets of any future guarantors.

As of September 30, 2022, an aggregate principal amount of \$9.6 million was outstanding pursuant to the revolving credit facility and an aggregate principal amount of \$5.0 million was outstanding pursuant to the term loan facility.

Acquisition of L3Harris Space and Navigation Business

On April 29, 2022, we completed the previously announced acquisition of the L3Harris Technologies, Inc. (“L3H”) Space and Navigation business (“S&N”) pursuant to that certain Sale Agreement, dated as of February 14, 2022 (as amended, the “Sale Agreement”), entered into by and among the Company, Ringo Acquisition Sub, Inc. and L3H, pursuant to which we acquired certain intellectual property, assets, and liabilities of S&N for aggregate consideration of approximately \$5.0 million, exclusive of transaction costs and expenses and subject to certain post-closing working capital adjustments. Following the completion of the working capital adjustments, the final purchase price was approximately \$4.9 million.

COVID-19 and Economic Conditions

We are subject to ongoing risks and uncertainties as a result of the COVID-19 pandemic. The full extent of the COVID-19 impact on operational and financial performance is highly uncertain, out of our control, and cannot be predicted. Each region we and our supply chain partners operate in has been affected by COVID-19 at varying times and magnitudes, often creating unforeseen challenges associated with logistics, raw material supply, and labor shortages. For example, at various times during the fiscal years ended September 30, 2022 and 2021, unexpected delays and cancellations of key component deliveries required us to source critical components from alternative sources on short schedules and at increased prices, and a COVID-19 outbreak at the Company's Concord facility resulted in production delays during the fiscal year ended September 30, 2022. These and other actions resulting from the effects of COVID-19 may continue in the future and cause additional challenges to and disruptions of our business, inventory levels, operating results, and cash flows. We continue to analyze on an ongoing basis how COVID-19 related actions could affect our product development efforts, future customer demand, timing of orders, recognized revenue, and cash flows.

In addition, the instability of global economic conditions and inflationary risks are adding to the uncertainty of our business. These adverse conditions could result in longer sales cycles, increased costs to manufacture our products and increased price competition. Given the dynamic nature of these macroeconomic conditions, we cannot reasonably estimate their full impact on our ongoing business, results of operations, and overall financial performance.

Equity Offering

On February 16, 2021, we closed an offering of 6,655,093 shares of our common stock, which included the full exercise of the underwriters’ option to purchase 868,056 additional shares of common stock, at a price to the public of \$5.40 per share, resulting in net proceeds to us from the offering, after deducting the underwriting discounts and commissions and other offering expenses, of approximately \$33.1 million. The shares were sold by us pursuant to an underwriting agreement with Cowen and Company, LLC, dated February 10, 2021.

Fastrain Transaction

As part of the effort to streamline operations and move to a variable cost model in our CATV Optical Transmitters and Components product line, on August 9, 2021, we entered into an Asset Purchase Agreement (the “Fastrain Asset Purchase Agreement”) with each of Shenzhen Fastrain Technology Co., Ltd., a corporation formed under the laws of the P.R.C. (“Shenzhen Fastrain”), and Hong Kong Fastrain Company Limited, a limited liability company incorporated in Hong Kong (“HK Fastrain”, and together with Shenzhen Fastrain, collectively, “Fastrain”), pursuant to which, among other items, Fastrain agreed to purchase certain CATV module and transmitter manufacturing equipment (the “Equipment”) that had been located at the manufacturing facility of our wholly-owned subsidiary, EMCORE Optoelectronics (Beijing) Co., Ltd., a corporation formed under the laws of the P.R.C., for an aggregate price of \$6.2 million, all of which has been paid to us as of the fiscal year ended September 30, 2022.

Concurrently with the execution of the Fastrain Asset Purchase Agreement, we and Fastrain entered into a Manufacturing Supply Agreement, dated August 9, 2021 (as amended, the “Fastrain Manufacturing Agreement”), pursuant to which Fastrain agreed to manufacture for us, from a manufacturing facility or facilities located in Thailand or Malaysia and for an initial term ending on December 31, 2025, the CATV Optical Transmitters and Components products set forth in the Fastrain

Manufacturing Agreement. In the Fastrain Manufacturing Agreement, (a) we agreed to pay certain shortfall penalties in the event that orders for manufactured products are below certain thresholds beginning in calendar year 2021 and continuing through calendar year 2025, and (b) Fastrain agreed to pay certain surplus bonuses to us in the event that deliveries for manufactured products in either of the 24-month periods beginning on January 1, 2021 and ending on December 31, 2022 or beginning on January 1, 2023 and ending on December 31, 2024 exceed certain thresholds. No such shortfall penalties or surplus bonuses had accrued or become payable as of the fiscal year ended September 30, 2022.

Other Significant Actions that Affect the Comparability of Our Operating Results and Financial Condition

Critical Accounting Estimates

The discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with U.S. GAAP. The preparation of these financial statements require us to make estimates and judgements that affect the reported amounts of assets and liabilities, revenues and expenses, and related disclosure at the date of our financial statements. Critical accounting estimates are those estimates made that involve a significant level of estimation uncertainty and have had or are reasonably likely to have an impact on our statement of operations. We believe that our accounting policies for goodwill, intangible assets, and other long-lived assets are the only estimates critical to an understanding and evaluation of our financial results for the fiscal year ended September 30, 2022, as discussed below. 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. The 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. We have other significant accounting policies that do not generally require subjective estimates or judgments or would not have a material impact on our results of operations. Our significant accounting policies are described in [Note 2 – Summary of Significant Accounting Policies](#). We believe that our accounting policies for goodwill, intangible assets, and other long-lived assets are the only estimates critical to an understanding and evaluation of our financial results for 2022, as discussed below.

Inventory

Inventory is stated at the lower of cost or net realizable value (first-in, first-out). Inventory that is expected to be used within the next twelve 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 inventory.

Goodwill

We follow the Financial Accounting Standards Board (“FASB”) Accounting Standards Codification (“ASC”) Topic 350, Intangibles-Goodwill and Other (“ASC 350”). ASC 350 requires the completion of a goodwill impairment test at least annually based on either an optional qualitative assessment or a quantitative analysis comparing the estimated fair value of a reporting unit to its carrying value as of the test date. Our annual test date is December 31st of each year, unless there are indications requiring a more frequent impairment test. Any impairment charges would be based on the quantitative analysis.

For the December 31, 2021 test, we performed a qualitative assessment of goodwill impairment (Step 0) and concluded that it is not more likely than not that the fair value of any of our reporting units is less than its carrying amount, including goodwill, and therefore, there was no goodwill impairment.

Intangible Assets and Other Long-Lived Assets

We follow FASB ASC Topic 360, Property Plant, and Equipment (“ASC 360”). ASC 360 requires review of long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of intangible assets with estimated lives and other long-lived assets is measured by a comparison of the carrying amount of an asset or asset group to future net undiscounted cash flows expected to be generated by the asset or asset group. If these comparisons indicate that an asset is not recoverable, we will recognize an impairment loss for the amount

by which the carrying value of the asset or asset group exceeds the related estimated fair value. Estimated fair value is based on either discounted future operating cash flows or appraised values, depending on the nature of the asset.

During 2022, there was a triggering event of negative cash flows and operating losses at the FOG asset group level within the Inertial Navigation product line of the A&D segment that indicated the carrying amounts of our long-lived assets may not be recoverable. In accordance with ASC 360, with regard to our long-lived assets, we performed an undiscounted cash flow analysis and concluded that the carrying value of the asset group was not recoverable. Accordingly, we then performed an analysis to estimate the fair value of the other long-lived assets and recognized an impairment charge of \$3.0 million against the FOG property, plant, and equipment by the amount by which the carrying value of the asset group's other long-lived assets exceeded their estimated fair value.

Purchase Accounting

The Company accounts for acquisitions of businesses under the acquisition method of accounting. Under the acquisition method of accounting, the Company records assets acquired and liabilities assumed at their estimated fair value on the date of acquisition. Goodwill is measured as the excess of the fair value of the consideration transferred over the fair value of the identifiable net assets. Estimated fair values of acquired assets and liabilities are provisional and could change as additional information is received. When appropriate, our estimates of the fair values of assets and liabilities acquired include assistance from independent third-party valuation firms. Valuations are finalized as soon as practicable, but not later than one year from the acquisition date. Any subsequent changes to purchase price allocations result in a corresponding adjustment to goodwill.

Inventory, long-lived assets, goodwill, and other intangible assets generally represent the largest components of our acquisitions. Inventory is valued utilizing net realizable value method. Property, plant, and equipment is valued utilizing a cost and market approach. Intangible assets are recognized at their estimated fair values as of the date of acquisition and generally consist of customer relationships, technology, in-process research and development ("IPR&D"), and trademarks. Determination of the estimated fair value of intangible assets requires judgment. The estimated fair value of technology, IPR&D, and trademarks, is determined utilizing the relief from royalty method. Under this form of income approach, a royalty rate based on observed market royalties is applied to projected revenue supporting the technology, IPR&D, and trademarks and discounted to present value. The estimated fair value of customer relationships is determined using the multiple period excess earnings method. Under this form of income approach, net cash flows attributable to the subject asset are typically calculated net of fair returns on and of all assets that are necessary to realize the cash flows. Cash flows of the subject intangible asset are charged amounts representing a return of and a return on these contributory assets (based on the fair values of the contributory assets).

Results of Operations

The following table provides the Consolidated Statement of Operation and Comprehensive (Loss) Income as a percentage of revenue:

	Year Ended September 30,	
	2022	2021
Revenue	100.0 %	100.0 %
Cost of revenue	76.1	61.2
Gross profit	23.9	38.8
Operating expense:		
Selling, general, and administrative	27.2	15.5
Research and development	14.9	11.0
Severance	1.1	—
(Gain) loss on sale of assets	(2.2)	0.3
Impairment charge	2.4	—
Total operating expense	43.4	26.8
Operating (loss) income	(19.5)	12.0
Other (expense) income:		
Gain on extinguishment of debt	—	4.1
Interest (expense) income, net	(0.1)	0.3
Foreign exchange (loss) gain	(0.3)	0.1
Pension income	0.2	—
Total other (expense) income	(0.2)	4.5
(Loss) income before income tax benefit (expense)	(19.7)	16.5
Income tax benefit (expense)	0.1	(0.4)
Net (loss) income	(19.6) %	16.1 %
Foreign exchange translation adjustment	0.1	(0.1)
Pension adjustment	0.4	—
Comprehensive (loss) income	(19.1) %	16.0 %

Comparison of Results of Operations
(in thousands, except percentages)

	Year Ended September 30,			
	2022	2021	Change	
Revenue	\$ 124,126	\$ 158,444	\$ (34,318)	(21.7)%
Cost of revenue	94,408	96,956	(2,548)	(2.6)
Gross profit	29,718	61,488	(31,770)	(51.7)
Operating expense:				
Selling, general, and administrative	33,710	24,544	9,166	37.3
Research and development	18,536	17,448	1,088	6.2
Severance	1,353	—	1,353	100.0
(Gain) loss on sale of assets	(2,685)	515	(3,200)	(621.4)
Impairment charge	2,956	—	2,956	100.0
Total operating expense	53,870	42,507	11,363	26.7%
Operating (loss) income	(24,152)	18,981	(43,133)	(227.2)
Other (expense) income:				
Gain on extinguishment of debt	—	6,561	(6,561)	(100.0)
Interest (expense) income, net	(139)	466	(605)	(129.8)
Foreign exchange (loss) gain	(352)	207	(559)	(270.0)
Pension income	171	—	171	100.0
Total other (expense) income	(320)	7,234	(7,554)	(104.4)
(Loss) income before income tax benefit (expense)	(24,472)	26,215	(50,687)	(193.4)
Income tax benefit (expense)	139	(572)	711	124.3
Net (loss) income	\$ (24,333)	\$ 25,643	\$ (49,976)	(194.9)%
Foreign exchange translation adjustment	173	(231)	404	174.9
Pension adjustment	441	—	441	100.0
Comprehensive (loss) income	\$ (23,719)	\$ 25,412	\$ (49,131)	(193.3)%

Revenue
(in thousands, except percentages)

	Year Ended September 30,			
	2022	2021	Change	
Aerospace and Defense	\$ 53,306	\$ 50,838	\$ 2,468	4.9 %
Broadband	70,820	107,606	(36,786)	(34.2)
Total revenue	\$ 124,126	\$ 158,444	\$ (34,318)	(21.7) %

For the fiscal year ended September 30, 2022, Aerospace and Defense revenue increased from the prior fiscal year driven by higher Inertial Navigation revenue primarily due to the acquisitions of S&N and EMCORE Chicago. The revenue from these acquisitions was partially offset by Defense Optoelectronics, QMEMS, and Alhambra FOG revenue decreases due to supply chain disruptions and, in the case of Defense Optoelectronics and Alhambra FOG products, a drop in customer demand due to delays in receiving purchase orders. The decline in QMEMS revenue was further affected by lower production yields.

For the fiscal year ended September 30, 2022, Broadband revenue decreased from the prior fiscal year due to a significant decline in sales of CATV Optical Transmitter and Components products into the CATV infrastructure market. This market is historically cyclical. Following a significant COVID-19 related up-cycle during the fiscal year ended September 30, 2021 and the early part of the fiscal year ended September 30, 2022, we are currently in a down-cycle with substantial inventory build-up in our sales channels.

Gross Profit

(in thousands, except percentages)

	Year Ended September 30,			
	2022	2021	Change	
Aerospace and Defense	\$ 5,357	\$ 13,705	\$ (8,348)	(60.9) %
Broadband	24,361	47,783	(23,422)	(49.0)
Total gross profit	<u>\$ 29,718</u>	<u>\$ 61,488</u>	<u>\$ (31,770)</u>	<u>(51.7) %</u>

Gross profit is revenue less cost of revenue. Cost of revenue consists of raw materials, compensation expense, depreciation, amortization, accretion expense, and other manufacturing overhead costs, expenses associated with excess and obsolete inventories, and product warranty costs. Historically, gross profit as a percentage of revenue, which we refer to as gross margin, has fluctuated significantly due to product mix, manufacturing yields, sales volumes, inventory and specific product warranty charges, as well as the amount of our revenue relative to fixed manufacturing costs.

For the fiscal year ended September 30, 2022, Aerospace and Defense gross profit decreased from the prior fiscal year primarily due to lower product revenue, lower QMEMS manufacturing yields associated with higher performing products, and lower absorption of fixed overhead costs.

For the fiscal year ended September 30, 2022, Broadband gross profit decreased from the prior fiscal year primarily due to lower product revenue and the associated lower absorption of overhead costs in our wafer fabrication facility.

Selling, General, and Administrative

Selling, general, and administrative (“SG&A”) consists primarily of personnel related expenditures for sales and marketing, IT, finance, legal and human resources support functions.

For the fiscal year ended September 30, 2022, SG&A increased from the prior fiscal year primarily due to expenses related to the S&N and EMCORE Chicago acquisitions, and higher litigation costs, travel expenses, short-term consulting services, and the addition of EMCORE Chicago partially offset by lower variable incentive compensation.

Research and Development

Research and development (“R&D”) includes personnel related expenditures, project costs, and facility-related expenses. We intend to continue to invest in R&D programs because they are essential to the future growth of our Aerospace and Defense segment.

For the fiscal years ended September 30, 2022 and 2021, Aerospace and Defense R&D expense was \$15.5 million and \$14.6 million, respectively. R&D increased from the prior fiscal year due to project and facility-related costs.

For each of the fiscal years ended September 30, 2022 and 2021, Broadband R&D expense was \$3.0 million and \$2.8 million, respectively.

Severance

For the fiscal year ended September 30, 2022, severance totaled approximately \$1.4 million associated with the shutdown of manufacturing operations in Beijing, China.

(Gain) loss on Sale of Assets

For the fiscal years ended September 30, 2022 and 2021, (gain) loss on sale of assets totaled approximately \$(2.7) million and \$0.5 million, respectively as we sold certain CATV Lasers and Transmitters manufacturing equipment for purposes of outsourcing manufacturing of our CATV Lasers and Transmitters product line.

Impairment charge

For the fiscal year ended September 30, 2022, impairment charge totaled approximately \$3.0 million as we wrote down long-lived assets related to our FOG products within our Inertial Navigation product line in our A&D reporting segment as there was a triggering event of negative cash flows and operating losses at the FOG asset group level within the Inertial Navigation

product line of the A&D segment that indicated the carrying amounts of our long-lived assets may not be recoverable. In accordance with ASC 360, with regard to our long-lived assets, we performed an undiscounted cash flow analysis and concluded that the carrying value of the asset group was not recoverable. Accordingly, we then performed an analysis to estimate the fair value of the other long-lived assets and recognized the impairment charge against the FOG property, plant, and equipment by the amount by which the carrying value of the asset group's other long-lived assets exceeded their estimated fair value.

Gain on Extinguishment of Debt

For the fiscal year ended September 30, 2021, we recorded a gain on extinguishment of debt of \$6.6 million related to the forgiveness in full of our PPP Loan, including accrued interest.

Interest (Expense) Income, net

During the fiscal years ended September 30, 2022 and 2021, we recorded \$(0.1) million and \$0.5 million of interest (expense) income, respectively. Interest expense, net increased due to the debt outstanding from our Credit Agreement entered into and due to having lower cash and cash equivalents balance earning interest income.

Foreign Exchange (Loss) Gain

For the fiscal years ended September 30, 2022 and 2021, we recorded foreign exchange (loss) gain of approximately \$(0.4) million and \$0.2 million, respectively related to the change in value of the Yuan Renminbi relative to the U.S. dollar.

Pension Income

For the fiscal year ended September 30, 2022, pension income totaled approximately \$0.2 million related to the change in value of the pension benefit plan assets during the period. We assumed the Pension Plan on April 29, 2022 as a result of the acquisition of S&N.

Income Tax Benefit (Expense)

For the fiscal years ended September 30, 2022 and 2021, we recorded income tax benefit (expense) of approximately \$0.1 million and \$(0.6) million, respectively. Income tax benefit for the fiscal year ended September 30, 2022 is composed primarily of federal refund of AMT credit and state minimum tax expense. Income tax expense for the fiscal year ended September 30, 2021 is composed primarily of state minimum tax expense.

Liquidity and Capital Resources

We have historically consumed cash from operations, and in most periods, have incurred operating losses from continuing operations. We have managed our liquidity position through the sale of assets and the execution of cost reduction initiatives, as well as borrowings from our Credit Agreement and capital markets transactions. As of September 30, 2022, cash and cash equivalents totaled \$26.1 million and net working capital totaled \$63.7 million. Net working capital, calculated as current assets (including inventory) minus current liabilities, is a financial metric we use which represents available operating liquidity.

We have taken a number of actions to continue to support our operations and meet our obligations:

- In December 2022, we consummated the sale of the real property interests in the Tinley Park Facility to the Tinley Park Buyer, resulting in net proceeds of approximately \$10.3 million, pursuant to the terms of the Tinley Park Purchase Agreement.
- In August 2022, we entered into the Credit Agreement with Wingspire that provides us with (a) an asset-based revolving credit facility in an aggregate principal amount of up to \$40.0 million, subject to a borrowing base consisting of eligible accounts receivable and eligible inventory (subject to certain reserves), and (b) a term loan facility in an aggregate principal amount of \$5,965,000. As of September 30, 2022, an aggregate principal amount of \$9.6 million was outstanding pursuant to the revolving credit facility and an aggregate principal amount of \$5.9 million was outstanding pursuant to the term loan facility, and an additional \$3.9 million was available for borrowing. See [Note 11 - Credit Agreement and PPP Loan](#) in the Notes to Consolidated Financial Statements for additional information regarding the Credit Agreement.
- In August 2021, we entered into the Fastrain Asset Purchase Agreement, pursuant to which, among other items, Fastrain agreed to purchase certain of our CATV Lasers and Transmitters manufacturing equipment for purposes of

outsourcing manufacturing of our CATV Optical Transmitters and Components product lines to Fastrain, for aggregate consideration of \$6.2 million. See Management's Discussion and Analysis of Financial Condition and Results of Operations Recent Developments under the heading "Fastrain Transaction" for additional information regarding the transactions with Fastrain.

- In February 2021, we closed our offering of 6,655,093 shares of our common stock at a price of \$5.40 per share, resulting in net proceeds to us from the offering of \$33.1 million. See Management's Discussion and Analysis of Financial Condition and Results of Operations Recent Developments under the heading "Equity Offering" for additional information regarding the equity offering.

We believe that our existing balances of cash and cash equivalents, cash flows from operations, amounts expected to be available under the Credit Agreement and cash generated from sales or other monetization of certain assets will provide us with sufficient financial resources to meet cash requirements for operations, working capital, and capital expenditures for at least the next 12 months from the issuance date of these financial statements. We may require more capital than what we are able to generate from operations, the Credit Agreement or from sales or other monetization of certain assets. If we do require more capital, we could take additional actions to reduce our expenses or elect to raise capital through additional sales or other monetization of certain assets or additional debt or equity issuances. These alternatives may not be available to us on reasonable terms or at all, and could result in higher effective tax rates, increased interest expense, and/or dilution of ownership by our current shareholders.

The continued spread of COVID-19 has led to disruption and volatility in the global capital markets, which, depending on future developments, could impact our capital resources in the future. If we need to raise additional capital to support operations, we may be unable to access capital markets and additional capital may only be available to us on terms that could be significantly detrimental to our existing shareholders and to our business.

	Year Ended September 30,			
	2022	2021	Change	
<i>(in thousands, except percentages)</i>				
Net cash provided by operating activities (net of acquired assets and assumed liabilities)	\$ 2,956	\$ 11,153	\$ (8,197)	(73.5) %
Net cash used in investing activities	\$ (62,697)	\$ (3,837)	\$ (58,860)	(1,534.0) %
Net cash provided by financing activities	\$ 14,348	\$ 33,725	\$ (19,377)	(57.5) %

For the fiscal year ended September 30, 2022, cash provided by operations declined compared to the prior fiscal year due to the cyclical nature of our CATV product revenue, cash used in investing activities increased due to the acquisitions of S&N and EMCORE Chicago in the current fiscal year and cash provided by financing activities decreased due to an offering of equity securities in the fiscal year ended September 30, 2021, resulting in net proceeds to us from the offering of \$33.1 million, compared to borrowings under the Credit Facility in fiscal year ended September 30, 2022 in an aggregate amount of \$15.5 million outstanding as of September 30, 2022. Going forward, we expect that we will continue to be in a cash used position due to our focus on future growth.

Operating Activities

For the fiscal year ended September 30, 2022, operating activities provided cash of \$3.0 million, primarily due to net loss of \$24.3 million and adjustments for non-cash charges, including depreciation and amortization expense of \$4.8 million, stock-based compensation expense of \$5.4 million, an impairment charge of \$3.0 million, and changes in operating assets and liabilities (or working capital components), of \$15.9 million offset by a gain on disposal of assets of \$2.7 million. The change in operating assets and liabilities was primarily the result of a decrease in accounts receivable and contract assets of \$19.5 million, inventory of \$6.2 million and a decrease in accrued expenses and other current liabilities of \$2.4 million offset by an increase in other assets of \$7.1 million, and a decrease in accounts payable of \$7.3 million.

For the fiscal year ended September 30, 2021, operating activities provided cash of \$11.2 million, primarily due to net income of \$25.6 million and adjustments for non-cash charges, including depreciation and amortization expense of \$4.1 million and stock-based compensation expense of \$4.2 million, offset by changes in operating assets and liabilities (or working capital components), of \$22.9 million. The change in operating assets and liabilities was primarily the result of an increase in accounts receivable and contract assets of \$5.3 million, inventory of \$6.3 million and other assets of \$1.5 million, and a decrease in accounts payable of \$0.4 million and accrued expenses and other liabilities of \$9.3 million.

Investing Activities

For the fiscal year ended September 30, 2022, investing activities used cash of \$62.7 million primarily due to \$59.9 million used in our acquisitions of the S&N and EMCORE Chicago businesses and capital-related expenditures of \$6.6 million, partially offset by cash proceeds from the disposal of property, plant and equipment of \$3.7 million.

For the fiscal year ended September 30, 2021, investing activities used cash of \$3.8 million primarily from capital-related expenditures of \$5.4 million partially offset by cash proceeds from the future sale of assets of \$0.8 million and cash proceeds from the disposal of property, plant and equipment of \$0.7 million.

Financing Activities

For the fiscal year ended September 30, 2022, financing activities provided cash of \$14.3 million, primarily due to proceeds from credit facilities of \$21.9 million offset by taxes paid related to net share settlement of equity awards of \$0.3 million.

For the fiscal year ended September 30, 2021, financing activities provided cash of \$33.7 million, primarily due to proceeds from issuance of employee stock purchase plan and equity awards of \$0.8 million, proceeds from sale of common stock of \$35.9 million offset by issuance costs of \$2.8 million.

Contractual Obligations and Commitments

Contractual obligations and commitments over the next five fiscal years are summarized in the table below and are presented as of September 30, 2022:

<i>(in thousands)</i>	Total	Less Than a Year	1 to 3 Years	4 to 5 Years	Over 5 Years
Purchase obligations	\$ 27,627	\$ 27,026	\$ 591	\$ 10	\$ —
Asset retirement obligations	4,664	—	2,556	—	2,108
Operating lease obligations	31,462	3,387	6,689	4,048	17,338
Pension obligations	5,637	600	1,141	1,148	2,748
Total contractual obligations and commitments	<u>\$ 69,390</u>	<u>\$ 31,013</u>	<u>\$ 10,977</u>	<u>\$ 5,206</u>	<u>\$ 22,194</u>

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

Purchase Obligations

Purchase obligations represent an estimate of all open purchase orders and contractual obligations in the ordinary course of business for which we have not received the goods or services as of September 30, 2022. Although open purchase orders are considered enforceable and legally binding, the terms generally allow us the option to cancel, reschedule, and adjust requirements based on business needs prior to the delivery of goods or performance of services. The purchase obligations of \$27.6 million as of September 30, 2022, set forth above primarily relates to open purchase orders to our contract manufacturers, component suppliers, service partners, and other vendors, including capital expenditures related to facility renovations.

Asset Retirement Obligations

We have known conditional Asset Retirement Obligation (“ARO”) conditions, such as certain asset decommissioning and restoration of rented facilities to be performed in the future. 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 11 - Commitments and Contingencies](#) in the Notes to Consolidated Financial Statements for additional information related to AROs.

Operating Lease Obligations

Operating leases include non-cancelable terms and exclude renewal option periods, property taxes, insurance, and maintenance expenses on leased properties. See [Note 11 - Commitments and Contingencies](#) in the Notes to Consolidated Financial Statements for additional information related to operating lease obligations.

Pension Obligations

Future pension obligation payments are subject to revaluation and are dependent on pension fund asset performance and pension obligation valuation assumptions. See [Note 9 – Benefit Plans](#) in the Notes to Consolidated Financial Statements for additional information related to pension obligations.

Off-Balance Sheet Arrangements

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

ITEM 7A. Quantitative and Qualitative Disclosures About Market Risk.

Not applicable.

ITEM 8. Financial Statements and Supplementary Data.

EMCORE CORPORATION
CONSOLIDATED BALANCE SHEETS

(in thousands)	September 30,	
	2022	2021
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 25,625	\$ 71,621
Restricted cash	520	61
Accounts receivable, net of credit loss of \$337 and \$260, respectively	18,073	31,849
Contract assets	4,560	361
Inventory	37,035	32,309
Prepaid expenses and other current assets	7,124	6,877
Assets held for sale	—	1,241
Total current assets	92,937	144,319
Property, plant, and equipment, net	37,867	22,544
Goodwill	17,894	69
Operating lease right-of-use assets	23,243	13,489
Other intangible assets, net	14,790	167
Other non-current assets	2,351	225
Total assets	\$ 189,082	\$ 180,813
LIABILITIES and SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 12,729	\$ 16,686
Accrued expenses and other current liabilities	8,124	9,568
Loan payable - current	852	—
Contract liabilities	5,300	368
Operating lease liabilities - current	2,213	1,198
Total current liabilities	29,218	27,820
Operating lease liabilities - non-current	21,625	12,684
Line of credit	9,599	—
Loan payable - non-current	5,042	—
Asset retirement obligations	4,664	2,049
Other long-term liabilities	106	794
Total liabilities	70,254	43,347
Commitments and contingencies (Note 11)		
Shareholders' equity:		
Common stock, no par value, 50,000 shares authorized; 44,497 shares issued and 37,591 shares outstanding as of September 30, 2022; 43,890 shares issued and 36,984 shares outstanding as of September 30, 2021	787,347	782,266
Treasury stock at cost; 6,906 shares	(47,721)	(47,721)
Accumulated other comprehensive income	1,301	687
Accumulated deficit	(622,099)	(597,766)
Total shareholders' equity	118,828	137,466
Total liabilities and shareholders' equity	\$ 189,082	\$ 180,813

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

EMCORE CORPORATION
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE (LOSS) INCOME

<i>(in thousands, except per share data)</i>	Year Ended September 30,	
	2022	2021
Revenue	\$ 124,126	\$ 158,444
Cost of revenue	94,408	96,956
Gross profit	29,718	61,488
Operating expense:		
Selling, general, and administrative	33,710	24,544
Research and development	18,536	17,448
Severance	1,353	—
(Gain) loss on sale of assets	(2,685)	515
Impairment charge	2,956	—
Total operating expense	53,870	42,507
Operating (loss) income	(24,152)	18,981
Other (expense) income:		
Gain on extinguishment of debt	—	6,561
Interest income (expense), net	(139)	466
Foreign exchange gain (loss)	(352)	207
Pension income	171	0
Total other (expense) income	(320)	7,234
(Loss) income before income tax benefit (expense)	(24,472)	26,215
Income tax benefit (expense)	139	(572)
Net (loss) income	\$ (24,333)	\$ 25,643
Foreign exchange translation adjustment	173	(231)
Pension adjustment	441	—
Comprehensive (loss) income	\$ (23,719)	\$ 25,412
Per share data:		
Net (loss) income per basic share:	\$ (0.65)	\$ 0.75
Weighted-average number of basic shares outstanding	37,269	34,020
Net (loss) income per diluted share	\$ (0.65)	\$ 0.72
Weighted-average number of diluted shares outstanding	37,269	35,789

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

EMCORE CORPORATION
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

<i>(in thousands)</i>	Year Ended September 30,	
	2022	2021
Shares of common stock		
Balance, beginning of period	36,984	29,550
Stock-based compensation	601	572
Stock option exercises	6	15
Issuance of common stock - ESPP	—	192
Sale of common stock	—	6,655
Balance, end of period	37,591	36,984
Value of common stock		
Balance, beginning of period	\$ 782,266	\$ 744,361
Stock-based compensation	5,374	4,180
Stock option exercises	29	77
Tax withholding paid on behalf of employees for stock-based awards	(322)	(260)
Issuance of common stock - ESPP	—	767
Sale of common stock, net of offering costs	—	33,141
Balance, end of period	787,347	782,266
Treasury stock, beginning and ending of period	(47,721)	(47,721)
Accumulated other comprehensive income		
Balance, beginning of period	687	918
Translation adjustment	173	(231)
Pension income	441	—
Balance, end of period	1,301	687
Accumulated deficit		
Balance, beginning of period	(597,766)	(623,409)
Net (loss) income	(24,333)	25,643
Balance, end of period	(622,099)	(597,766)
Total shareholders' equity	\$ 118,828	\$ 137,466

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

EMCORE CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS

<i>(in thousands)</i>	Year Ended September 30,	
	2022	2021
Cash flows from operating activities:		
Net (loss) income	\$ (24,333)	\$ 25,643
Adjustments to reconcile net loss to net cash provided by operating activities:		
Depreciation and amortization expense	4,775	4,061
Stock-based compensation expense	5,374	4,180
Provision adjustments related to credit loss	170	33
Provision adjustments related to product warranty	174	322
(Gain) loss on disposal of property, plant, and equipment	(2,685)	515
Impairment charge	2,956	0
Other	631	(658)
Total non-cash adjustments	11,395	8,453
Changes in operating assets and liabilities:		
Accounts receivable and contract assets	19,547	(5,348)
Inventory	6,220	(6,326)
Other assets	(7,124)	(1,500)
Accounts payable	(7,285)	(420)
Contract liabilities	2,650	(164)
Operating lease liabilities - current	(487)	206
Accrued expenses and other current liabilities	2,373	(9,391)
Total change in operating assets and liabilities	15,894	(22,943)
Net cash provided by operating activities	2,956	11,153
Cash flows from investing activities:		
Purchase of equipment	(6,565)	(5,358)
Acquisition of business, net of cash acquired	(59,861)	—
Proceeds from future sale of assets	—	834
Proceeds from disposal of property, plant, and equipment	3,729	687
Net cash used in investing activities	(62,697)	(3,837)
Cash flows from financing activities:		
Proceeds from borrowings of credit facilities	21,863	—
Payments towards credit facilities	(7,222)	—
Proceeds from employee stock purchase plans and exercise of equity awards	—	844
Proceeds from sale of common stock	29	35,937
Issuance cost associated with sale of common stock	—	(2,796)
Taxes paid related to net share settlement of equity awards	(322)	(260)
Net cash provided by financing activities	14,348	33,725
Effect of exchange rate changes provided by foreign currency	(144)	103
Net increase (decrease) in cash, cash equivalents and restricted cash	(45,537)	41,144
Cash, cash equivalents and restricted cash at beginning of period	71,682	30,538
Cash, cash equivalents and restricted cash at end of period	\$ 26,145	\$ 71,682
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION		
Cash paid during the period for interest	\$ 40	\$ 61
Cash paid during the period for income taxes	\$ 547	\$ 975
NON-CASH INVESTING AND FINANCING ACTIVITIES		
Changes in accounts payable related to purchases of equipment	\$ (76)	\$ 360

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

EMCORE CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
Years Ended September 30, 2022 and 2021

NOTE 1. Description of Business

We are a leading provider of sensors for navigation in the aerospace and defense market as well as a manufacturer of chips, laser components, and optical subsystems for use in the Broadband and Cable TV (“CATV”) industries. We pioneered the linear fiber optic transmission technology that enabled the world’s first delivery of CATV directly on fiber, and today are a leading provider of advanced mixed-signal products serving the aerospace and defense and broadband communications markets. The mixed-signal technology, at the heart of our broadband communications products, is shared with our fiber optic gyros (“FOGs”) and inertial sensors to provide the aerospace and defense markets with state-of-the-art navigation systems technology. Over the last three years, we have expanded our scale and portfolio of inertial sensor products through the acquisitions of Systron Donner Inertial, Inc. (“SDI”) in June 2019, the Space and Navigation business of L3Harris Technologies, Inc. (“S&N”) in April 2022, and the FOG and Inertial Navigation Systems business of KVH Industries, Inc. (“EMCORE Chicago”) in August 2022. We have fully vertically-integrated manufacturing capability at our headquarters in Alhambra, CA, and at our facilities in Budd Lake, NJ, Concord, CA, and Tinley Park, IL. These facilities support our vertically-integrated manufacturing strategy for quartz and FOG products for navigation systems, and for our chip, laser, transmitter, and receiver products for broadband applications. We design and manufacture industry-leading QMEMS, lithium niobate, and InP chip-level technology to deliver state-of-the-art component and system-level products across our end-market applications. Our best-in-class components and systems support a broad array of applications including navigation and inertial sensing, defense optoelectronics, broadband communications, optical sensing, and specialty chips for telecom and data center applications.

NOTE 2. Summary of Significant Accounting Policies

Principles of Consolidation

The consolidated financial statements have been prepared in accordance with U.S. GAAP and include the assets, liabilities, shareholders’ equity, and operating results of the Company and its wholly owned subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation. The Company is not the primary beneficiary of, nor do we hold a significant variable interest in, any variable interest entity.

Going Concern Basis

The consolidated financial statements included herein have been prepared on a going concern basis, which contemplates continuity of operations and the realization of assets and the repayment of liabilities in the ordinary course of business. Management evaluated the significance of the Company’s recent operating losses and determined that the Company’s current cash on hand, operating plan, and sources of capital will be sufficient for the Company to continue as a going concern. The Company has taken a number of actions to continue to support its operations and meet its obligations, including recent acquisitions that have increased revenue, headcount and cost reductions, monetization of certain fixed assets and real estate, and entering into financing activities. The Company believes that its existing liquidity will be sufficient to meet anticipated cash needs for at least the next 12 months from the issuance date of these financial statements.

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. Such estimates include accounts receivable; inventories; goodwill; long-lived assets; product warranty liabilities; legal contingencies; income taxes; asset retirement obligations, and pension obligation, as well as the evaluation associated with the going concern determination.

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 accounts receivable. When necessary, we perform credit evaluations on customers' financial condition and occasionally we request deposits in advance of shipping product to 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.

Accounts Receivable

We regularly evaluate the collectability of accounts receivable and maintain allowances for doubtful accounts for estimated losses resulting from the inability of 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 net realizable value (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 cost of revenue. We evaluate inventory levels at least quarterly against an estimate of future demand 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 inventory. See [Note 6 - Inventory](#) in the Notes to Consolidated Financial Statements for additional information related to inventory.

Property, Plant, and Equipment

Property, plant, and equipment are recorded at cost. Plant and equipment are depreciated on a straight-line basis over the estimated useful lives of the assets. We depreciate buildings over forty years, equipment over three to seven years, furniture and fixtures over five years, computer hardware and software over three to five 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 (loss) income. See [Note 7 - Property, Plant, and Equipment, net](#) in the Notes to Consolidated Financial Statements for additional information related to the impairment charge during the fiscal year ended September 30, 2022.

Valuation of Long-lived Assets

Long-lived assets consist primarily of intangible assets, net and property, plant, and equipment, net. Since long-lived assets are subject to amortization and depreciation, we review these assets for impairment in accordance with the provisions of ASC 360, *Property, Plant, and Equipment*. We review long-lived assets for impairment whenever events or changes in circumstances indicate that their carrying amount may not be recoverable. 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 the 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 operations, and estimated salvage values.

Asset Retirement and Environmental 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 ARO, 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.

Pension Plan

With the acquisition of S&N, we acquired the assets and assumed the liabilities associated with a pension plan, now named the EMCORE Space & Navigation Corporation Pension Plan (the “Pension Plan”), which is a defined benefit pension plan providing postretirement benefits to certain employees. As of July 1, 2022, the Pension Plan was amended to freeze benefit plan accruals for participants.

The investments in the Pension Plan are measured at fair value using quoted market prices or the net asset value per share as a practical expedient. The projected benefit obligations associated with the Pension Plan are determined based on actuarial models utilizing mortality tables and discount rates applied to the expected benefit term.

Fair Value of Financial Instruments

We determine the fair value of financial instruments in accordance with ASC 820, *Fair Value Measurements and Disclosures*. 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 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 and cash equivalents 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 cash temporarily reserved by the Company. Cash, cash equivalents and restricted cash are based on Level 1 measurements. The carrying amounts of cash and cash equivalents, restricted cash, accounts receivable, other current assets, and accounts payable approximate fair value because of the short maturity of these instruments.

Revenue Recognition

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

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

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

In addition, we follow the percentage of completion method of revenue recognition for the majority of our S&N revenue, as these contracts typically are for products specific to the customer and there is no alternative use for the product. We recognize revenue progressively as the customer takes control of the manufactured products built to customer specifications. Under these S&N manufacturing contracts with customers, the customer controls all of the work-in-progress as products are being built.

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

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

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

Receivables, Net

Receivables, net, include amounts billed and currently due from customers. The amounts due are stated at their net estimated realizable value. Payments are generally due within 90 days or less of invoicing and do not include a significant financing component. We maintain an allowance for credit loss to provide for the estimated amount of receivables that will not be collected. The allowance is based upon an assessment of customer creditworthiness, historical payment experience, the age of outstanding receivables, and collateral to the extent applicable.

Contract Assets

A contract asset is recognized when the Company has recognized revenue, but has not issued an invoice for payment. Contract assets are classified as current assets and transferred to receivables when the entitlement to payment becomes unconditional. The Company's contract assets are generally converted to trade account receivables within 90 days, at which time the Company is entitled to payment of the fixed price upon delivery of the finished product subject to customer payment terms.

Contract Liabilities

A contract liability is recognized when the Company has billed and received payment from a customer, but has not yet earned revenue. Contract liabilities are classified as current liabilities and transferred to revenue when revenue recognition standards have been met.

Remaining Performance Obligations

Remaining performance obligations represent the transaction price of firm orders for long-term contracts which control has not transferred to the customer. As of September 30, 2022, the aggregate amount of the transaction price allocated to remaining performance obligations was \$24.9 million. The Company expects to recognize revenue on the remaining performance obligations by fiscal year 2025.

Product Warranty Reserves

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

Disaggregation of Revenue

Revenue is classified within the Company's segments. For additional information on the disaggregated revenues by geographical region and major product category, see [Note 13 – Segment Data and Revenue Information](#) in the Notes to Consolidated Financial Statements.

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 the consolidated financial statements or tax returns. The measurement of current and deferred taxes is based on provisions of the enacted tax law. 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. 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 the ability to utilize 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 the ability to realize deferred tax assets for which a valuation allowance has been established, then the 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 the tax provision may increase in the period in which we make the determination. See [Note 10 - Income and Other Taxes](#) in the Notes to Consolidated Financial Statements for additional information related to income taxes.

Leases

The Company determines if an arrangement is a lease at its inception. Right of use (ROU) assets and operating lease liabilities are recognized at the lease commencement date based on the present value of lease payments over the lease term. The Company uses its estimated incremental borrowing rate in determining the present value of lease payments considering the term of the lease, which is derived from information available at the lease commencement date. The lease term includes renewal options when it is reasonably certain that the option will be exercised, and excludes termination options. To the extent that the Company's agreements have variable lease payments, the Company includes variable lease payments that depend on an index or a rate and excludes those that depend on facts or circumstances occurring after the commencement date, other than the passage of time. Lease expense for these leases is recognized on a straight-line basis over the lease term. The Company has elected not to recognize ROU assets and lease liabilities that arise from short-term (12 months or less) leases for any class of underlying asset. Operating leases are included in operating lease ROU assets, current operating lease liabilities, and non-current operating lease liabilities in the Company's consolidated balance sheet.

Purchase Accounting

The Company accounts for acquisitions of businesses under the acquisition method of accounting. Under the acquisition method of accounting, the Company records assets acquired and liabilities assumed at their estimated fair value on the date of acquisition. Goodwill is measured as the excess of the fair value of the consideration transferred over the fair value of the identifiable net assets. Estimated fair values of acquired assets and liabilities are provisional and could change as additional information is received. When appropriate, our estimates of the fair values of assets and liabilities acquired include assistance from independent third-party valuation firms. Valuations are finalized as soon as practicable, but not later than one year from the acquisition date. Any subsequent changes to purchase price allocations result in a corresponding adjustment to goodwill.

Inventory, long-lived assets, goodwill, and other intangible assets generally represent the largest components of our acquisitions. Inventory is valued utilizing net realizable value method. Property, plant, and equipment is valued utilizing a cost and market approach. Intangible assets are recognized at their estimated fair values as of the date of acquisition and generally consist of customer relationships, technology, IPR&D, and trademarks. Determination of the estimated fair value of intangible assets requires judgment. The estimated fair value of technology, IPR&D, and trademarks, is determined utilizing the relief from royalty method. Under this form of income approach, a royalty rate based on observed market royalties is applied to projected revenue supporting the technology, IPR&D, and trademarks and discounted to present value. The estimated fair value of customer relationships is determined using the multiple period excess earnings method. Under this form of income approach, net cash flows attributable to the subject asset are typically calculated net of fair returns on and of all assets that are necessary to realize the cash flows. Cash flows of the subject intangible asset are charged amounts representing a return of and a return on these contributory assets (based on the fair values of the contributory assets).

Recent Accounting Pronouncements

Recently Adopted Accounting Pronouncements

In December 2019, the FASB issued Accounting Standards Update (“ASU”) 2019-12, Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes, which simplifies the accounting for income taxes by removing various exceptions, such as the exception to the incremental approach for intra-period tax allocation when there is a loss from continuing operations and income or a gain from other items. The amendments in this update also simplify the accounting for income taxes related to income-based franchise taxes and require that an entity reflect enacted tax laws or rates in the annual effective tax rate computation in the interim period that includes the enactment date. The new standard was effective for our fiscal year beginning October 1, 2021. The adoption of this new standard did not have a material impact on the consolidated financial statements.

In October 2021, the FASB issued ASU 2021-08, Business Combinations (Topic 805): Accounting for Contract Assets and Contract Liabilities from Contracts with Customers, which provides an exception to fair value measurement for contract assets and contract liabilities related to revenue contracts acquired in a business combination. ASU 2021-08 requires an entity (acquirer) to recognize and measure contract assets and contract liabilities acquired in a business combination in accordance with Topic 606. At the acquisition date, an acquirer should account for the related revenue contracts in accordance with Topic 606 as if it had originated the contract. ASU 2021-08 is effective for the Company for our annual and interim periods beginning October 1, 2023. We early adopted this standard effective with our fiscal year beginning October 1, 2021. The early adoption of this new standard did not have a material impact on the consolidated financial statements.

Recent Accounting Standards or Updates Not Yet Effective

There are no recent accounting pronouncements issued by the FASB that the Company expects would have a material impact on the Company's financial statements.

NOTE 3. Acquisitions

On April 29, 2022, we completed the acquisition of the L3Harris Technologies, Inc. (“L3H”) Space and Navigation business (“S&N”) for a total purchase price of approximately \$5.0 million in cash, exclusive of transaction costs and expenses and subject to certain post-closing working capital adjustments, resulting in a final adjusted purchase consideration transferred of \$4.9 million. Following the closing, S&N results are included in our Aerospace and Defense reportable segment and in our consolidated financial statements beginning on the acquisition date. Revenue and net income of S&N from the acquisition date of \$10.1 million and \$0.5 million, respectively, is included in our consolidated statements of operations and comprehensive (loss) income for the fiscal year ended September 30, 2022.

On August 9, 2022, we completed the acquisition of the KVH Industries, Inc. (“KVH”) FOG and Inertial Navigation Systems business (“EMCORE Chicago”) pursuant to that certain Sale Agreement, pursuant to which we acquired substantially all of KVH's assets and liabilities primarily related to the segment, including property interests in the Tinley Park Facility, for aggregate consideration of approximately \$55.0 million, exclusive of transaction costs and expenses and subject to certain post-closing working capital adjustments. Following the closing, EMCORE Chicago results are included in our Aerospace and Defense reportable segment and in our consolidated financial statements beginning on the acquisition date. Revenue and net income of EMCORE Chicago from the acquisition date of \$6.1 million and \$0.7 million, respectively, is included in our consolidated statements of operations and comprehensive (loss) income for the fiscal year ended September 30, 2022.

Preliminary Purchase Price Allocation

The total purchase price for each of the S&N acquisition and the EMCORE Chicago acquisition was allocated to the assets acquired and liabilities assumed based on their estimated fair values as of the acquisition date. Due to the fact that each such acquisition occurred in the current fiscal year, the Company's fair value estimates for the purchase price allocations are preliminary. The final determination of fair value for the assets acquired and liabilities assumed is subject to further change and will be completed as soon as possible, but no later than one year from the applicable acquisition date. Since acquisition, the preliminary purchase price allocations for S&N has changed by \$2.3 million as a reduction to contract assets and an increase to goodwill acquired. The preliminary estimates that are not yet finalized for S&N relate to identifiable intangible assets and asset retirement obligations. The preliminary estimates that are not yet finalized for EMCORE Chicago relate to identifiable intangible assets. Goodwill is measured as the excess of the fair value of the purchase consideration transferred over the fair value of the identifiable net assets. Any changes in the fair values of the assets acquired and liabilities assumed during the measurement period may result in a material adjustment to goodwill. Goodwill from these acquisitions totaled \$17.8 million, of which 74.8% was the result of the EMCORE Chicago acquisition, which expanded EMCORE's competitive position in the Inertial Navigation market.

The table below represents the preliminary purchase price allocation to the assets acquired and liabilities assumed of S&N based on their estimated fair values as of the acquisition date based on management's best estimates and assumptions:

<i>(in thousands)</i>	Amount
Tangible assets acquired:	
Accounts receivable	\$ 803
Inventory	370
Contract assets	3,920
Operating lease right-of-use assets	1,529
Property, plant, and equipment	1,996
Net pension benefit assets	1,727
Intangible assets acquired	1,970
Goodwill	4,483
Liabilities assumed:	
Accounts payable	(1,226)
Accrued expenses	(622)
Contract liabilities	(6,024)
Operating lease liabilities	(1,565)
Asset retirement obligations	(2,500)
Total purchase consideration	<u>\$ 4,861</u>

The table below represents the preliminary purchase price allocation to the assets acquired and liabilities assumed of EMCORE Chicago based on their estimated fair values as of the acquisition date based on management's best estimates and assumptions:

<i>(in thousands)</i>	Amount
Tangible assets acquired:	
Accounts receivable	\$ 4,977
Inventory	10,800
Prepaid expenses and other current assets	1,483
Property, plant, and equipment	14,442
Intangible assets acquired	12,770
Goodwill	13,342
Liabilities assumed:	
Accounts payable	(1,699)
Accrued expenses	(485)
Contract liabilities	(637)
Other long-term liabilities	(8)
Total purchase consideration	<u>\$ 54,985</u>

Included in intangible assets acquired are customer relationships of \$2.3 million, technology of \$2.4 million, in-process research and development of \$5.9 million, and trademarks of \$2.2 million. For the fiscal year ended September 30, 2022, the Company incurred transaction costs of approximately \$6.1 million in connection with the acquisitions, which were expensed as incurred and included in selling, general and administrative expenses within the accompanying consolidated statements of operations and comprehensive (loss) income.

Unaudited Pro Forma Financial Information

The following unaudited pro forma financial information presented for the fiscal years ended September 30, 2022 does not purport to be indicative of the results of operations that would have been achieved had the acquisition been consummated on October 1, 2020, nor of the results which may occur in the future. The pro forma amounts are based upon available information and certain assumptions that the Company believes are reasonable.

(in thousands, except per share data)	Year Ended September 30, 2022			
	EMCORE (excluding EMCORE Chicago)	EMCORE Chicago	Pro Forma Adjustments	Pro Forma Combined
Revenue	\$ 118,029	\$ 31,757	\$ —	\$ 149,786
Cost of revenue	89,486	24,347	683 (a)	114,516
Gross profit	28,543	7,410	(683)	35,270
Operating expense:				
Selling, general, and administrative	33,294	9,670	(4,102) (a)(b)	38,862
Research and development	18,401	4,946	(1,057) (a)(b)	22,290
Severance	1,357	(4)	—	1,353
Gain on sale of assets	(2,685)	—	—	(2,685)
Impairment charge	2,956	—	—	2,956
Total operating expense	53,323	14,612	(5,159)	62,776
Operating loss	(24,780)	(7,202)	4,476	(27,506)
Other (expense) income:				
Interest expense, net	(139)	—	(1,060) (c)	(1,199)
Foreign exchange loss	(352)	—	—	(352)
Pension income	148	—	—	148
Other income	—	137	—	137
Total other expense	(343)	137	(1,060)	(1,266)
Loss before income tax benefit	(25,123)	(7,065)	3,416	(28,772)
Income tax benefit (expense)	139	(42)	(19) (d)(e)	78
Net loss	(24,984)	(7,107)	3,397	(28,694)
Foreign exchange translation adjustment	172	—	—	172
Pension adjustment	441	—	—	441
Comprehensive loss	\$ (24,371)	\$ (7,107)	\$ 3,397	\$ (28,081)
Per share data:				
Net loss per basic share:	\$ (0.67)		\$ —	\$ (0.77)
Weighted-average number of basic and diluted shares outstanding	37,269		\$ —	37,269

(a) Reflects the impact to depreciation expense and amortization expense as a result of the change in fair value of property, plant, and equipment and intangible assets acquired. Adjustment was made to the unaudited pro forma condensed combined statements of operations for the nine months ended September 30, 2022.

(b) Reflects the deduction of various sales, general, and administrative and research and development expenses allocated from corporate overhead to EMCORE Chicago during the periods presented that will not be incurred on an ongoing basis as a result of existing EMCORE management structures in place, which will provide the same support to EMCORE Chicago upon completion of a transition services agreement entered into between EMCORE and KVH in connection with the EMCORE Chicago acquisition. Amounts were estimated based on historical allocation included in the stand-alone financial statements of

EMCORE Chicago. However, actual costs to be incurred associated with corporate support may vary under the EMCORE structure.

(c) Reflects the impact of interest expense related to cash from borrowing facility for funding of the transaction.

(d) Reflects the current tax expense due to additional income and deferred income tax expense related to deferred tax liability generated from annual tax amortization of indefinite-lived assets that were acquired for the periods presented. Such amounts were determined based on the effective tax rate of EMCORE rather than statutory tax rates as a result of a tax valuation allowance covering substantially all deferred tax assets and the existence of tax loss carryforwards present at both entities.

(e) Reflects the deduction of the income tax expense related to the FIN 48 liability of EMCORE Chicago that is not assumed by EMCORE.

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 consolidated statements of cash flows:

(in thousands)	September 30,	
	2022	2021
Cash	\$ 20,011	\$ 16,547
Cash equivalents	5,614	55,074
Restricted cash	520	61
Total cash, cash equivalents, and restricted cash	<u>\$ 26,145</u>	<u>\$ 71,682</u>

Restricted cash as of September 30, 2022 increased from September 30, 2021 due to an additional reserve related to our workers' compensation insurance policy. A reserve was taken as of June 30, 2022 in lieu of a corresponding letter of credit that was previously in place under our Credit and Security Agreement with Wells Fargo Bank, N.A., ("Wells Fargo") which terminated in May 2022 pursuant to its terms.

NOTE 5. Accounts Receivable, net

The components of accounts receivable, net consisted of the following:

(in thousands)	September 30,	
	2022	2021
Accounts receivable, gross	\$ 18,410	\$ 32,109
Allowance for credit loss	(337)	(260)
Accounts receivable, net	<u>\$ 18,073</u>	<u>\$ 31,849</u>

The following table summarizes changes in the allowance for credit loss:

(in thousands)	Year Ended September 30,	
	2022	2021
Balance at beginning of period	\$ 260	\$ 227
Additions from acquisitions	106	—
Provision adjustment - expense, net of recoveries	229	90
Write-offs and other deductions	(258)	(57)
Balance at end of period	<u>\$ 337</u>	<u>\$ 260</u>

NOTE 6. Inventory

The components of inventory consisted of the following:

	September 30,	
	2022	2021
<i>(in thousands)</i>		
Raw materials	\$ 22,927	\$ 16,146
Work in-process	9,587	11,410
Finished goods	4,521	4,753
Inventory	\$ 37,035	\$ 32,309

NOTE 7. Property, Plant, and Equipment, net

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

	September 30,	
	2022	2021
<i>(in thousands)</i>		
Land	\$ 995	\$ —
Building	8,805	—
Equipment	42,330	37,985
Furniture and fixtures	1,394	1,125
Computer hardware and software	3,378	3,575
Leasehold improvements	7,180	6,663
Construction in progress	9,886	9,247
Property, plant, and equipment, gross	\$ 73,968	\$ 58,595
Accumulated depreciation	(36,101)	(36,051)
Property, plant, and equipment, net	\$ 37,867	\$ 22,544

Depreciation expense totaled \$4.6 million and \$4.0 million during the fiscal years ended September 30, 2022 and 2021, respectively. During the fiscal years ended September 30, 2022 and 2021, the Company sold certain equipment and recognized a gain (loss) on sale of assets of \$2.7 million and \$(0.5) million, respectively.

During 2022, there was a triggering event of negative cash flows and operating losses at the FOG asset group level within the Inertial Navigation product line of the A&D segment that indicated the carrying amounts of our long-lived assets may not be recoverable. In accordance with ASC 360, with regard to our long-lived assets, we performed an undiscounted cash flow analysis and concluded that the carrying value of the asset group was not recoverable. Accordingly, we then performed an analysis to estimate the fair value of the other long-lived assets and recognized an impairment charge within operating expenses of \$3.0 million against the FOG property, plant, and equipment by the amount by which the carrying value of the asset group's other long-lived assets exceeded their estimated fair value for the fiscal year ended September 30, 2022. Key assumptions utilized in the determination of fair value include expected future cash flows and working capital requirements. While we believe the expectations and assumptions about the future are reasonable, they are inherently uncertain.

Geographical Concentrations

Long-lived assets consist of land, building, property, plant, and equipment. As of September 30, 2022 and 2021, approximately 95% and 97%, respectively, of our long-lived assets were located in the United States. The remaining long-lived assets are primarily located in Thailand. The increase in long-lived assets in Thailand was a result of consigning additional equipment in CIP for production purposes for use predominantly in the CATV Lasers and Transmitters product line.

NOTE 8. Intangible Assets and Goodwill

Intangible assets arose from the acquisition of SDI in 2019 and the acquisitions of S&N and EMCORE Chicago in the current fiscal year and are reported within the A&D segment. Intangible assets are amortized on a straight-line basis over the estimated useful life of: (a) 7.0 years for patents (b) 8.0 years for customer relationships, and (c) 2.0-8.0 years for technology. IPR&D is indefinite-lived until completion of the related development project, at which point amortization of the carrying value of the technology will commence. Trademarks are indefinite-lived.

The following table summarizes changes in intangible assets, net:

<i>(in thousands)</i>	Year Ended September 30,	
	2022	2021
Balance at beginning of period	\$ 167	\$ 202
Additions from acquisition	14,740	—
Amortization	(117)	(35)
Balance at end of period	<u>\$ 14,790</u>	<u>\$ 167</u>

The weighted average remaining useful lives by definite-lived intangible asset category are as follows:

<i>(in thousands, except weighted average remaining life)</i>	Year Ended September 30, 2022			
	Weighted Average Remaining Life (in years)	Gross Carrying Amount	Accumulated Amortization	Net Book Value
Technology	5.4	\$ 10,991	\$ (8,261)	\$ 2,730
Customer relationships	4.6	3,260	(50)	3,210
Definite-lived intangible assets total		<u>\$ 14,251</u>	<u>\$ (8,311)</u>	<u>\$ 5,940</u>

As of September 30, 2022 IPR&D and trademarks was approximately \$6.7 million and \$2.2 million, respectively.

<i>(in thousands, except weighted average remaining life)</i>	Year Ended September 30, 2021			
	Weighted Average Remaining Life (in years)	Gross Carrying Amount	Accumulated Amortization	Net Book Value
Technology	4.7	\$ 8,361	\$ (8,194)	\$ 167

Estimated future amortization expense for intangible assets recorded by the Company at September 30, 2022 is as follows:

<i>(in thousands)</i>	Amount
2023	\$ 1,057
2024	1,038
2025	1,011
2026	609
2027	586
Thereafter	1,639
Total amortization expense	<u>\$ 5,940</u>

Goodwill is recorded when the consideration for an acquisition exceeds the fair value of net tangible and identifiable intangible assets acquired. \$17.8 million of the Company's goodwill of \$17.9 million relates to the recent S&N and EMCORE Chicago acquisitions and are within the A&D segment. None of the Company's goodwill is deductible for tax purposes. The following table summarizes changes in goodwill:

<i>(in thousands)</i>	Year Ended September 30,	
	2022	2021
Balance at beginning of period	\$ 69	\$ 69
Additions from acquisition	17,825	—
Balance at end of period	<u>\$ 17,894</u>	<u>\$ 69</u>

NOTE 9. Benefit Plans

We assumed the Pension Plan on April 29, 2022 as a result of the acquisition of S&N. The Pension Plan was frozen to new hires as of March 31, 2007 and employees hired on or after April 1, 2007 are not eligible to participate in the Pension Plan. On July 1, 2022, the Pension Plan was amended to freeze benefit plan accruals for participants. As a result of the freeze, a

curtailment was triggered and a restatement of the benefit obligation and plan assets occurred, although no gain or loss resulted. The annual measurement date for the Pension Plan is September 30. Benefits are based on years of credited service at retirement. Annual contributions to the Pension Plan are not less than the minimum funding standards outlined in the Employee Retirement Income Security Act of 1974, as amended. We maintain the Pension Plan with the goal of ensuring that it is adequately funded to meet its future obligations. We did not make any contributions to the Pension Plan during the period from April 29, 2022 to September 30, 2022. We do not anticipate making any contributions for the fiscal year ending September 30, 2023.

The following table presents the benefit obligation, fair value of the plan assets, and funded status of the plan:

<i>(in thousands)</i>		September 30, 2022
Change in Benefit Obligation		
Benefit obligation at April 29, 2022	\$	8,203
Service cost		49
Interest cost		130
Participant contributions		—
Amendments		—
Actuarial losses (gains)		(901)
Benefits paid		(149)
Business combinations and (divestitures)		—
Curtailments, settlements and/or special/contractual termination benefits		—
Benefit obligation at September 30, 2022	\$	7,332
Change in Plan Assets		
Fair value at April 29, 2022	\$	9,930
Actual return on plan assets		(312)
Company contributions		—
Participant contributions		—
Benefits paid		(149)
Expenses paid		—
Business combinations and (divestitures)		—
Curtailments, settlements and/or special/contractual termination benefits		—
Fair value at September 30, 2022	\$	9,469
Funded Status		
Funded status at September 30, 2022	\$	2,137
Amounts Recognized in Balance Sheets		
Non-current assets	\$	2,137
Current liabilities	\$	—
Non-current liabilities	\$	—
Amounts Recognized in Accumulated Other Comprehensive Income		
Transition obligation (asset)	\$	—
Prior service cost (credit)	\$	—
Net loss (gain)	\$	(441)
Net periodic pension cost		
Service cost	\$	49
Interest cost		130
Expected return on plan assets		(148)
Amortization of transition obligation (asset)		—
Amortization of prior service cost (credit)		—
Amortization of net loss (gain)		—
Recognition due to settlement, curtailment, and special/contractual termination benefits		—
Net periodic pension cost	\$	31

Other Changes in Plan Assets and Benefit Obligations Recognized in Other Comprehensive (Loss) Income		
Net loss (gain)	\$	(441)
Prior service cost (credit)		—
Amortization of net (loss) gain		(1,831)
Amortization of prior service cost (credit)		—
Amortization of initial asset		—
Total recognized in other comprehensive (loss) income	\$	(441)
Actuarial (Gain) Loss by Source		
Updated census	\$	(55)
Updated discount rate		(846)
Total	\$	(901)
Estimated Future Benefit Payments		
2023	\$	600
2024		579
2025		562
2026		575
2027		573
Thereafter		2,748
Total	\$	5,637
Weighted Average Assumptions to Determine Benefit Obligations at Year End		
Discount rate		5.6%
Rate of compensation increase		N/A
Weighted Average Assumptions to Determine Net Periodic Pension Cost		
Discount rate		4.4%
Rate of compensation increase		N/A

Net pension asset is included as a component of other non-current assets on the consolidated balance sheets as of September 30, 2022. As of September 30, 2022 the Pension Plan assets consist primarily of cash and cash equivalents, we manage a liability driven investment strategy intended to maintain fully-funded status.

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. Our matching contribution in cash for each of the fiscal years ended September 30, 2022 and 2021 was approximately \$1.2 million and \$1.1 million, respectively.

NOTE 10. Accrued Expenses and Other Current Liabilities

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

(in thousands)	September 30,	
	2022	2021
Compensation	\$ 4,213	\$ 7,192
Warranty	1,504	1,125
Legal expenses and other professional fees	275	152
Income and other taxes	—	104
Severance and restructuring accruals	423	—
Litigation settlement accrual	341	70
Other	1,368	925
Accrued expenses and other current liabilities	\$ 8,124	\$ 9,568

Severance and restructuring-related accruals specifically relate to the reductions in force. Expense related to severance and restructuring accruals is included in SG&A expense on the consolidated statements of operations and comprehensive (loss) income. In an effort to better align current and future business operations related to CATV product lines, we reduced our workforce and recorded \$0.1 million in severance expense in the fiscal year ended September 30, 2021 and there was \$1.4 million in severance expense recorded in the fiscal year ended September 30, 2022. As of September 30, 2022 and 2021 there was \$0.4 million and \$0.0 million accrued. We expect to have fully exited from our operations in China by the quarter ending June 30, 2023 and do not expect to incur any further costs related to the exit beyond the amount currently accrued.

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

<i>(in thousands)</i>	Year Ended September 30,	
	2022	2021
Balance at beginning of period	\$ 1,125	\$ 803
Additions from acquisitions	437	—
Provision for product warranty expense	251	505
Adjustments and utilization of warranty accrual	(309)	(183)
Balance at end of period	<u>\$ 1,504</u>	<u>\$ 1,125</u>

NOTE 11. Credit Agreement and PPP Loan

Wingspire Credit Agreement

On August 9, 2022, EMCORE and EMCORE Space & Navigation Corporation, our wholly-owned subsidiary, entered into that certain Credit Agreement with the lenders party thereto and Wingspire Capital LLC (“Wingspire”), as administrative agent for the lenders, as amended pursuant to that First Amendment to Credit Agreement, dated as of October 25, 2022, among EMCORE and EMCORE Space & Navigation Corporation, EMCORE Chicago Inertial Corporation, our wholly-owned subsidiary (together with the Company and S&N, the “Borrowers”), the lenders party thereto and Wingspire to add EMCORE Chicago as a Borrower and include certain of its assets in the borrowing base (as amended, the “Credit Agreement”). The Credit Agreement provides for two credit facilities: (a) an asset-based revolving credit facility in an aggregate principal amount of up to \$40.0 million, subject to a borrowing base consisting of eligible accounts receivable and eligible inventory (subject to certain reserves), and (b) a term loan facility in an aggregate principal amount of \$6.0 million.

The proceeds of the loans made under the Credit Agreement may be used for general corporate purposes.

Borrowings under the Credit Agreement will mature on August 8, 2025, and will bear interest, at a rate per annum equal to term SOFR plus a margin of (i) 3.75% or 5.50% in the case of revolving loans, depending on the applicable assets corresponding to the borrowing base pursuant to which the applicable loans are made and (ii) 5.50% in the case of term loans. In addition, the Borrowers will be responsible for Wingspire’s annual collateral monitoring fees as well as the lenders’ fees and expenses, including a closing fee of 1.0% of the aggregate principal amount of the commitments as of the closing with respect to revolving loans and 1.50% of the aggregate principal amount of the commitments as of the closing with respect to term loans. The Borrowers may also be required to pay an unused line fee of 0.50% in respect of the undrawn portion of the revolving commitments, which is generally based on average daily usage of the revolving facility during the immediately preceding month.

The Credit Agreement contains representations and warranties, reporting and other affirmative covenants, and negative covenants that are generally customary for credit facilities of this type. Among others, the Credit Agreement contains various covenants that, subject to agreed upon exceptions, limit the Borrowers’ and their respective subsidiaries’ ability to incur indebtedness, grant liens, enter into sale and leaseback transactions, enter into swap agreements, make loans, acquisitions and investments, change the nature of their business, acquire or sell assets or consolidate or merge with or into other persons or entities, declare or pay dividends or make other restricted payments, enter into transactions with affiliates, enter into burdensome agreements, change fiscal year, amend organizational documents, and use proceeds to fund any activities of or business with any person that is the subject of governmental sanctions. In addition, the Credit Agreement requires that, for any period commencing upon the occurrence of an event of default or excess availability under the Credit Agreement being less than the greater of \$5.0 million and 15% of the revolving commitments until such time as no event of default shall be continuing and excess availability under the Credit Agreement shall be at least the greater of \$5.0 million and 15% of the revolving commitments for a period of 60 consecutive days, the Borrowers satisfy a consolidated fixed charge coverage ratio of not less than 1.10:1.00.

The Credit Agreement also includes customary events of default, the occurrence of which, following any applicable grace period, would permit the lenders to, among other things, declare the principal, accrued interest and other obligations of the Borrowers under the Credit Agreement to be immediately due and payable, and exercise rights and remedies available to the lenders under the Credit Agreement or applicable law or equity.

In connection with the Credit Agreement, the Borrowers entered into a pledge and security agreement pursuant to which the obligations under the Credit Agreement are secured on a senior secured basis (subject to permitted liens) by substantially all assets of the Borrowers and substantially all assets of any future guarantors.

At the closing under the Credit Agreement, the Borrowers borrowed revolving loans in an aggregate principal amount of \$14.3 million and term loans in an aggregate principal amount equal to the entire term loan commitment.

As of September 30, 2022, an aggregate principal amount of \$9.6 million was outstanding pursuant to the revolving credit facility and an aggregate principal amount of \$5.9 million was outstanding pursuant to the term loan facility. Also, as of September 30, 2022, the revolving credit facility had approximately \$3.9 million available for borrowing. Provided that no event of default has occurred, and subject to availability limitation, loans under the revolving credit facility can continue to be drawn/redrawn until expiration in 2025.

Our future term loan repayments is as follows:

<i>(in thousands)</i>	Amount	
2023	\$	852
2024		852
2025		852
2026		852
2027		2,487
Total loan payments	\$	5,895

PPP Loan

On May 3, 2020, the Company entered into a Paycheck Protection Program Promissory Note and Agreement with Wells Fargo under the Paycheck Protection Program established under the Coronavirus Aid, Relief and Economic Security Act and administered by the U.S. Small Business Administration (the “SBA”) to receive loan proceeds of approximately \$6.5 million (the “PPP Loan”), which the Company received on May 6, 2020.

During 2021 the Company received a notification from Wells Fargo that the SBA approved the Company’s PPP Loan forgiveness application for the entire PPP Loan balance of approximately \$6.5 million, including all accrued interest thereon, and that the remaining PPP Loan balance is zero. The forgiveness of the PPP Loan was recognized during the Company’s fiscal quarter ended June 30, 2021. The Company recorded the gain on debt extinguishment in other income (expense) in the statements of operations and comprehensive (loss) income.

NOTE 12. Income and Other Taxes

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

<i>(in thousands)</i>	Year Ended September 30,	
	2022	2021
Domestic	\$ (22,510)	\$ 25,744
Foreign	(1,962)	471
(Loss) income before income taxes	\$ (24,472)	\$ 26,215

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

<i>(in thousands)</i>	Year Ended September 30,	
	2022	2021
Federal:		
Current	\$ (125)	\$ —
Deferred	12	—
	(113)	—
State:		
Current	(37)	990
Deferred	11	—
	(26)	990
Foreign:		
Current	—	(418)
Deferred	—	—
	—	(418)
Total income tax (benefit) expense	\$ (139)	\$ 572

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 (loss) income before provision for income taxes is as follows:

<i>(in thousands)</i>	Year Ended September 30,	
	2022	2021
Income tax expense (benefit) computed at U.S. federal statutory rate	\$ (5,139)	\$ 5,506
State tax expense (benefit), net of U.S. federal effect	(27)	990
Foreign tax rate differential	(73)	24
Effect due to change in tax rate	—	—
Shortfall from stock based compensation	141	(122)
Other	84	103
Federal benefit on PPP loan forgiveness	—	(1,363)
Change in uncertain tax positions	—	(419)
Net operating loss carryforward expiration	11,924	454
Change in valuation allowance	(7,049)	(4,601)
Income tax (benefit) expense	\$ (139)	\$ 572
Effective tax rate	(0.6) %	2.2 %

Significant components of deferred tax assets are as follows:

(in thousands)	September 30,	
	2022	2021
Federal net operating loss carryforwards	\$ 89,236	\$ 96,289
Foreign net operating loss carryforwards	1,448	1,372
Income tax credit carryforwards	592	2,510
Inventory reserves	2,397	2,229
Accounts receivable reserves	57	62
Accrued warranty reserve	264	269
State net operating loss carryforwards	6,822	6,356
Stock compensation	1,352	979
Deferred compensation	465	476
Fixed assets and intangibles	202	(497)
ROU lease liability	5,862	3,289
ROU lease assets	(5,724)	(3,195)
Other	2,443	1,372
Total deferred tax assets	105,416	111,511
Valuation allowance	(105,439)	(111,511)
Net deferred tax liabilities	\$ (23)	\$ —

For the fiscal years ended September 30, 2022 and 2021, the Company recorded income tax benefit (expense) of approximately \$0.1 million and \$(0.6) million, respectively. Income tax benefit for the fiscal year ended September 30, 2022 is comprised primarily of federal refund of AMT credit and state minimum tax expense. Income tax expense for the fiscal year ended September 30, 2021 is comprised primarily of California state income tax due to temporary suspension of net operating loss credits and other state minimum tax expense, partially offset by the release of a reserve on uncertain tax benefits due to statutory limitation expiration.

For the fiscal years ended September 30, 2022 and 2021, the effective tax rate on operations was (0.6)%, and 2.2%, respectively. The lower tax rate for the fiscal year ended September 30, 2022 is primarily due to the federal refund of AMT credit. The Company uses some estimates to forecast permanent differences between book and tax accounting.

We have not provided for income taxes on non-U.S. subsidiaries' undistributed earnings as of September 30, 2022 because we plan to indefinitely reinvest the unremitted earnings of the non-U.S. subsidiaries and all of the non-U.S. subsidiaries historically have negative earnings and profits.

All deferred tax assets have a full valuation allowance at September 30, 2022. On a quarterly basis, the Company evaluates the positive and negative evidence to assess whether the more likely than not criteria, has been satisfied in determining whether there will be further adjustments to the valuation allowance.

During the fiscal year ended September 30, 2021, the Company released the ASC 740-10 reserve on uncertain tax benefits due to statutory limitation expiration.

As of September 30, 2022, the Company had net operating loss carryforwards for U.S. federal income tax purposes of approximately \$424.9 million which begin to expire in 2023. As of September 30, 2022, the Company had foreign net operating loss carryforwards of \$5.8 million which begin to expire in 2023 as well as state net operating loss carryforwards of approximately \$78.8 million which begin to expire in 2023. As of September 30, 2022, the Company also had tax credits (primarily foreign income and U.S. research and development tax credits) of approximately \$0.5 million. The research credits begin to expire in 2023. 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 Section 382 of the Code 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 \$165.4 million is subject to an annual limitation and \$259.5 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.

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

(in thousands)	September 30,	
	2022	2021
Balance at beginning of period	\$ —	\$ 419
Adjustments based on tax positions related to the current year	—	—
Adjustments based on tax positions of prior years	—	(419)
Balance at end of period	<u>\$ —</u>	<u>\$ —</u>

As we released the entire unrecognized tax benefits, as well as the associated interest and penalties as of September 30, 2021, there is no uncertain tax positions that will be paid or settled within the next 12 months. Interest that is accrued on tax liabilities is recorded within interest expense on the consolidated statements of operations. There is no interest and penalties accrued as tax liabilities on the consolidated balance sheet.

NOTE 13. Commitments and Contingencies

Leases

We lease certain facilities and equipment under non-cancelable operating leases. Operating lease amounts exclude property taxes, insurance, and maintenance expenses on leased properties. As of September 30, 2022, our operating leases had remaining lease terms of approximately 1 year to 13 years, some of which included options to extend 5 additional years. During the fiscal years ended September 30, 2022 and 2021, the Company recorded \$2.9 million and \$2.2 million of operating lease expense, respectively. The Company's finance leases and short term leases are immaterial.

Maturities of operating lease liabilities as of September 30, 2022 were as follows:

(in thousands)	Amount
2023	\$ 3,387
2024	3,597
2025	3,092
2026	1,999
2027	2,049
Thereafter	17,338
Total lease payments	<u>\$ 31,462</u>
Less imputed interest	(7,624)
Total operating lease liabilities	<u>\$ 23,838</u>

Weighted-average remaining lease term and discount rate related to operating leases are as follows:

	September 30,	
	2022	2021
Weighted average remaining lease term (years)	9.8	11.9
Weighted average discount rate	5.4 %	6.1 %

Supplemental cash information and non-cash activities related to operating leases are as follows:

(in thousands)	September 30,	
	2022	2021
Operating cash outflows from operating leases	\$ 2,781	\$ 1,975
Right-of-use assets obtained in exchange for operating lease liabilities	\$ 1,529	\$ 10,358

Asset Retirement Obligations

ARO consists of legal requirements to decommission assets, restore the existing leased facilities to their original state, and perform certain environmental work due to the presence of a manufacturing fabrication operation. ARO includes assumptions related to renewal option periods for those facilities where we expect to extend lease terms. The Company recognizes its

estimate of the fair value of its ARO in the period incurred in long-term liabilities and is also capitalized as property, plant and equipment. The fair value of 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 1.73% to 3.31%.

The following table summarizes ARO activity:

(in thousands)	September 30,	
	2022	2021
Balance at beginning of period	\$ 2,049	\$ 2,022
Additions from acquisitions	2,500	—
Accretion expense	90	48
Revision in estimated cash flows	25	(21)
Balance at end of period	<u>\$ 4,664</u>	<u>\$ 2,049</u>

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 customer indemnification obligations. We enter into indemnification agreements with each of our directors and executive officers pursuant to which we agree to indemnify them for certain potential expenses and liabilities arising from their status as a director or executive officer of the Company. We maintain director and officer insurance, which covers certain liabilities relating to our obligation to indemnify our directors and executive officers in certain circumstances. It is not possible to determine the aggregate maximum potential loss under these indemnification agreements due to the limited history of prior indemnification claims and the unique facts and circumstances involved in each particular claim.

Legal Proceedings

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

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 the ability to obtain intellectual property protection for 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.

Resilience Litigation

In February 2021, Resilience Capital (“Resilience”) filed a complaint against us with the Delaware Chancery Court containing claims arising from the February 2020 sale of SDI’s real property (the “Concord Property Sale”) located in Concord, California (the “Concord Real Property”) to Eagle Rock Holdings, LP (“Buyer”) and that certain Single-Tenant Triple Net Lease, dated as of February 10, 2020, entered into by and between SDI and the Buyer, pursuant to which SDI leased from the Buyer the Concord Real Property for a 15 year term. The Resilience complaint seeks, among other items, (a) a declaration that the Concord Property Sale included a non-cash component, (b) a decree requiring us and Resilience to follow the appraisal requirements set forth in that certain Purchase and Sale Agreement (the “SDI Purchase Agreement”), dated as of June 7, 2019, by and among the Company, The Resilience Fund IV, L.P., The Resilience Fund IV-A, L.P., Aerospace Newco Holdings, Inc. and Ember Acquisition Sub, Inc., (c) recovery of Resilience’s costs and expenses, and (d) pre- and post-judgment interest.

In April 2021, we filed with the Delaware Chancery Court our answer to the Resilience complaint and counterclaims against Resilience, in which we are seeking, among other items, (a) dismissal of the Resilience complaint and/or granting of judgment

in favor of EMCORE with respect to the Resilience complaint, (b) entering final judgment against Resilience awarding damages to us for Resilience’s fraud and breaches of the SDI Purchase Agreement in an amount to be proven at trial and not less than \$1,565,000, (c) a judicial determination of the respective rights and duties of us and Resilience under the SDI Purchase Agreement, (d) an award to us of costs and expenses, and (e) pre- and post-judgment interest. We believe that the claims made by Resilience in its complaint are without merit and we intend to vigorously defend ourselves against them.

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 four equity incentive compensation plans, collectively described as our “Equity Plans”: (a) the 2010 Equity Incentive Plan (the “2010 Plan”), (b) the 2012 Equity Incentive Plan (the “2012 Plan”), (c) the 2019 Equity Incentive Plan (the “2019 Plan”), and (d) the 2022 New Employee Inducement Plan.

We issue new shares of common stock to satisfy awards granted under our Equity Plans. In March 2022, our shareholders approved the Amended and Restated EMCORE Corporation 2019 Plan, which was adopted by the Company’s Board of Directors in December 2021 and increased the maximum number of shares of the Company’s common stock that may be issued or transferred pursuant to awards under the 2019 Plan by an additional 1.9 million shares. In August 2022, our Board of Directors adopted the EMCORE Corporation 2022 New Employee Inducement Plan, pursuant to which a maximum of 380,000 shares of the Company’s common stock may be issued or transferred pursuant to awards made as an inducement material to the grantee’s entering into employment with the Company to the extent such grantee was not previously an employee of the Company or is entering into employment following a bona fide period of non-employment with the Company.

Stock Options

Most stock options vest and become exercisable over four to five years 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 Code.

The Company has estimated the fair value of each option grant on the date of grant using the Black-Scholes option-pricing model. The expected volatility assumption is based on the historical daily price data of the Company’s common stock over a period equivalent to the weighted average expected life of the Company’s options. The expected term of options granted is derived using assumed exercise rates based on historical exercise patterns and represents the period of time the options granted are expected to be outstanding. The risk-free interest rate is based on the actual U.S. Treasury zero-coupon rates for bonds matching the expected term of the option as of the option grant date. The dividend yield of zero is based upon the fact that the Company has not historically declared or paid cash dividends, and does not expect to declare or pay dividends in the foreseeable future.

The following table summarizes stock option activity under the Equity Plans for the fiscal year ended September 30, 2022:

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (in years)	Aggregate Intrinsic Value (*) (in thousands)
Outstanding as of September 30, 2021	19,869	\$ 4.59		
Granted	—	—		
Exercised	5,725	5.05		
Forfeited	—	—		
Expired	4,163	4.13		
Outstanding as of September 30, 2022	9,981	\$ 4.52	2.53	\$ —
Exercisable as of September 30, 2022	9,981	\$ 4.52	2.53	\$ —
Vested and expected to vest as of September 30, 2022	9,981	\$ 4.52	2.53	\$ —

(*) 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 year ended September 30, 2021, the intrinsic value of options exercised was \$0.

As of September 30, 2022, there was no unrecognized stock-based compensation expense related to non-vested stock options granted under the Equity Plans.

Valuation Assumptions

There were no stock option grants for the fiscal years ended September 30, 2022 and 2021.

Time-Based Restricted Stock

Time-based restricted stock units (“RSUs”) and restricted stock awards (“RSAs”) granted to employees under the 2010 Plan, 2012 Plan, the 2019 Plan, or the 2022 New Employee Inducement Plan typically vest over 3 to 4 years and are subject to forfeiture if employment terminates prior to the vesting or lapse of the restrictions, as applicable. 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 value of RSUs is determined by the stock price on the grant date.

The following table summarizes the activity related to RSUs and RSAs subject to time-based vesting requirements for the fiscal year ended September 30, 2022:

	RSUs		RSAs	
	Number of Shares	Weighted Average Grant Date Fair Value	Number of Shares	Weighted Average Grant Date Fair Value
Non-vested as of September 30, 2021	1,804,854	\$ 4.61	—	\$ —
Granted	1,987,657	3.46	—	—
Vested	592,711	4.57	—	—
Forfeited	254,420	3.95	—	—
Non-vested as of September 30, 2022	2,945,380	\$ 3.90	—	\$ —

As of September 30, 2022, there was approximately \$9.5 million of remaining unamortized stock-based compensation expense associated with RSUs, which will be expensed over a weighted average remaining service period of approximately 2.9 years. The 2.9 million outstanding non-vested and expected to vest RSUs have an aggregate intrinsic value of \$4.9 million and a weighted average remaining contractual term of 1.7 years. For the fiscal years ended September 30, 2022 and 2021, the intrinsic value of RSUs vested was approximately \$3.0 million and \$3.6 million, respectively and the weighted average grant date fair value of RSUs granted was \$3.46 and \$3.41 per share, respectively.

For the fiscal year ended September 30, 2022, \$27.3 thousand of RSAs vested. As of September 30, 2022, there was no remaining unamortized stock-based compensation expense associated with RSAs.

Performance-Based Restricted Stock

Performance based restricted stock units (“PSUs”) and performance-based shares of restricted stock (“PRSAs”) granted to employees under the 2012 Plan or 2019 Plan typically vest over 1 to 3 years and are subject to forfeiture in whole, if employment terminates, or in whole or in part, if specified vesting conditions are not satisfied in each case prior to vesting. PSUs are not considered issued or outstanding common stock until they vest. PRSAs are considered issued and outstanding on the grant date and are subject to forfeiture if specified vesting conditions are not satisfied. PSUs and PRSAs that are granted to executive officers and key employees are provided as long-term incentive compensation that is based on relative total shareholder return, which measures performance against the Russell Microcap Index.

PSUs are valued based on a Monte Carlo simulation model to reflect the impact of the PSUs market condition. The probability of satisfying a market condition is considered in the estimation of the grant-date fair value for PSUs and the compensation cost is not reversed if the market condition is not achieved, provided the requisite service has been provided.

The following table summarizes the activity related to PSUs for the fiscal year ended September 30, 2022:

	PSUs	
	Number of Shares (at target)	Weighted Average Grant Date Fair Value
Non-vested as of September 30, 2021	967,000	\$ 5.01
Granted	1,082,053	4.51
Vested	92,352	5.19
Forfeited	147,648	5.19
Non-vested as of September 30, 2022	1,809,053	\$ 4.69

As of September 30, 2022, there was approximately \$5.0 million of remaining unamortized stock-based compensation expense associated with PSUs, which will be expensed over a weighted average remaining service period of approximately 1.7 years. The 1.8 million outstanding non-vested and expected to vest PSUs have an aggregate intrinsic value of approximately \$3.0 million and a weighted average remaining contractual term of 1.7 years. For the fiscal years ended September 30, 2022 and 2021, the intrinsic value of PSUs vested was \$321.3 thousand and \$34.4 thousand, respectively. For the fiscal years ended September 30, 2022 and 2021, the weighted average grant date fair value of PSUs granted was \$4.51 and \$3.81 per share, respectively.

For the fiscal year ended September 30, 2022, no PRSAs vested. As of September 30, 2022, there was no remaining unamortized stock-based compensation expense associated with PRSAs.

Stock-Based Compensation

The following table sets forth stock-based compensation expense by award type:

	Year Ended September 30,	
	2022	2021
<i>(in thousands)</i>		
Employee stock options	\$ —	\$ 2
RSUs and RSAs	2,576	2,093
PSUs and PRSAs	2,314	1,396
ESPP	—	307
Outside director equity awards and fees in common stock	484	382
Total stock-based compensation expense	\$ 5,374	\$ 4,180

The following table sets forth stock-based compensation expense by expense type:

	Year Ended September 30,	
	2022	2021
<i>(in thousands)</i>		
Cost of revenue	\$ 952	\$ 767
Selling, general, and administrative	3,591	2,590
Research and development	831	823
Total stock-based compensation expense	\$ 5,374	\$ 4,180

Capital Stock

Authorized capital stock consists of 50 million shares of common stock, no par value, and 5,882,352 shares of preferred stock, \$0.0001 par value. No shares of preferred stock were outstanding as of September 30, 2022.

On February 16, 2021, the Company closed our offering of 6,655,093 shares of our common stock, which included the full exercise of the underwriters' option to purchase 868,056 additional shares of common stock, at a price to the public of \$5.40 per share, resulting in net proceeds to us from the offering, after deducting the underwriting discounts and commissions and other offering expenses, of approximately \$33.1 million. The shares were sold by us pursuant to an underwriting agreement with Cowen and Company, LLC, dated as of February 10, 2021. As of September 30, 2022 and 2021, we had 44.5 million and 43.9 million shares of common stock issued and outstanding, respectively. There were no shares of preferred stock issued or outstanding as of September 30, 2022 and 2021.

(Loss) Income Per Share

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

<i>(in thousands, except per share data)</i>	Year Ended September 30,	
	2022	2021
Numerator		
Net (loss) income	\$ (24,333)	\$ 25,643
Denominator		
Weighted average number of shares outstanding - basic	37,269	34,020
Effect of dilutive securities		
Stock options	—	7
PSUs, RSUs, and restricted stock	—	1,762
Weighted average number of shares outstanding - diluted	37,269	35,789
Earnings per share - basic	\$ (0.65)	\$ 0.75
Earnings per share - diluted	\$ (0.65)	\$ 0.72
Weighted average antidilutive options, unvested RSUs and RSAs, unvested PSUs and ESPP shares excluded from the computation	858	195

Basic earnings per share (“EPS”) is computed by dividing net (loss) income for the period by the weighted-average number of common stock outstanding during the period. Diluted EPS is computed by dividing net (loss) income for the period by the weighted average number of common stock outstanding during the period, plus the dilutive effect of outstanding RSUs and RSAs, PSUs, stock options, and shares issuable under the employee stock purchase plan (“ESPP”) as applicable pursuant to the treasury stock method. Certain of the Company's outstanding share-based awards, noted in the table above, were excluded because they were anti-dilutive, but they could become dilutive in the future. The anti-dilutive stock options and shares of outstanding and unvested restricted stock were excluded from the computation of earnings per share for the fiscal year ended September 30, 2022 due to the Company incurring a net loss for such period.

ESPP

Until September 2021, we maintained the ESPP, which provided employees an opportunity to purchase common stock through payroll deductions. The ESPP was a 6-month duration plan with new participation periods beginning on approximately February 25 and August 26 each year, with the purchase price set at 85% of the average high and low market price of common stock on either the first or last trading day of the participation period, whichever was lower, and annual contributions were limited to the lower of 10% of an employee’s compensation or \$25.0 thousand. In September 2021, the Compensation Committee of our Board Directors approved the termination of the ESPP, effective immediately.

Prior to termination of the ESPP, we issued 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 year ended September 30, 2021 totaled approximately 192.0 thousand. As of the termination of the ESPP in September 2021, the total amount of common stock issued under the ESPP totaled 3,395,090 shares.

Future Issuances

Common stock reserved for future issuances was as follows:

	As of September 30, 2022
Exercise of outstanding stock options	9,981
Unvested RSUs and RSAs	2,945,380
Unvested PSUs and PRSAs (at 200% maximum payout)	3,618,106
Issuance of stock-based awards under the Equity Plans	271,282
Purchases under the officer and director share purchase plan	88,741
Total reserved	6,933,490

NOTE 15. Segment and Revenue Information

Reportable Segments

Reported below are the Company's segments for which separate financial information is available and upon which operating results are evaluated by the chief operating decision maker, the Chief Executive Officer, to assess performance and to allocate resources. We do not allocate sales and marketing, general and administrative expenses, or interest expense and interest income to our segments because management does not include the information in its measurement of the performance of the operating segments. Also, a measure of segment assets and liabilities has not been provided to the Company's chief operating decision maker and therefore is not shown below.

Information on reportable segments utilized by the chief operating decision maker is as follows:

<i>(in thousands)</i>	Year Ended September 30,	
	2022	2021
Revenue		
Aerospace and Defense	\$ 53,306	\$ 50,838
Broadband	70,820	107,606
Total revenue	<u>\$ 124,126</u>	<u>\$ 158,444</u>
Segment profit		
Aerospace and Defense gross profit	\$ 5,357	\$ 13,705
Aerospace and Defense research and development expense	15,543	14,616
Aerospace and Defense segment profit	<u>\$ (10,186)</u>	<u>\$ (911)</u>
Broadband gross profit	\$ 24,361	\$ 47,783
Broadband research and development expense	2,993	2,832
Broadband segment profit	<u>\$ 21,368</u>	<u>\$ 44,951</u>
Total segment profit	<u>\$ 11,182</u>	<u>\$ 44,040</u>

Product Categories

Revenue is classified by major product category as presented below:

<i>(in thousands)</i>	Year Ended September 30,	
	2022	2021
Aerospace and Defense		
Inertial Navigation	\$ 45,318	\$ 36,539
Defense Optoelectronics	7,988	14,299
Broadband		
CATV Optical Transmitters and Components	58,488	95,255
Data Center Chips	4,814	3,106
Optical Sensing	7,518	9,245
Total revenue	<u>\$ 124,126</u>	<u>\$ 158,444</u>

Geographical Concentration

The following table sets forth revenue by geographic area based on customers' billing addresses:

<i>(in thousands)</i>	Year Ended September 30,	
	2022	2021
United States and Canada	\$ 106,533	\$ 139,443
Asia	8,697	11,836
Europe	6,489	4,802
Other	2,407	2,363
Total revenue	<u>\$ 124,126</u>	<u>\$ 158,444</u>

Customer Concentration

Portions of the Company’s sales are concentrated among a limited number of customers. Significant customers are defined as customers representing greater than 10% of consolidated revenue. There were three and three significant customers representing an aggregate of 54.1% and 70.1% of consolidated revenue for the fiscal years ended September 30, 2022 and 2021, respectively. The percentage from significant customers decreased due to lower CATV revenue from our Broadband segment.

The duration, severity, and future impact of the COVID-19 pandemic is highly uncertain and could result in significant disruptions to the business operations of the Company’s customers. If one or more of these significant customers significantly decreases their orders for the Company’s products, or if we are unable to deliver finished products to the customer in connection with such orders, the Company’s business could be materially and adversely affected.

NOTE 16. Subsequent Events

On December 13, 2022, EMCORE Chicago consummated the sale of the real property interests in the Tinley Park Facility to the Tinley Park Buyer, resulting in net proceeds of approximately \$10.3 million, pursuant to the terms of the Tinley Park Purchase Agreement. In connection with the sale of the real property interests in the Tinley Park Facility, we entered into the Lease Agreement with the Tinley Park Buyer pursuant to which we leased back the Tinley Park Facility for a 12 year term commencing on December 13, 2022, unless earlier terminated or extended in accordance with the terms of the Lease Agreement.

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors
EMCORE Corporation:

Opinions on the Consolidated Financial Statements and Internal Control Over Financial Reporting

We have audited the accompanying consolidated balance sheets of EMCORE Corporation and subsidiaries (the Company) as of September 30, 2022 and 2021, the related consolidated statements of operations and comprehensive (loss) income, shareholders' equity, and cash flows for each of the years in the two-year period ended September 30, 2022, and the related notes (collectively, the consolidated financial statements). We also have audited the Company's internal control over financial reporting as of September 30, 2022, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of September 30, 2022 and 2021, and the results of its operations and its cash flows for each of the years in the two-year period ended September 30, 2022, in conformity with U.S. generally accepted accounting principles. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of September 30, 2022 based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

The Company acquired Space & Navigation on April 29, 2022 and EMCORE Chicago on August 9, 2022, and management has excluded these from its assessment of the effectiveness of the Company's internal control over financial reporting as of September 30, 2022. Space & Navigation represented approximately 11% of the Company's consolidated total assets as of September 30, 2022 and approximately 8% of the Company's consolidated revenue for the fiscal year ended September 30, 2022. EMCORE Chicago represented approximately 32% of the Company's consolidated total assets as of September 30, 2022 and approximately 5% of the Company's consolidated revenue for the fiscal year ended September 30, 2022. Our audit of internal control over financial reporting of the Company also excluded an evaluation of internal control over financial reporting of Space & Navigation and EMCORE Chicago.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, 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 consolidated financial statements and an opinion on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audit of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting 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 audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control Over Financial Reporting

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.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Net realizable value of inventory

As discussed in Note 2 to the consolidated financial statements, net inventory was \$37.0 million at September 30, 2022 compared to \$32.3 million at September 30, 2021 which is stated at the lower of cost or net realizable value. The Company writes-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. The determination of the excess and obsolete inventory requires management to make assumptions related to estimates of future inventory demand and market conditions.

We identified the evaluation of net realizable value of inventory as a critical audit matter. Subjective auditor judgment was required to evaluate future inventory demand and market conditions, including whether past consumption and recent purchases used in the Company's model were indicative of future inventory demand.

The following are the primary procedures we performed to address this critical audit matter. We evaluated the design and tested the operating effectiveness of certain internal controls related to the inventory process, including controls over the assumptions described above. We evaluated historical write down trends, historical sales of older inventory, and relevant changes in the overall business environment, including changes in key customers, product lines, and competitors, in order to assess the Company's model. For a sample of products within inventory, we compared the Company's determination of past consumption and recent purchases used to estimate future inventory demand of the product to supporting documentation.

Evaluation of acquisition date fair value of technology and in-process research and development

As discussed in Notes 2, 3 and 8 to the financial statements, on August 9, 2022, the Company acquired the KVH Industries, Inc. FOG and Inertial Navigation Systems business (EMCORE Chicago) in a business combination. The fair value of total consideration of the acquired business was \$55.0 million of which \$2.4 million was allocated to technology and \$5.9 million was allocated to in-process research and development (IPR&D). The initial fair values of these acquired intangible assets are estimated using the relief from royalty method. Under this method a royalty rate based on observed market royalties is applied to projected revenue supporting the technology and IPR&D and discounted to present value.

We identified the evaluation of the initial measurement of the fair value of technology and IPR&D acquired in the EMCORE Chicago business combination as a critical audit matter. The estimated acquisition-date fair values of these intangible assets were sensitive to changes in significant assumptions used to measure their fair values. Specifically, there was a high degree of subjective auditor judgment involved in evaluating the following key assumptions: forecasted revenue growth rates, estimated royalty rate, and discount rates. In addition, individuals with specialized skills and knowledge were required to assess the royalty rate and the discount rates.

The following are the primary procedures we performed to address the critical audit matter. We evaluated the design and tested the operating effectiveness of certain internal controls related to the Company's acquisition-date valuation process including controls related to the development of the key assumptions. We evaluated the Company's forecasted revenue growth assumptions related to the intangible assets by comparing forecasted revenue growth rates to the historic growth rates of the Company's peers. In addition, we involved valuation professionals with specialized skills and knowledge, who assisted in:

- developing an estimate of the fair value of the technology and IPR&D using the Company's assumptions of cash flows, discount rates and royalty rate, and comparing the result to the Company's fair value estimate
- evaluating the Company's estimated royalty rate by comparing the rate of publicly available third-party market data for comparable entities
- evaluating the Company's discount rates by performing an independent analysis using inputs and assumptions deemed reasonable and comparing the results used to the Company's calculation.

/s/ KPMG LLP

We have served as the Company's auditor since 2010.

Los Angeles, California

December 28, 2022

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

None.

ITEM 9A. Controls and Procedures.

Disclosure Controls and Procedures

Management, with the participation of its Chief Executive Officer (Principal Executive Officer) and Chief Financial Officer (Principal Financial Officer), evaluated the effectiveness of the Company's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) promulgated under the Exchange Act) as of the end of the period covered by this Annual Report on Form 10-K. Based upon this evaluation, the Chief Executive Officer and the Chief Financial Officer concluded that disclosure controls and procedures were effective as of the end of the period covered by this report.

Management's Annual Report on Internal Control Over Financial Reporting

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 the Chief Executive Officer and Chief Financial Officer and with the participation of management, we conducted an evaluation of the effectiveness of internal control over financial reporting as of September 30, 2022 based on the framework in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on that evaluation, management concluded that internal control over financial reporting was effective as of September 30, 2022.

The Company acquired S&N on April 29, 2022 and EMCORE Chicago on August 9, 2022, and management has excluded these from its assessment of the effectiveness of the Company's internal control over financial reporting as of September 30, 2022. S&N represented approximately 11% of the Company's consolidated total assets as of September 30, 2022 and approximately 8% of the Company's consolidated revenue for the fiscal year ended September 30, 2022. EMCORE Chicago represented approximately 32% of the Company's consolidated total assets as of September 30, 2022 and approximately 5% of the Company's consolidated revenue for the fiscal year ended September 30, 2022.

Changes in Internal Control Over Financial Reporting

There were no changes in the Company's internal control over financial reporting (as defined in Rule 13a-15(f) and 15d-15(f) promulgated under the Exchange Act) during the quarter ended September 30, 2022 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting. Due to the ongoing COVID-19 pandemic, a significant number of employees are now working from home. The design of processes, systems, and controls allows for remote execution with accessibility to secure data.

Limitations on Effectiveness of Controls and Procedures

Management, including the Chief Executive Officer and Chief Financial Officer, does not expect that disclosure controls or 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.

ITEM 9B. Other Information.

None.

PART III.

ITEM 10. Directors, Executive Officers and Corporate Governance.

Except as set forth below, the information required by this item is incorporated by reference to our 2022 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 the 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 the code of ethics for 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.

The information required by this item is incorporated by reference to our 2022 Proxy Statement.

ITEM 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

The information required by this item is incorporated by reference to our 2022 Proxy Statement.

ITEM 13. Certain Relationships and Related Transactions, and Director Independence.

The information required by this item is incorporated by reference to our 2022 Proxy Statement.

ITEM 14. Principal Accountant Fees and Services.

The information required by this item is incorporated by reference to our 2022 Proxy Statement.

PART IV.**ITEM 15. Exhibit and Financial Statement Schedules.****(a)(1) Financial Statements**

Included in [Part II, Item 8](#) of this Annual Report on Form 10-K:

[Report of Independent Registered Public Accounting Firm](#) (PCAOB ID: 185)

[Consolidated Balance Sheets as of September 30, 2022 and 2021](#)

[Consolidated Statements of Operations and Comprehensive \(Loss\) Income for the years ended September 30, 2022 and 2021](#)

[Consolidated Statements of Shareholders' Equity for the years ended September 30, 2022 and 2021](#)

[Consolidated Statements of Cash Flows for the years ended September 30, 2022 and 2021](#)

[Notes to Consolidated Financial Statements](#)

(a)(2) Financial Statement Schedules

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

(a)(3) Exhibits

See Item 15(b) below. Each management contract or compensatory plan or arrangement required to be filed has been identified.

(b) Exhibits

2.1	Asset Purchase Agreement, dated as of August 9, 2021, by and among EMCORE Corporation, Shenzhen Fastrain Technology Co., Ltd. and Hong Kong Fastrain Company Limited (incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed on August 11, 2021).
2.2	Sale Agreement, dated as of February 14, 2022, by and among EMCORE Corporation, Ringo Acquisition Sub, Inc., and L3Harris Technologies, Inc. (incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed on February 15, 2022).
2.3	First Amendment to Sale Agreement, dated as of March 1, 2022, by and among EMCORE Corporation, Ringo Acquisition Sub, Inc., and L3Harris Technologies, Inc. (incorporated by reference to Exhibit 2.2 to the Company's Current Report on Form 8-K filed on May 2, 2022).
2.4	Second Amendment to Sale Agreement, dated as of March 31, 2022, by and among EMCORE Corporation, Ringo Acquisition Sub, Inc., and L3Harris Technologies, Inc. (incorporated by reference to Exhibit 2.3 to the Company's Current Report on Form 8-K filed on May 2, 2022).
2.5	Third Amendment to Sale Agreement, dated as of April 29, 2022, by and among EMCORE Corporation, Ringo Acquisition Sub, Inc., and L3Harris Technologies, Inc. (incorporated by reference to Exhibit 2.4 to the Company's Current Report on Form 8-K filed on May 2, 2022).
2.6	Asset Purchase Agreement, dated as of August 9, 2022, by and among EMCORE Corporation, Delta Acquisition Sub, Inc., and KVH Industries, Inc. (incorporated by reference to Exhibit 1.1 to the Company's Current Report on Form 8-K filed on August 9, 2022).
3(i).1	Restated Certificate of Incorporation, dated April 4, 2008 (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on April 4, 2008).
3(i).2	Certificate of Amendment of Restated Certificate of Incorporation of EMCORE Corporation, dated February 15, 2012 (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on February 16, 2012).
3(i).3	Certificate of Amendment of Restated Certificate of Incorporation of EMCORE Corporation, dated September 18, 2014 (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on September 18, 2014).
3(i).4	Certificate of Designation Establishing the Series A Junior Participating Preferred Stock and Fixing the Powers, Designations, Preferences and Relative, Participating, Optional and Other Special Rights, and the Qualifications, Limitations and Restrictions, of the Series A Junior Participating Preferred Stock, dated September 18, 2014 (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on September 18, 2014).

3(i).5	Certificate of Amendment to the Restated Certificate of Incorporation dated March 19, 2018 (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on March 20, 2018).
3(i).6	Certificate of Amendment to the Restated Certificate of Incorporation dated May 12, 2021 (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on May 13, 2021).
3(ii).7	By-Laws of EMCORE Corporation, as amended through November 2, 2022 (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on November 2, 2022).
4.1	Specimen Certificate for Shares of Common Stock (incorporated by reference to Exhibit 4.1 to the Company's Annual Report on Form 10-K filed on December 6, 2017).
4.2**	Description of EMCORE Corporation Capital Stock.
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 March 18, 2021) (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q filed on May 7, 2021).
10.3†	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).
10.4†	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).
10.5†	2012 Equity Incentive Plan, as amended and restated on January 19, 2017 (incorporated by reference to Exhibit 10.7 to the Company's Annual Report on Form 10-K filed on December 6, 2017).
10.6†	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).
10.7†	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).
10.8†	Form of Performance-Based Restricted Stock Award Agreement under the 2012 Equity Incentive Plan (for executive officers) (as of December 2017) (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed on February 6, 2018).
10.9†	Form of Performance-Based Restricted Stock Award Agreement under the 2012 Equity Incentive Plan (for non-executive officers) (as of October 2016) (incorporated by reference to Exhibit 10.11 to the Company's Annual Report on Form 10-K filed on December 6, 2017).
10.10†	Form of Indemnification Agreement entered into with directors and executive officers (incorporated by reference to Exhibit 10.2 of the Company's Quarterly Report on Form 10-Q filed on August 8, 2020).
10.11†	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).
10.12†	Amended and Restated EMCORE Corporation 2019 Equity Incentive Plan, as amended and restated on December 9, 2021 (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on March 17, 2022).
10.13†	Form of Time-Based Restricted Stock Unit Award under the EMCORE Corporation 2019 Equity Incentive Plan (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on March 27, 2019).
10.14†	Form of Performance-Based Restricted Stock Unit Award under the EMCORE Corporation 2019 Equity Incentive Plan (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed on March 27, 2019).
10.15†	Form of Time-Based Restricted Stock Unit Award (for directors) under the Amended and Restated EMCORE Corporation 2019 Equity Incentive Plan (as of March 2021) (incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q filed on May 7, 2021).
10.16†	Form of Performance-Based Restricted Stock Unit Award (for executive officers) under the Amended and Restated EMCORE Corporation 2019 Equity Incentive Plan (incorporated by reference to Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q filed on May 7, 2021).
10.17†	Form of Performance-Based Restricted Stock Unit Award (for executive officers) under the Amended and Restated EMCORE Corporation 2019 Equity Incentive Plan (incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q filed on May 5, 2022).

10.18†	Employment Agreement, dated August 7, 2019, by and between EMCORE Corporation and Tom Minichiello (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on August 12, 2019).
10.19	Manufacturing Supply Agreement, dated as of August 9, 2021, by and among EMCORE Corporation, Shenzhen Fastrain Technology Co., Ltd. and Hong Kong Fastrain Company Limited (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on August 11, 2021).
10.20	Amendment to Manufacturing Supply Agreement, dated as of February 25, 2022, by and among by and among EMCORE Corporation, Shenzhen Fastrain Technology Co., Ltd. and Hong Kong Fastrain Company Limited (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed on May 5, 2022).
10.21	Single-Tenant Triple Net Lease, dated as of February 10, 2020, by and between Systron Donner Inertial, Inc. and Eagle Rock Holdings, LP (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed on February 11, 2020).
10.22	Standard Industrial/Commercial Single-Tenant Lease – Net, dated as of October 1, 2017, by and between EMCORE Corporation and CHESTNUT2015 LLC (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on November 2, 2021).
10.23	Amendment to Lease, dated as of March 31, 2019, by and between EMCORE Corporation and CHESTNUT2015 LLC (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on November 2, 2021).
10.24	Amendment to Lease, dated as of November 1, 2021, by and between EMCORE Corporation and CHESTNUT2015 LLC (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed on November 2, 2021).
10.25**	Amendment to Lease, dated as of November 10, 2022, by and between EMCORE Corporation and CHESTNUT2015 LLC.
10.26†	EMCORE Corporation Short-Term Incentive Plan (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on June 15, 2022).
10.27†	EMCORE Corporation 2022 New Employee Inducement Plan (incorporated by reference to Exhibit 99.1 to the Company's Form S-8 Registration Statement filed on August 10, 2022).
10.28	Credit Agreement, dated as of August 9, 2022, among EMCORE, EMCORE Space & Navigation Corporation, the lenders party thereto and Wingspire Capital LLC, as administrative agent for the lenders (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on August 9, 2022).
10.29*	First Amendment to Credit Agreement, dated as of October 25, 2022, among EMCORE, the Domestic Subsidiaries of the Company party thereto, the lenders party thereto and Wingspire Capital LLC, as administrative agent for the lenders.
10.30	Purchase and Sale Agreement, dated November 1, 2022, by and between EMCORE Chicago Inertial Corporation and HSRE Fund VII Holding Company, LLC (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on November 3, 2022).
10.31	Form of Single-Tenant Triple Net Lease (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on November 3, 2022).
10.32	Form of Lease Guaranty (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed on November 3, 2022).
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**	Inline XBRL Instance Document.
101.SCH**	Inline XBRL Taxonomy Extension Schema Document.
101.CAL**	Inline XBRL Taxonomy Extension Calculation Linkbase Document.
101.LAB**	Inline XBRL Taxonomy Extension Label Linkbase Document.
101.PRE**	Inline XBRL Taxonomy Extension Presentation Linkbase Document.

101.DEF**	Inline XBRL Taxonomy Extension Definition Linkbase Document.
104	Cover Page Interactive Data File - formatted in Inline XBRL and contained in Exhibit 101.

† *Management contract or compensatory plan*
** *Filed herewith*
*** *Furnished herewith*

ITEM 16. Form 10-K Summary.

Not applicable.

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.

<p>Date: <u>December 28, 2022</u></p> <p>Date: <u>December 28, 2022</u></p>	<p style="text-align: center;">EMCORE CORPORATION</p> <p>By: <u>/s/ Jeffrey Rittichier</u> Jeffrey Rittichier Chief Executive Officer (Principal Executive Officer)</p> <p>By: <u>/s/ Tom Minichiello</u> Tom Minichiello Chief Financial Officer (Principal Financial and Accounting Officer)</p>
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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 Securities and Exchange 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 28, 2022.

<p>Signature <u>/s/ Jeffrey Rittichier</u> Jeffrey Rittichier</p> <p><u>/s/ Tom Minichiello</u> Tom Minichiello</p> <p><u>/s/ Stephen L. Domenik</u> Stephen L. Domenik</p> <p><u>/s/ Bruce E. Grooms</u> Bruce E. Grooms</p> <p><u>/s/ Noel Heiks</u> Noel Heiks</p> <p><u>/s/ Rex S. Jackson</u> Rex S. Jackson</p>	<p>Title Chief Executive Officer and Director (Principal Executive Officer)</p> <p>Chief Financial Officer (Principal Financial and Accounting Officer)</p> <p>Chairman of the Board</p> <p>Director</p> <p>Director</p> <p>Director</p>
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**EMCORE CORPORATION DESCRIPTION OF SECURITIES REGISTERED PURSUANT TO
SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934**

The following is a summary of the material provisions of our Restated Certificate of Incorporation, as amended (our “Certificate of Incorporation”), and By-Laws (our “Bylaws”), insofar as they relate to the material terms of our capital stock. This summary is qualified in its entirety by reference to the full text of our Restated Certificate of Incorporation and Bylaws, which are included as exhibits to our most recent Annual Report on Form 10-K filed with the Securities and Exchange Commission (“SEC”), as may be amended by a document filed with one of our periodic reports filed with the SEC subsequent to the date of that Annual Report. Additionally, the New Jersey Business Corporation Act (the “NJBCA”) may also affect the terms of our capital stock.

Authorized Capitalization

Our authorized capital stock consists of:

100,000,000 shares of common stock, no par value (“Common Stock”); and
5,882,352 shares of preferred stock, par value \$0.0001 per share (“Preferred Stock”).

Common Stock

Subject to the relative rights, limitations and preferences of the holders of any then outstanding Preferred Stock, holders of our Common Stock will be entitled to certain rights, including (i) to share ratably in dividends if, when and as declared by our Board of Directors (our “Board”) out of funds legally available therefor and (ii) in the event of our liquidation, dissolution or winding up, to share ratably in the distribution of assets legally available therefor, after payment of debts and expenses. Each outstanding share of our Common Stock entitles the holder to one vote on all matters submitted to a vote of the shareholders, including the election of directors, and the holders of shares of our Common Stock will possess the exclusive voting power. The holders of our Common Stock do not have cumulative voting rights in the election of directors or preemptive rights to subscribe for additional shares of our capital stock.

Holders of shares of our Common Stock do not have any preference, conversion, exchange, sinking fund, redemption or appraisal rights. All outstanding shares of Common Stock are fully paid and nonassessable.

Preferred Stock

Under the terms of our Certificate of Incorporation, our Board has the authority, without any requirement of vote or class vote of shareholders, to issue up to 5,882,352 shares of Preferred Stock, in one or more classes or series, and to establish and designate in any such class or series of Preferred Stock such priorities, powers, preferences and relative, participating, optional or other special rights and qualifications, limitations and restrictions as it shall determine.

Anti-Takeover Effects of Our Certificate of Incorporation and Bylaw Provisions and the NJBCA

Certain provisions of our Certificate of Incorporation and Bylaws, as well as certain provisions of the NJBCA, may make it more difficult to acquire control of us by means of a tender offer, open market purchase, proxy contest or otherwise. These provisions, summarized below, are expected to discourage certain types of coercive takeover practices and takeover bids that our Board may consider inadequate and to encourage persons seeking to acquire control of our company to first negotiate with our Board. We believe that the benefits of increased protection of our ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure our company outweigh the disadvantages of discouraging takeover or acquisition proposals because, among other things, negotiation of these proposals could result in an improvement of their terms. For additional information, we refer you to the provisions of our Restated Certificate of Incorporation, our Bylaws and the applicable sections of the NJBCA.

Certain Provisions of our Certificate of Incorporation and Bylaws

Certain provisions contained in our Certificate of Incorporation and Bylaws could have an anti-takeover effect.

These provisions:

- authorize the issuance by our Board of Preferred Stock, without any requirement of vote or class vote of shareholders, commonly referred to as “blank check” preferred stock, which shares of Preferred Stock may have rights senior to those of our Common Stock;
- do not provide for cumulative voting by shareholders in the election of directors. Under cumulative voting, a minority stockholder holding a sufficient percentage of a class of shares may be able to ensure the election of one or more directors;
- provide that directors may be removed at any time, but only for cause and only by the affirmative vote of the holders of at least a majority of our outstanding shares of capital stock entitled to vote generally in the election of directors cast at a meeting of the shareholders called for that purpose;
- provide that a supermajority vote of our shareholders is required to amend some portions of our Certificate of Incorporation and Bylaws, including requiring approval by the holders of 80% or more of the outstanding shares of our capital stock entitled to vote generally in the election of directors 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;
- limit the persons who can call special shareholder meetings; shareholders do not have authority to call a special meeting of shareholders;
- establish advance notice requirements that must be complied with by shareholders to nominate persons for election to our Board or to propose matters that can be acted on by shareholders at shareholder meetings;
- provide for the filling of vacancies on our Board by action of 66 2/3% of the directors and not by the shareholders; and
- provide that the authorized number of directors may be changed only by resolution of the Board.

New Jersey Shareholders Protection Act

We are subject to NJBCA Section 14A-10A, which is also known as the New Jersey Shareholders Protection Act, a type of anti-takeover statute designed to protect shareholders against coercive, unfair or inadequate tender offers and other abusive tactics and to encourage any person contemplating a business combination with us to negotiate with our Board for the fair and equitable treatment of all shareholders. Subject to certain qualifications and exceptions, the statute prohibits an interested stockholder of a corporation from effecting a business combination with the corporation for a period of five years unless the corporation’s board of directors approved the combination prior to the shareholder becoming an interested shareholder. In addition, but not in limitation of the five-year restriction, if applicable, corporations covered by the New Jersey statute may not engage at any time in a business combination with any interested shareholder of that corporation unless the combination is approved by the board of directors prior to the interested shareholder’s stock acquisition date, the combination receives the approval of two-thirds of the voting stock of the corporation not beneficially owned by the interested shareholder, or the combination meets minimum financial terms specified by the statute.

An “interested stockholder” is defined to include any beneficial owner of 10% or more of the voting power of the outstanding voting stock of the corporation and any affiliate or associate of the corporation who within the prior five year period has at any time owned 10% or more of the voting power of the then outstanding stock of the corporation.

The term “business combination” is defined broadly to include, among other things:

- the merger or consolidation of the corporation with the interested stockholder or any corporation that is or after the merger or consolidation would be an affiliate or associate of the interested stockholder,
- the sale, lease, exchange, mortgage, pledge, transfer or other disposition to an interested stockholder or any affiliate or associate of the interested stockholder of 10% or more of the corporation’s assets, or
- the issuance or transfer to an interested stockholder or any affiliate or associate of the interested stockholder of 5% or more of the aggregate market value of the stock of the corporation.

The effect of the statute is to protect non-tendering, post-acquisition minority shareholders from mergers in which they will be “squeezed out” after the merger, by prohibiting transactions in which an acquirer could favor itself at the expense of minority shareholders. The statute generally applies to corporations that are organized under New Jersey law, and have a class of stock registered or traded on a national securities exchange or registered with the SEC pursuant to Section 12(g) of the Securities Exchange Act of 1934, as amended.

Listing

Our Common Stock is listed on The Nasdaq Global Select Market under the trading symbol “EMKR.”

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company, LLC.



November 10, 2022

CHESTNUT2015 LLC
Attn: Ms. Maria Tam Isles
2225 W. Commonwealth Ave., #206
Alhambra, CA 91803

Re: Amendment to Lease

Dear Ms. Isles:

Reference is hereby made to that certain Standard Industrial/Commercial Single-Tenant Lease –Net for the premises of 2001 to 2025 W. Chestnut Street, 707 S. Raymond Ave and 708 S. Palm Ave, Alhambra, California, dated as of October 1, 2017 (the “Original Lease”), entered into by and between CHESTNUT2015 LLC (“Lessor”) and EMCORE Corporation (“Lessee”), as amended by (i) that certain Amendment to Lease, dated as of March 31, 2019, by and between Lessor and Lessee (the “March 2019 Amendment”) and (ii) that certain Amendment to Lease, dated as of November 1, 2021, by and between Lessor and Lessee (the “November 2021 Amendment”, and the Original Lease, as amended by the March 2019 Amendment and the November 2021 Amendment and together with all prior Addendums thereto, the “Existing Lease”). Lessor and Lessee desire to further amend the November 2021 Amendment and the Existing Lease as set forth below, effective as of the last date of signature set forth below. Capitalized terms used herein but not otherwise defined shall have the meanings given such terms in the Existing Lease.

By execution of this amendment to the November 2021 Amendment and the Existing Lease (this “Amendment”, and the November 2021 Amendment and the Existing Lease taken together with the Amendment, the “Amended Lease”), Lessor and Lessee agree that the Existing Lease is hereby amended as follows:

1. To the extent that anything contained in this Amendment conflicts with any prior term or provision of the Existing Lease, this Amendment shall control.
2. Paragraph 2 of the November 2021 Amendment is hereby amended by (i) replacing “September 30, 2022” with “September 30, 2024” and (ii) replacing “March 30, 2023” with “March 31, 2025”.
3. Paragraph 1.3 of the Existing Lease and Paragraph 4(d) of the November 2021 Amendment are hereby amended to reference Base Rent for the period of October 1, 2023 – September 30, 2024 of \$62,500.

Except as specifically modified by this Amendment, the November 2021 Amendment and the Existing Lease shall remain unchanged and in full force and effect, and when taken together with this Amendment as the Amended Lease, shall constitute the agreement between the Parties. This Amendment shall be governed by the laws of the State of California. This Amendment may be executed in counterparts, each of which shall be deemed to be an original and all of which shall constitute one and the same document.



Sincerely,

DocuSigned by:
Tom Minichiello
DED6C3219F01445...
Tom Minichiello
Chief Financial Officer, EMCORE Corporation

Acknowledged and Agreed:

CHESTNUT2015 LLC

DocuSigned by:

Maria Tam Isles

By 553D9C1DFCE948D...

Name: Maria Tam Isles

Title: Manager

Date: 11/10/2022

FIRST AMENDMENT TO CREDIT AGREEMENT

This FIRST AMENDMENT TO CREDIT AGREEMENT, dated as of October 25, 2022 (this “Amendment”), is entered into among EMCORE CORPORATION, a New Jersey corporation (the “Company”), the Domestic Subsidiaries of the Company party hereto and listed in the signature pages hereof as “Borrowers” (the Company, together with such Domestic Subsidiaries each, individually, a “Borrower” and jointly, severally, and collectively, the “Borrowers”), the Lenders party hereto and WINGSPIRE CAPITAL LLC, as administrative agent for the Lenders (in such capacity, together with its successors and permitted assigns in such capacity, the “Administrative Agent”).

WITNESSETH:

WHEREAS, the Borrowers, the Lenders and the Administrative Agent entered into that certain Credit Agreement, dated as of August 9, 2022 (as amended, restated, amended and restated, supplemented or otherwise modified prior to the date hereof, the “Credit Agreement”; capitalized terms used but not otherwise defined herein shall have the meanings ascribed to them in the Credit Agreement);

WHEREAS, the Borrowers have requested that the Administrative Agent and the Required Lenders make certain amendments to the Credit Agreement; and

WHEREAS, the Administrative Agent and the Required Lenders have agreed to make certain amendments to the Credit Agreement, on the terms and subject to the conditions set forth herein;

NOW, THEREFORE, in consideration of the agreements herein contained and other good and valuable consideration, the parties hereby agree as follows:

1. Amendments to Credit Agreement. The Credit Agreement is amended as follows:

(a) The following definitions are inserted into Section 1.1 in the appropriate alphabetical order:

“Eligible Machinery and Equipment” means, as of any date of determination, all Equipment that:

(a) is owned by a Borrower free and clear of all Liens other than (i) Liens in favor of the Administrative Agent securing the Obligations and (ii) Permitted Encumbrances;

(b) is installed in a facility owned or leased by a Loan Party at either 8412 West 185th Street, Tinley Park, Illinois or 450 Clark Drive, Budd Lake, Mount Olive Township, NJ 07828, and either (i) a Collateral Access Agreement has been delivered to the Administrative Agent or (ii) Reserves reasonably satisfactory to the Administrative Agent have been established with respect thereto;

(c) is in good operating condition (ordinary wear and tear excepted);

(d) is not obsolete or surplus Equipment;

(e) is covered by casualty and liability insurance required by this Agreement and the Security Agreement;

(f) is subject to a first priority perfected Lien in favor of the Administrative Agent, subject to Permitted Encumbrances; and

(g) does not consist of automobiles or other Equipment subject to a certificate of title statute.

With respect to any Equipment purchased or otherwise acquired after the Closing Date, such Equipment shall become Eligible Machinery and Equipment upon the completion of an appraisal (to be conducted at Borrowers' expense) (which may be a desktop or other similar, short-form appraisal, to the extent approved by the Administrative Agent) on such Equipment, prepared by an appraiser acceptable to the Administrative Agent.

"First Amendment Closing Date" means October 25, 2022.

"M&E Revolving Loans" means Revolving Loans that are advanced against and attributable to Eligible Machinery and Equipment.

"Total M&E Revolving Loan Outstandings" means at any time, the aggregate outstanding principal amount of all M&E Revolving Loans at such time.

(b) The definition of "Applicable Margin" in Section 1.1 is replaced in its entirety as follows:

"Applicable Margin" means:

(a) With respect to the Revolving Loans, (i) in the case of portions thereof designated as SOFR Loans, (1) 3.75% or (2) 5.50% for M&E Revolving Loans, and (ii) in the case of portions thereof designated as Base Rate Loans, 2.75%.

(b) With respect to the Term Loans, (i) in the case of portions thereof designated as SOFR Loans, 5.50% and (ii) in the case of portions thereof designated as Base Rate Loans, 4.50%.

(c) The definition of "Borrowing Base" in Section 1.1 is replaced in its entirety as follows:

"Borrowing Base" means, as at any date of determination thereof, an amount equal to the sum of:

(a) 90% of the net amount of Eligible Accounts; plus

(b) the lesser of (i) 70% of the value of Eligible Inventory at such date and (ii) 90% of the NOLV of Eligible Inventory at such date; plus

(c) \$1,668,873 (as such amount shall be reduced to the extent of any required mandatory prepayments hereunder resulting from a Disposition of Eligible Machinery and Equipment) (the "Eligible Equipment Amount"); provided, however, the Eligible Equipment Amount shall be reduced by an amount equal to \$22,542.25 commencing on the first day of the first month following the First Amendment Closing Date and continuing on the first day of each month thereafter until the Eligible Equipment Amount has been reduced to zero; minus

(d) Reserves.

For purposes hereof, (1) the net amount of Eligible Accounts at any time shall be the face amount of such Eligible Accounts less any and all returns, rebates, discounts (which may, at Administrative Agent's option, be calculated on shortest terms), credits, allowances or excise taxes of any nature at any time issued, owing, claimed by Account Debtors, granted, outstanding or payable in connection with such Accounts at such time and (2) the value of Eligible Inventory shall be determined on a first-in, first-out, lower of cost or market basis in accordance with GAAP.

(d) The definition of "Revolving Loan" in Section 1.1 is replaced in its entirety as follows:

"Revolving Loan" means a loan referred to in Section 2.1(a), including a M&E Revolving Loan, and made pursuant to Section 2.2.

(e) Section 2.1(a) "Revolving Commitments" is replaced in its entirety with the following:

(a) Revolving Commitments. Subject to the terms and conditions hereof and relying upon the representations and warranties herein set forth, each Revolving Lender agrees, severally and not jointly, to make Revolving Loans and M&E Revolving Loans to the Borrowers in Dollars from time to time during the Availability Period in an aggregate principal amount that will not result in (i) such Revolving Lender's Revolving Exposure exceeding such Revolving Lender's Revolving Commitment, (ii) the Total M&E Revolving Loan Outstandings exceeding the Eligible Equipment Amount, and (iii) the Total Revolving Outstandings exceeding the Line Cap (other than any Overadvances or Protective Advances to the extent permitted hereunder). Within the foregoing limits and subject to the terms and conditions set forth herein, during the Availability Period, the Borrowers may borrow, prepay and reborrow Revolving Loans; provided however, that any M&E Revolving Loans that are prepaid or repaid may not be reborrowed.

(f) Section 2.2(b) "Borrowing of Revolving Loans" is replaced in its entirety with the following:

(b) Each notice by the Borrower Agent pursuant to Section 2.2(a) shall be made by submitting such request by ABLSoft (or, if requested by the Administrative Agent, by delivering, in writing or by an Approved Electronic Communication, a Borrowing Request in the form of Exhibit C) (each such request, a "Borrowing Request"), appropriately completed and signed by a Responsible Officer of the Borrower Agent. Each Borrowing of Revolving Loans shall be in a minimum principal amount of \$100,000 or a whole multiple of \$100,000 in excess thereof. Each Borrowing Request shall specify (A) the requested date of the Borrowing (which shall be a Business Day), (B) the principal amount of Loans to be borrowed, and (C) if such Loans shall be M&E Revolving Loans.

(g) Section 2.5(b)(iii) "Application of Mandatory Prepayments is replaced in its entirety with the following:

(iii) Application of Mandatory Prepayments. Mandatory prepayments from (i) Net Cash Proceeds described in Sections 2.5(b)(i)(A) and (C) above, to the extent arising from a Disposition of, or Casualty or Condemnation Event with respect to, Inventory, Accounts or Eligible Machinery and Equipment shall be applied to the prepayment of the Revolving Loans (first to the portion of the Revolving Loans that are not M&E Revolving Loans and

second to M&E Revolving Loans) without a permanent reduction of the Revolving Commitments, and, thereafter, applied against the remaining scheduled installments of principal due in respect of Term Loans under Section 2.4(b), in the inverse order of maturity of such remaining scheduled installments and (ii) cash proceeds described in Section 2.5(b)(i)(D) above, shall be applied against the remaining scheduled installments of principal in respect of Term Loans under Section 2.4(b), in the inverse order of maturity of such remaining scheduled installments; provided that if, after applying all or a portion of such prepayment to the Term Loans, the Term Loans shall have been paid in full, any unapplied portion thereof shall be returned to Borrower Agent. All other mandatory prepayments shall be applied against the remaining scheduled installments of principal in respect of Term Loans under Section 2.4(b), in the inverse order of maturity of such remaining scheduled installments; provided that if, after applying all or a portion of such prepayment to the Term Loans, the Term Loans shall have been paid in full, any unapplied portion thereof shall be applied to the prepayment of the Revolving Loans (first to the portion of the Revolving Loans that are not M&E Revolving Loans and second to M&E Revolving Loans) without a permanent reduction of the Revolving Commitments.

(h) Section 2.6(g) “Insufficient Payment” is replaced in its entirety with the following:

(g) Insufficient Payment. Subject to the provisions of Article 8, whenever any payment received by the Administrative Agent under this Agreement or any of the other Loan Documents is insufficient to pay in full all amounts due and payable to the Credit Parties under or in respect of this Agreement and the other Loan Documents on any date, such payment shall be distributed by the Administrative Agent and applied by the Administrative Agent (i) first, towards payment of all fees and expenses due to the Administrative Agent under the Loan Documents, (ii) second, towards payment of all expenses then due hereunder, ratably among the parties entitled thereto in accordance herewith, (iii) third, towards payment of interest, fees and commissions then due hereunder, ratably among the parties entitled thereto in accordance with the amounts of interest, fees and commissions then due to such parties, and (iv) fourth, towards payment of principal of Loans then due hereunder, ratably among the parties entitled thereto in accordance with the amounts of principal of Loans then due to such parties. All payments with respect to the Revolving Loans shall be applied first to the portion of such Revolving Loans that are not M&E Revolving Loans and second to the portion of such Revolving Loans that are M&E Revolving Loans.

(i) Section 8.3 “Application of Funds” is replaced in its entirety with the following:

Section 8.3 Application of Funds. After the exercise of remedies provided for in Section 8.2 (or after the Loans have automatically become immediately due and payable hereunder), any amounts received on account of the Obligations shall be applied by the Administrative Agent in the following order:

(a) with respect to all payments and all proceeds of Collateral (other than payments and proceeds of or relating to Term Loan Priority Collateral):

First, to the payment of that portion of the Obligations constituting fees, indemnities, expenses and other amounts (including fees, charges and disbursements of counsel to the Administrative Agent and amounts payable under Article 3), in each case payable to the Administrative Agent in its capacity as such;

Second, to the extent of any excess of such proceeds, to the payment of that portion of the Obligations constituting fees, indemnities and other amounts, payable to the Credit Parties

(including fees, charges and disbursements of counsel to the respective Credit Parties and amounts payable under Article 3), ratably among them in proportion to the respective amounts described in this clause Second payable to them;

Third, to the extent of any excess of such proceeds, to the payment of that portion of the Obligations constituting accrued and unpaid interest on the Revolving Loans and other Obligations (other than the Term Loans and any other Obligations related solely to the Term Loans), ratably among the Revolving Lenders in proportion to the respective amounts described in this clause Third payable to them, which shall be applied first to the portion of the Revolving Loans that are not M&E Revolving Loans and second to the portion of the Revolving Loans that are M&E Revolving Loans;

Fourth, to the extent of any excess of such proceeds, to the payment of that portion of the Obligations constituting unpaid principal of the Revolving Loans, ratably among the Revolving Lenders in proportion to the respective amounts described in this clause Fourth held by them, which shall be applied first to the portion of the Revolving Loans that are not M&E Revolving Loans and second to the portion of the Revolving Loans that are M&E Revolving Loans;

Fifth, to the extent of any excess of such proceeds, to the payment of that portion of the Obligations constituting accrued and unpaid interest on the Term Loans and other Obligations relating solely to the Term Loans, ratably among the Term Lenders in proportion to the respective amounts described in this clause Fifth payable to them;

Sixth, to the extent of any excess of such proceeds, to the payment of that portion of the Obligations constituting unpaid principal of the Term Loans, ratably among the Term Lenders in proportion to the respective amounts described in this clause Sixth held by them;

Seventh, to the extent of any excess of such proceeds, to the payment of all other Obligations that are due and payable to the Secured Parties or any other holder of Obligations, or any of them, on such date, ratably based on the respective aggregate amounts of all such Obligations owing to the Secured Parties on such date; and

Last, to the extent of any excess of such proceeds, the balance, if any, after all of the Obligations (other than contingent indemnification and expense reimbursement obligations, in each case, for which no claims have been asserted or amounts requested to be paid) have been paid in full, to the Borrowers or as otherwise required by law.

(b) with respect to all payments and all proceeds of or relating to Term Loan Priority Collateral:

First, to the payment of that portion of the Obligations constituting fees, indemnities, expenses and other amounts (including fees, charges and disbursements of counsel to the Administrative Agent and amounts payable under Article 3), in each case payable to the Administrative Agent in its capacity as such;

Second, to the extent of any excess of such proceeds, to the payment of that portion of the Obligations constituting fees, indemnities and other amounts, payable to the Credit Parties (including fees, charges and disbursements of counsel to the respective Credit Parties and amounts payable under Article 3), ratably among them in proportion to the respective amounts described in this clause Second payable to them

Third, to the extent of any excess of such proceeds, to the payment of that portion of the Obligations constituting accrued and unpaid interest on the Term Loans and other Obligations (other than the Revolving Loans and any other Obligations related solely to the Revolving Loans), ratably among the Term Lenders in proportion to the respective amounts described in this clause Third payable to them;

Fourth, to the extent of any excess of such proceeds, to the payment of that portion of the Obligations constituting unpaid principal of the Term Loans, ratably among the Term Lenders in proportion to the respective amounts described in this clause Fourth held by them;

Fifth, to the extent of any excess of such proceeds, to the payment of that portion of the Obligations constituting accrued and unpaid interest on the Revolving Loans and other Obligations related solely to the Revolving Loans, ratably among the Credit Parties in proportion to the respective amounts described in this clause Fifth payable to them, which shall be applied first to the portion of the Revolving Loans that are not M&E Revolving Loans and second to the portion of the Revolving Loans that are M&E Revolving Loans;

Sixth, to the extent of any excess of such proceeds, to the payment of that portion of the Obligations constituting unpaid principal of the Revolving Loans, ratably among the Revolving Lenders in proportion to the respective amounts described in this clause Sixth held by them, which shall be applied first to the portion of the Revolving Loans that are not M&E Revolving Loans and second to the portion of the Revolving Loans that are M&E Revolving Loans;

Seventh, to the extent of any excess of such proceeds, to the payment of all other Obligations that are due and payable to the Secured Parties or any other holder of Obligations, or any of them, on such date, ratably based on the respective aggregate amounts of all such Obligations owing to the Secured Parties on such date; and

Last, to the extent of any excess of such proceeds, the balance, if any, after all of the Obligations (other than contingent indemnification and expense reimbursement obligations, in each case, for which no claims have been asserted or amounts requested to be paid) have been paid in full, to the Borrowers or as otherwise required by law.

Notwithstanding anything to the contrary set forth above, Excluded Swap Obligations with respect to any Guarantor shall not be paid with amounts received from such Guarantor or its assets, but appropriate adjustments shall be made with respect to payments from other Loan Parties to preserve the allocation to Obligations otherwise set forth above in this Section.

2. **Conditions Precedent to Effectiveness.** This Amendment shall become effective on the First Amendment Closing Date upon the Administrative Agent's receipt of each of the following:

- (a) an executed counterpart of this Amendment from each Borrower and Required Lenders; and
- (b) Borrower shall have paid to Administrative Agent (i) an amendment fee in the amount of \$10,000, which such fee shall be duly earned and non-refundable as of the date hereof and (ii) all reasonable fees, costs and expenses (including reasonable attorneys' fees) incurred

by the Administrative Agent and the Lenders, respectively, in connection with the preparation, negotiation and execution of this Amendment and any other agreements and documents executed and delivered in connection herewith.

3. Ratification and Affirmation. Except as herein amended, the Credit Agreement shall remain in full force and effect in accordance with its terms, and the Credit Agreement, as so amended, is hereby ratified and affirmed. This Amendment is a Loan Document. Execution of this Amendment shall not alter or diminish any rights of any Lender, the Administrative Agent or any Borrower under any other note, instrument or obligation secured by or entitled to the benefits of the Credit Agreement, including, without limitation, the other Loan Documents.

4. Representations of Credit Parties. Each Borrower represents and warrants to the Administrative Agent and the Required Lenders, in each case as of the First Amendment Closing Date, that: (a) each of the representations and warranties of the Loan Parties set forth in the Loan Documents is true and correct in all material respects, in each case on and as of the date of this Amendment as if made on and as of such date, provided that to the extent that such representations and warranties specifically refer to an earlier date, they are true and correct in all material respects as of such earlier date, and provided further that any representation and warranty that is qualified as to “materiality”, “Material Adverse Effect” or similar language is true and correct (after giving effect to any qualification therein) in all respects on such respective dates; and (b) no Default or Event of Default exists, or would result from the effectiveness of this Amendment.

5. Successors and Assigns. The provisions of this Amendment shall be binding upon and inure to the benefit of the parties hereto and their respective successors and permitted assigns.


6. Governing Law. This Amendment shall be governed by, and construed in accordance with, the laws of the State of New York.

[remainder of page intentionally left blank]

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be duly executed by their respective authorized officers as of the day and year first above written.

BORROWERS:

EMCORE CORPORATION

By: 
Name: Tom Minichiello
Title: Chief Financial Officer

EMCORE SPACE & NAVIGATION
CORPORATION

By: 
Name: Tom Minichiello
Title: Chief Financial Officer

EMCORE CHICAGO INERTIAL CORPORATION

By: 
Name: Tom Minichiello
Title: Chief Financial Officer

ADMINISTRATIVE AGENT AND LENDER:

WINGSPIRE CAPITAL LLC

By: 

Name: _____

Title: _____

Brian Long

Managing Director

Exhibit 21.1

EMCORE Corporation subsidiaries*

Name
EMCORE Chicago Inertial Corporation, a Delaware corporation
EMCORE Space & Navigation Corporation, a Delaware corporation
EMCORE Hong Kong, Limited, a Hong Kong corporation
Langfang EMCORE Optoelectronics Company, Limited, a Chinese corporation
EMCORE Optoelectronics (Beijing) Co., LTD, a Chinese corporation

*As of December 27, 2022

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the registration statements (Nos. 333-171929, 333-175777, 333-185699, 333-197179, 333-211912, 333-217799, 333-230709, 333-261493, 333-264752, and 333-266726) on Form S-8 and (No. 333-256090) on Form S-3 of our report dated December 28, 2022, with respect to the consolidated financial statements of EMCORE Corporation and the effectiveness of internal control over financial reporting.

The audit report on the effectiveness of internal control over financial reporting as of September 30, 2022 contains an explanatory paragraph that states that the Company acquired Space & Navigation on April 29, 2022 and EMCORE Chicago on August 9, 2022, and management has excluded these from its assessment of the effectiveness of the Company's internal control over financial reporting as of September 30, 2022. Space & Navigation represented approximately 11% of the Company's consolidated total assets as of September 30, 2022 and approximately 8% of the Company's consolidated revenue for the fiscal year ended September 30, 2022. EMCORE Chicago represented approximately 32% of the Company's consolidated total assets as of September 30, 2022 and approximately 5% of the Company's consolidated revenue for the fiscal year ended September 30, 2022. Our audit of internal control over financial reporting of the Company also excluded an evaluation of internal control over financial reporting of Space & Navigation and EMCORE Chicago.

/s/ KPMG LLP

Los Angeles, California
December 28, 2022

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 28, 2022** 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, Tom Minichiello, 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 28, 2022 By: /s/ Tom Minichiello
 Tom Minichiello
 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, 2022, 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 28, 2022** 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, 2022, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Tom Minichiello, 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 28, 2022** By: /s/ Tom Minichiello
Tom Minichiello
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.