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The information in this prospectus supplement is not complete and may be changed. A registration statement relating to these securities has been declared effective by the Securities and Exchange Commission. This preliminary prospectus supplement and the accompanying prospectus are not an offer to sell these securities, and we are not soliciting offers to buy these securities in any jurisdiction where the offer or sale is not permitted.

PRELIMINARY PROSPECTUS SUPPLEMENT (Subject to Completion) **Dated February 14, 2023**
(To Prospectus dated May 20, 2021)

Shares

emcore®

Common Stock

EMCORE Corporation

We are offering shares of our common stock. Our common stock is listed for trading on the Nasdaq Global Market under the symbol "EMKR." On February 13, 2023, the last reported sale price of shares of our common stock on the Nasdaq Global Market was $1.37 per share.

We have retained A.G.P./Alliance Global Partners to act as our exclusive placement agent (the "Placement Agent") in connection with this offering. The Placement Agent has agreed to use its best efforts to sell the shares offered by this prospectus supplement. The Placement Agent is not purchasing or selling any of the shares offered by this prospectus supplement. The net proceeds to us, after deducting the estimated Placement Agent fees and commissions and estimated offering expenses payable by us, will be approximately $ million assuming we sell the maximum number of shares offered hereby. Refer to the section entitled "Plan of Distribution" beginning on page S-15 of this prospectus supplement for more information regarding these arrangements.

	Per Share	Total
Public offering price	$	$
Placement Agent fees[(1)]	$	$
Proceeds, before expenses, to EMKR	$	$

(1) We have agreed to pay the Placement Agent a cash placement commission equal to 7.0% of the gross proceeds from the sale of shares of our common stock offered in this offering. The Placement Agent fees in this table reflect a per share weighted average assuming we sell the maximum number of shares offered hereby. We have also agreed to reimburse the Placement Agent for certain expenses incurred in connection with this offering.

On February 13, 2023, the last reported sale price of our common stock on the Nasdaq Global Market was $1.37 per share. The aggregate market value of our outstanding common equity held by non-affiliates on February 13, 2023 was $51,024,586 based on 38,069,548 shares of common stock outstanding as of February 10, 2023, of which 37,244,223 were held by non-affiliates, and the last reported sale price as of February 13, 2023 of $1.37. During the 12 calendar months prior to and including the date hereof, we have not sold any securities pursuant to General Instruction I.B.6. of Form S-3.

Our business and an investment in our common stock involve significant risks. These risks are described under the caption "Risk Factors" beginning on page S-3 of this prospectus supplement, and beginning on page 6 of the accompanying prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

A.G.P.

Sole Placement Agent

Prospectus Supplement Dated February , 2023

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ABOUT THIS PROSPECTUS SUPPLEMENT

This document is part of a registration statement that was filed with the Securities and Exchange Commission ("SEC"), using a "shelf" registration process and consists of two parts. The first part is this prospectus supplement, which describes the specific terms of this offering and also supplements and updates information contained in the accompanying prospectus and the documents incorporated by reference into this prospectus supplement and the accompanying prospectus. The second part is the accompanying prospectus, which provides more general information, some of which may not apply to this offering. This prospectus supplement may add, update, or change information contained in the accompanying prospectus. Generally, when we refer to this prospectus, we are referring to both parts of this document combined. In addition, in this prospectus, as permitted by law, we "incorporate by reference" information from other documents that we file with the SEC. This means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be a part of this prospectus supplement and the accompanying prospectus and should be read with the same care. When we update the information contained in documents that have been incorporated by reference by making future filings with the SEC, the information included or incorporated by reference in this prospectus supplement is considered to be automatically updated and superseded. If the information contained in this prospectus supplement differs or varies from, or is inconsistent with, the information contained in the accompanying prospectus, or the information contained in any document incorporated by reference that was filed with the SEC before the date of this prospectus supplement, you should rely on the information set forth in this prospectus supplement.

You should rely only on the information contained or incorporated by reference in this prospectus supplement and the accompanying prospectus. We have not, and the Placement Agent has not, authorized anyone else to provide you with information that is in addition to or different from that contained or incorporated by reference in this prospectus supplement and the accompanying prospectus, along with the information contained in any permitted free writing prospectuses we have authorized for use in connection with this offering. We and the Placement Agent take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may provide.

The information contained in this prospectus supplement and the accompanying prospectus is accurate only as of the date of this prospectus supplement or the date of the accompanying prospectus, and the information in the documents incorporated by reference in this prospectus supplement and the accompanying prospectus is accurate only as of the date of those respective documents, regardless of the time of delivery of this prospectus supplement and the accompanying prospectus or of any sale of our common stock. Our business, financial condition, results of operations and prospects may have changed since those dates. It is important for you to read and consider all information contained or incorporated by reference in this prospectus supplement and the accompanying prospectus in making your investment decision. You should read both this prospectus supplement and the accompanying prospectus, as well as the documents incorporated by reference into this prospectus supplement and the accompanying prospectus and the additional information described under "Where You Can Find More Information" in this prospectus supplement and in the accompanying prospectus before investing in our common stock.

We further note that the representations, warranties, and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference in this prospectus supplement and the accompanying prospectus were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties, and covenants should not be relied on as accurately representing the current state of our affairs.

We use various trademarks and trade names in our business, including without limitation our corporate name and logo. All other trademarks or trade names referred to in this prospectus supplement and the accompanying prospectus and the documents incorporated by reference herein or therein are the property of their respective owners. Solely for convenience, the trademarks and trade names in this prospectus supplement and the accompanying prospectus and the documents incorporated by reference herein or therein

may be referred to without the ® and ™ symbols, but such references should not be construed as any indicator that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto.

You should not consider this prospectus supplement or the accompanying prospectus to be an offer or solicitation relating to the securities in any jurisdiction in which such an offer or solicitation relating to the securities is not authorized. Persons outside the United States who come into possession of this prospectus supplement and the accompanying prospectus must inform themselves about, and observe any restrictions relating to, the offering of the securities and the distribution of this prospectus supplement and the accompanying prospectus outside the United States. This prospectus supplement and the accompanying prospectus do not constitute, and may not be used in connection with, an offer to sell, or a solicitation of an offer to buy, any securities offered by this prospectus supplement or the accompanying prospectus supplement by any person in any jurisdiction if the person making the offer or solicitation is not qualified to do so, or if it is unlawful for you to receive such an offer or solicitation.

Unless otherwise indicated, information contained in or incorporated by reference into this prospectus supplement and the accompanying prospectus concerning our business and the industry and markets in which we operate, including with respect to our business prospects, our market position and opportunity, and the competitive landscape, is based on information from our management's estimates, as well as from industry publications, surveys and studies conducted by third parties. Our management's estimates are derived from publicly available information, their knowledge of our business and industry, and assumptions based on such information and knowledge, which they believe to be reasonable. In addition, while we believe that information contained in the industry publications, surveys and studies has been obtained from reliable sources, we have not independently verified any of the data contained in these third-party sources, and the accuracy and completeness of the information contained in these sources is not guaranteed. Information that is based on estimates, forecasts, projections, market research or similar methodologies is inherently subject to uncertainties and actual events or circumstances may differ materially from events and circumstances reflected in this information. Unless otherwise expressly stated, we obtained this industry, business, market, and other data from reports, research surveys, studies and similar data prepared by market research firms and other third parties, industry, medical, and general publications, government data and similar sources.

Unless otherwise indicated or the context otherwise requires, references in this prospectus supplement and the accompanying prospectus to "EMCORE," "company," "we," "us" and "our" refer to EMCORE Corporation and its subsidiaries.

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights selected information about us and this offering. Because it is a summary, it does not contain all of the information that you should consider before investing. Before investing in our common stock, you should read this entire prospectus supplement and the accompanying prospectus carefully, including the "Risk Factors," and the financial statements and accompanying notes and other information incorporated by reference in this prospectus supplement and the accompanying prospectus.

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 scale and portfolio of inertial sensor products through our 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 products for navigation systems, and for our chip, laser, transmitter, and receiver products for broadband applications. We are vertically integrated in the manufacture of FOGs, QMEMS gyroscopes, accelerometers, IMU and INS within our own facilities.

We design and manufacture industry-leading Photonic Integrated Chip, Quartz MEMS ("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. Our operations include wafer fabrication, device design and production, fiber optic module, subsystem, and system design and manufacture, and 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 largely and increasingly manufactured with our electronics manufacturing service providers and other contract manufacturers (collectively, "CMs"). 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. We also believe our CMs 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.

Corporate Information

We were incorporated in 1986 as a New Jersey corporation. We became publicly traded in 1997 and our common stock is listed on the Nasdaq Global Market under the ticker symbol EMKR. Our headquarters and principal executive offices are located in Alhambra, California and our main telephone number is (626) 293-3400. 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 this prospectus supplement, the accompanying prospectus or a part of any other report or filing with the SEC.

THE OFFERING

Common stock offered by us	shares
Common stock to be outstanding immediately after the offering	shares
Offering price	$ per share
Use of proceeds	We estimate that the net proceeds to us from this offering, after deducting the estimated Placement Agent fees and commissions and estimated offering expenses payable by us, will be approximately $ million assuming we sell the maximum number of shares offered hereby. We currently intend to use the net proceeds from this offering for working capital and other general corporate purposes. See "Use of Proceeds."
Risk factors	Investing in our common stock involves significant risks. See "Risk Factors" on page S-3 of this prospectus supplement and under similar headings in the documents incorporated by reference into this prospectus supplement and the accompanying prospectus for a discussion of the factors you should carefully consider before deciding to invest in our common stock.
Nasdaq Global Market symbol	"EMKR"

The number of shares of common stock to be outstanding immediately after this offering is based on 37,793,549 shares outstanding as of December 31, 2022, which excludes:

- 9,981 shares of common stock issuable upon the exercise of outstanding stock options issued under the 2010 Equity Incentive Plan ("2010 Plan"), as of December 31, 2022, with a weighted-average exercise price of $4.52 per share;
- 2,644,870 unvested restricted stock units ("RSUs") and 2,722,106 unvested performance-based restricted stock units ("PSUs") (assuming maximum payout) under the 2010 Plan, the 2012 Equity Incentive Plan ("2012 Plan"), the 2019 Equity Incentive Plan ("2019 Plan") and the 2022 New Employee Inducement Plan (the "2022 Plan") (collectively, the "Equity Incentive Plans"), as of December 31, 2022;
- 1,128,932 shares of common stock reserved for future issuance under the Equity Incentive Plans; and
- 88,741 shares of common stock reserved for future issuances under our officer and director share purchase plan.

Unless otherwise indicated, all information contained in this prospectus supplement assumes no exercise of the outstanding options or vesting of the RSUs described above.

RISK FACTORS

Investing in our common stock involves a high degree of risk. Before making an investment decision, you should carefully consider the risks described below and in our most recent Annual Report on Form 10-K and subsequent Quarterly Reports on Form 10-Q or Current Reports on Form 8-K, as well as any amendments thereto reflected in subsequent filings, each of which are incorporated by reference in this prospectus supplement and the accompanying prospectus, and all of the other information in this prospectus supplement and the accompanying prospectus, including our financial statements and related notes incorporated by reference in this prospectus supplement and the accompanying prospectus. If any of these risks is realized, our business, financial condition, results of operations and prospects could be materially and adversely affected. In that event, the trading price of our common stock could decline, and you could lose part or all of your investment. Additional risks and uncertainties that are not yet identified or that we think are immaterial may also materially harm our business, operating results and financial condition and could result in a complete loss of your investment.

Risks Related to our Common Stock and this Offering

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, which may cause the value of any investment in our common stock to decline.

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 our ability, if needed, to raise additional funds through equity financing or to finance strategic transactions with the issuance of shares of our common 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 may be exacerbated by macroeconomic conditions that affect the market generally, or our industries in particular, any of which could divert management's attention to our ongoing business operations and materially harm our business.

Purchasers in this offering will experience immediate and substantial dilution in the book value of their investment.

Purchasers of our common stock in this offering will experience immediate dilution in the net tangible book value of the common stock purchased in this offering because the price per share of common stock in this offering is substantially higher than the net tangible book value per share of our common stock outstanding immediately after this offering. If you purchase shares of common stock in this offering, you will suffer immediate and substantial dilution of $ per share with respect to the net tangible book value of the common stock. See "Dilution" in this prospectus supplement for a detailed discussion of the dilution you will incur if you purchase shares in this offering.

We will have broad discretion in how we use the net proceeds of this offering. We may not use these proceeds effectively, which could affect our results of operations and cause our stock price to decline.

Although we currently intend to use the net proceeds from this offering in the manner described in the section entitled "Use of Proceeds" in this prospectus supplement, we will have considerable discretion in the

application of the net proceeds of this offering. We may use the net proceeds for purposes that do not yield a significant return or any return at all for our shareholders. In addition, pending their use, we may invest the net proceeds from this offering in a manner that does not produce income or that loses value. If we do not invest or apply the net proceeds from this offering in ways that enhance shareholder value, we may fail to achieve expected financial results, which could cause our stock price to decline.

The sale or availability for sale of a substantial number of shares of our common stock could adversely affect the market price of such shares.

Sales of a substantial number of shares of our common stock in the public market, including after expiration of applicable lock-up periods and other legal restrictions on resale, or the perception or indication that these sales could occur, could adversely affect the market price of such shares and could materially impair our ability to raise capital through equity offerings in the future. We, along with our directors and executive officers, have agreed that for a period of 90 days after the date of this prospectus supplement, subject to specified exceptions, we or they will not offer, sell, contract to sell, pledge or otherwise dispose of, directly or indirectly, any shares of our common stock or securities convertible into or exchangeable or exercisable for any shares of our common stock. These lock-up agreements affect approximately 825,325 shares, or 2.2%, of our common stock based on 38,069,548 shares outstanding as of February 10, 2023. Sales of stock by any of our directors and executive officers, or the perception or indication that such sales could occur, could have a material adverse effect on the trading price of our common stock.

All other outstanding and unrestricted shares of common stock will be freely tradable, without restriction, in the public market. If these shares are sold, the trading price of our common stock could decline. We are unable to predict what effect, if any, market sales of securities held by our significant shareholders, directors or officers or the availability of these securities for future sale will have on the market price of our common stock.

Future sales of our equity could result in significant dilution to our existing shareholders and depress the market price of our common stock.

It is likely that we will need to seek additional capital in the future and from time to time. If this financing is obtained through the issuance of equity securities, debt convertible into equity securities, options or warrants to acquire equity securities or similar instruments or securities, our existing shareholders will experience dilution in their ownership percentage upon the issuance, conversion or exercise of such securities and such dilution could be significant. Additionally, any new equity securities issued by us could have rights, preferences or privileges senior to those of our common stock. Any issuance by us or sales of our securities by our security holders, including by any of our affiliates, or the perception that such issuances or sales could occur, could negatively impact the market price of our securities. For example, if one or more of shareholders who own significant blocks of our common stock were to sell large portions of their holdings in a relatively short time, for liquidity or other reasons, the prevailing market price of our common stock could be negatively affected. This could result in further potential dilution to our existing shareholders and the impairment of our ability to raise capital through the sale of equity, debt or other securities.

The interest of our current or potential significant shareholders may conflict with other shareholders and they may attempt to effect changes or acquire control, which could adversely affect our results of operations and financial condition.

Our shareholders may from time to time engage in proxy solicitations, advance shareholder proposals, acquire control or otherwise attempt to effect changes, including by directly voting their shares on shareholder proposals. Campaigns by shareholders to effect changes at publicly traded companies are sometimes led by investors seeking to increase short-term shareholder value through actions such as financial restructuring, increased debt, special dividends, stock repurchases or sales of assets or the entire company. Responding to proxy contests and other actions by activist shareholders can be costly and time-consuming, disrupting our operations and diverting the attention of our Board of Directors and senior management from the pursuit of business strategies. Additionally, uncertainty over our direction and leadership may negatively impact our relationship with our customers and make it more difficult to attract and retain qualified

personnel and business partners. As a result, shareholder campaigns could adversely affect our results of operations and financial condition.

The continued uncertain global economic environment and volatility in global credit and financial markets could materially and adversely affect our business and results of operations.

The state of the global economy continues to be uncertain. As a result of these conditions, our manufacturers, vendors, and customers might experience deterioration of their businesses, cash flow shortages and difficulty obtaining financing which could result in interruptions or delays in the performance of any contracts, reductions and delays in customer purchases, delays in or the inability of customers to obtain financing to purchase our products, and bankruptcy of customers. Furthermore, the constraints in the capital and credit markets may limit the ability of our customers to meet their liquidity needs, which could result in an impairment of their ability to make timely payments to us and reduce their demand for our products, adversely impacting our results of operations and cash flows. Uncertainties affecting the global economy and the industries in which we participate also make it difficult for us to accurately forecast and plan future business activities.

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

Certain provisions of our organizational documents and New Jersey law could discourage potential acquisition proposals, delay, or prevent a change in control of the company, or limit the price that investors may be willing to pay in the future for shares of 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 our Board of Directors or to propose matters that can be acted on by shareholders at shareholder meetings;
- do not provide for cumulative voting in the election of directors; and
- provide for the filling of vacancies on our Board of Directors by action of 66⅔% of the directors and not by the shareholders.

These and other provisions in our organizational documents could allow our Board of Directors to affect the rights of shareholders in a number of ways, including making it difficult for shareholders to replace members of our Board of Directors. Because our 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 favored 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.

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

Our Credit Agreement, dated as of August 9, 2022 (the "Credit Agreement"), with 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 Credit Agreement under specified circumstances. Any failure by us to adhere to these covenants could result in an event of default under the Credit Agreement. The Credit Agreement also subjects 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 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.

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.

This offering is being conducted on a "best efforts" basis.

The Placement Agent is offering the shares on a "best efforts" basis, and the Placement Agent is under no obligation to purchase any common stock for its own account. The Placement Agent is not required to sell any specific number or dollar amount of common stock in this offering but will use its best efforts to sell the common stock offered by this prospectus supplement. As a "best efforts" offering, there can be no assurance that the offering contemplated hereby will ultimately be consummated or will be consummated with the sale of fewer than the maximum number of shares offered hereby.

FORWARD-LOOKING STATEMENTS

This prospectus supplement and the accompanying prospectus, including the documents we file with the SEC that are incorporated by reference, contains “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended (the “Securities Act”), and Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). These forward-looking statements are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These forward-looking statements are based on our current expectations and projections about future events and financial trends affecting the financial condition of our business. Such forward-looking statements include, in particular, projections about our future results included in our Exchange Act reports and statements about our plans, strategies, business prospects, changes and trends in our business and the markets in which we operate. All statements other than statements of fact, including statements identified by words, 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 are forward-looking statements. Additionally, statements concerning future matters such as our expected liquidity, development of new products, enhancements or technologies, sales levels, expense levels, expectations regarding the outcome of legal proceedings and other statements regarding matters that are not historical are forward-looking statements.

We have based these forward-looking statements on our current expectations and projections about future events and trends that we believe may affect our financial condition, results of operations, strategy, short- and long-term business operations and objectives, and financial requirements. These statements are subject to known and unknown risks, uncertainties and assumptions that could cause actual results to differ materially from those projected or otherwise implied by the forward-looking statements. Factors which may cause actual results to vary materially from those contained in the forward-looking statements include, without limitation: (a) the rapidly evolving markets for our products and uncertainty regarding the development of these markets; (b) our historical dependence on sales to a limited number of customers and fluctuations in the mix of products and customers in any period; (c) delays and other difficulties in commercializing new products; (d) the failure of new products: (i) to perform as expected without material defects, (ii) to be manufactured at acceptable volumes, yields, and cost, (iii) to be qualified and accepted by our customers, and (iv) to successfully compete with products offered by our competitors; (e) uncertainties concerning the availability and cost of commodity materials and specialized product components that we do not make internally; (f) actions by competitors; (g) risks and uncertainties related to applicable laws and regulations, including the impact of changes to applicable tax laws and tariff regulations; (h) acquisition-related risks, including that (1) the revenues and net operating results obtained from the SDI, S&N or EMCORE Chicago may not meet our expectations, (2) the costs and cash expenditures for integration of SDI, S&N or EMCORE Chicago business operations may be higher than expected, (3) there could be losses and liabilities arising from the acquisitions of SDI, S&N or EMCORE Chicago that we will not be able to recover from any source, and (4) we may not realize sufficient scale in our Navigation and Inertial Sensing product line from the SDI, S&N and EMCORE Chicago acquisitions and will need to take additional steps, including making additional acquisitions, to achieve our growth objectives for this product line; (i) risks related to our ability to obtain capital; (j) risks and uncertainties related to manufacturing and production capacity and expansion plans related thereto; (k) risks related to the conversion of order backlog into product revenue; and (l) other risks described in our most recent Annual Report on Form 10-K and our subsequent periodic reports filed with the SEC, and in any prospectus supplement.

You should not place undue reliance on these forward-looking statements. We discuss in greater detail in this prospectus supplement, the accompanying prospectus and in the documents incorporated by reference many of these risks, uncertainties, and assumptions under the headings “Risk Factors.” Additional cautionary statements or discussions of risks, uncertainties and assumptions that could affect our results or the achievement of the expectations described in forward-looking statements are also contained in the documents we incorporate by reference into this prospectus supplement and the accompanying prospectus. Any forward-looking statement made by us in this prospectus supplement and the accompanying prospectus or in any of the documents incorporated by reference in this prospectus supplement and the accompanying prospectus speaks only as of the date on which it was made. We expressly disclaim any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements contained herein to reflect any change in our expectations with regard thereto or any change in events, conditions or

circumstances on which any such statement is based. You should, however, review additional disclosures we make in our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, and Current Reports on Form 8-K filed with the SEC.

You should read this prospectus supplement, the accompanying prospectus, and the documents that we incorporated by reference in this prospectus supplement and the accompanying prospectus completely and with the understanding that our actual future results, levels of activity and performance as well as other events and circumstances may be materially different from what we expect. We qualify all of our forward-looking statements by these cautionary statements.

USE OF PROCEEDS

We estimate that the net proceeds to us from this offering, after deducting the estimated Placement Agent fees and commissions and estimated offering expenses payable by us, will be approximately $ million.

We currently intend to use the net proceeds of this offering for working capital and other general corporate purposes. Accordingly, we will retain broad discretion over the use of these proceeds. Pending application of the net proceeds as described above, we intend to invest the net proceeds in short- and intermediate-term, interest-bearing obligations, investment-grade instruments, certificates of deposit or direct or guaranteed obligations of the U.S. federal government.

DILUTION

If you purchase shares of our common stock in this offering, your ownership interest will be immediately diluted to the extent of the difference between the public offering price per share and the net tangible book value per share of our common stock immediately after this offering. Net tangible book value per share is determined by dividing the number of shares of common stock outstanding as of December 31, 2022, into our total tangible assets less total liabilities.

Our historical net tangible book value as of December 31, 2022, was approximately $77.1 million, or $2.04 per share, based on 37,793,549 shares of our common stock outstanding as of that date.

After giving effect to the sale of shares of common stock by us, and after deducting the estimated Placement Agent fees and commissions and estimated offering expenses payable by us, our as adjusted net tangible book value as of December 31, 2022, would have been $ million, or $ per share. This represents an immediate increase in net tangible book value of $ per share to existing shareholders and immediate dilution of $ per share to investors in this offering, as illustrated by the following table:

Public offering price per share		$
Net tangible book value per share as of December 31, 2022	$2.04	
Increase in net tangible book value per share attributable to investors participating in this offering		
As adjusted net tangible book value per share after giving effect to this offering		
Dilution per share to investors in this offering		$

The number of shares of common stock to be outstanding immediately after this offering is based on 37,793,549 shares outstanding as of December 31, 2022, which excludes:

- 9,981 shares of common stock issuable upon the exercise of outstanding stock options issued under the Equity Incentive Plans, as of December 31, 2022, with a weighted-average exercise price of $4.52 per share;
- 2,644,870 unvested RSUs and 2,722,106 unvested PSUs (assuming maximum payout) as of December 31, 2022;
- 1,128,932 shares of common stock reserved for future issuance under the Equity Incentive Plans; and
- 88,741 shares of common stock reserved for future issuances under our officer and director share purchase plan.

To the extent any options are exercised or restricted stock units vest, new options, restricted stock awards or restricted stock units are issued under our equity incentive plans, or we otherwise issue additional shares of common stock in the future, there will be further dilution to new investors.

In addition, we may choose to raise additional capital due to market conditions or strategic considerations, even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or debt securities, the issuance of these securities could result in further dilution to our shareholders.

MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES TO NON-U.S. HOLDERS

The following is a general discussion of the material U.S. federal income tax considerations applicable to non-U.S. holders (as defined herein) with respect to their ownership and disposition of shares of our common stock issued pursuant to this offering. This discussion does not address all aspects of U.S. federal income tax considerations relating thereto. This discussion also does not address the tax considerations arising under the laws of any non-U.S., state, or local jurisdiction, nor under U.S. federal gift and estate tax laws, except to the limited extent provided below. In general, a non-U.S. holder means a beneficial owner of our common stock (other than a partnership or an entity or arrangement treated as a partnership for U.S. federal income tax purposes) that is not, for U.S. federal income tax purposes:

- an individual who is a citizen or resident of the United States;
- a corporation, or an entity treated as a corporation for U.S. federal income tax purposes, created or organized in the United States or under the laws of the United States or of any state thereof or the District of Columbia;
- an estate, the income of which is subject to U.S. federal income tax regardless of its source; or
- a trust if (1) a U.S. court can exercise primary supervision over the trust's administration and one or more U.S. persons have the authority to control all of the trust's substantial decisions or (2) the trust has a valid election in effect under applicable U.S. Treasury Regulations to be treated as a U.S. person.

This discussion is based on current provisions of the U.S. Internal Revenue Code of 1986, as amended (the "Code"), existing U.S. Treasury Regulations promulgated thereunder, published administrative pronouncements and rulings of the U.S. Internal Revenue Service ("IRS"), and judicial decisions, all as in effect as of the date of this prospectus supplement. These authorities are subject to change and to differing interpretation, possibly with retroactive effect. Any change or differing interpretation could alter the tax consequences to non-U.S. holders described in this prospectus supplement and the accompanying prospectus.

We assume in this discussion that a non-U.S. holder holds shares of our common stock as a capital asset within the meaning of Section 1221 of the Code (generally, for investment). This discussion does not address all aspects of U.S. federal income taxation that may be relevant to a particular non-U.S. holder in light of that non-U.S. holder's individual circumstances, nor does it address any estate or gift tax consequences, except to the limited extent provided below, or any aspects of U.S. state, local or non-U.S. taxes. This discussion also does not consider any specific facts or circumstances that may apply to a non-U.S. holder and does not address the special tax rules applicable to particular non-U.S. holders, such as holders that own, or are deemed to own, more than 5% of our capital stock (except to the extent specifically set forth below), corporations that accumulate earnings to avoid U.S. federal income tax, tax-exempt organizations, banks, financial institutions, insurance companies, brokers, dealers or traders in securities, commodities or currencies, tax-qualified retirement plans, qualified foreign pension funds defined in Section 897(l)(2) of the Code (or any entities all of the interests of which are held by a qualified foreign pension fund), entities subject to the anti-inversion rules of Section 7874 of the Code, accrual method taxpayers subject to special tax accounting rules under Section 451(b) of the Code, holders subject to the alternative minimum tax or the Medicare contribution tax, holders who hold or receive our common stock pursuant to the exercise of employee stock options or otherwise as compensation, holders holding our common stock as part of a hedge, straddle or other risk reduction strategy, conversion transaction or other integrated investment, holders deemed to sell our common stock under the constructive sale provisions of the Code, controlled foreign corporations, passive foreign investment companies and certain former U.S. citizens or long-term residents.

In addition, this discussion does not address the tax treatment of partnerships (or entities or arrangements that are treated as partnerships for U.S. federal income tax purposes) or persons that hold their common stock through such partnerships. If a partnership, including any entity or arrangement treated as a partnership for U.S. federal income tax purposes, holds shares of our common stock, the U.S. federal income tax treatment of a partner in such partnership will generally depend upon the status of the partner and the activities of the partnership. Such partners and partnerships should consult their own tax advisors regarding the tax consequences of the purchase, ownership, and disposition of our common stock.

There can be no assurance that a court or the IRS will not challenge one or more of the tax consequences described herein, and we have not obtained, nor do we intend to obtain, an IRS ruling with respect to the U.S. federal income tax consequences to a non-U.S. holder of the purchase, ownership or disposition of our common stock.

Distributions on Our Common Stock

Distributions, if any, on our common stock generally will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. If a distribution exceeds our current and accumulated earnings and profits, the excess will be treated as a tax-free return of the non-U.S. holder's investment, up to such holder's adjusted tax basis in the common stock. Any remaining excess will be treated as capital gain from the sale or exchange of such common stock, subject to the tax treatment described below in "Gain on Sale, Exchange or Other Disposition of Our Common Stock." Any such distribution will also be subject to the discussion below under the heading "FATCA Withholding."

Dividends paid to a non-U.S. holder will generally be subject to withholding of U.S. federal income tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder's country of residence.

Dividends that are treated as effectively connected with a trade or business conducted by a non-U.S. holder within the United States and, if an applicable income tax treaty so provides, that are attributable to a permanent establishment or a fixed base maintained by the non-U.S. holder within the United States, are generally exempt from the 30% withholding tax if the non-U.S. holder satisfies applicable certification and disclosure requirements. However, such U.S. effectively connected income, net of specified deductions and credits, is taxed at the same graduated U.S. federal income tax rates applicable to U.S. persons (as defined in the Code). Any U.S. effectively connected income received by a non-U.S. holder that is a corporation may also, under certain circumstances, be subject to an additional "branch profits tax" at a 30% rate or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder's country of residence.

To claim a reduction or exemption from withholding, a non-U.S. holder of our common stock generally will be required to provide (a) a properly executed IRS Form W-8BEN or W-8BEN-E (or successor form) and satisfy applicable certification and other requirements to claim the benefit of an applicable income tax treaty between the United States and such holder's country of residence or (b) a properly executed IRS Form W-8ECI stating that dividends are not subject to withholding because they are effectively connected with such non-U.S. holder's conduct of a trade or business within the United States. Non-U.S. holders are urged to consult their tax advisors regarding their entitlement to benefits under a relevant income tax treaty.

A non-U.S. holder that is eligible for a reduced rate of U.S. withholding tax under an income tax treaty may obtain a refund or credit of any excess amounts withheld by timely filing an appropriate claim for refund with the IRS.

Gain on Sale, Exchange, or Other Disposition of Our Common Stock

Subject to the discussion below regarding backup withholding, in general, a non-U.S. holder will not be subject to any U.S. federal income tax on any gain realized upon such holder's sale, exchange or other disposition of shares of our common stock unless:

- the gain is effectively connected with a U.S. trade or business of the non-U.S. holder and, if an applicable income tax treaty so provides, is attributable to a permanent establishment or a fixed base maintained in the United States by such non-U.S. holder, in which case the non-U.S. holder generally will be taxed at the graduated U.S. federal income tax rates applicable to U.S. persons (as defined in the Code) (or such lower rate as may be specified by an applicable income tax treaty) and, if the non-U.S. holder is a foreign corporation, the branch profits tax described above in "Distributions on Our Common Stock" also may apply;

- the non-U.S. holder is a nonresident alien individual who is present in the United States for 183 days or more in the taxable year of the disposition and certain other conditions are met, in which case the non-U.S. holder will be subject to a 30% tax (or such lower rate as may be specified by an applicable income tax treaty) on the net gain derived from the disposition, which may be offset by U.S. source capital losses of the non-U.S. holder, if any (even though the individual is not considered a resident of the United States); or
- our common stock constitutes a U.S. real property interest because we are, or have been, at any time during the five-year period preceding such disposition (or the non-U.S. holder's holding period, if shorter) a "United States real property holding corporation." Generally, a corporation is a United States real property holding corporation only if the fair market value of its U.S. real property interests equals or exceeds 50% of the sum of the fair market value of its worldwide real property interests plus its other assets used or held for use in a trade or business. Although there can be no assurance, we do not believe that we are, or have been, a United States real property holding corporation, or that we are likely to become one in the future. Even if we are or become a United States real property holding corporation, provided that our common stock is regularly traded on an established securities market, within the meaning of applicable Treasury Regulations, our common stock will be treated as a U.S. real property interest only with respect to a non-U.S. holder that holds more than 5% of our outstanding common stock, directly or indirectly, actually or constructively, during the shorter of the 5-year period ending on the date of the disposition or the period that the non-U.S. holder held our common stock. In such case, such non-U.S. holder generally will be taxed on its net gain derived from the disposition at the graduated U.S. federal income tax rates applicable to U.S. persons (as defined in the Code). No assurance can be provided that our common stock will continue to be regularly traded on an established securities market for purposes of the rules described above.

U.S. Federal Estate Tax

The estates of nonresident alien individuals generally are subject to U.S. federal estate tax on property with a U.S. situs. Because we are a U.S. corporation, our common stock will be U.S. situs property and therefore will be included in the taxable estate of a nonresident alien decedent, unless an applicable estate tax treaty between the United States and the decedent's country of residence provides otherwise. Investors are urged to consult their own tax advisors regarding the U.S. federal estate tax consequences of the ownership or disposition of our common stock.

Information Reporting and Backup Withholding

We must report annually to the IRS and to each non-U.S. holder the gross amount of distributions on our common stock paid to such holder, whether or not such distribution is a dividend for U.S. federal income tax purposes, and the tax withheld, if any, with respect to such distributions. Non-U.S. holders will have to comply with specific certification procedures to establish that the holder is not a U.S. person (as defined in the Code) in order to avoid backup withholding at the applicable rate with respect to dividends on our common stock. A non-U.S. holder generally will not be subject to U.S. backup withholding with respect to payments of dividends on our common stock if it certifies its non-U.S. status by providing a valid IRS Form W-8BEN or W-8BEN-E (or successor form) or W-8ECI, or otherwise establishes an exemption; provided we do not have actual knowledge or reason to know such non-U.S. holder is a U.S. person, as defined in the Code. Dividends paid to non-U.S. holders subject to the U.S. withholding tax, as described above in "Distributions on Our Common Stock," generally will be exempt from U.S. backup withholding.

Information reporting and backup withholding will generally apply to the proceeds of a disposition of our common stock by a non-U.S. holder effected by or through the U.S. office of any broker, U.S. or foreign, unless the holder certifies its status as a non-U.S. holder and satisfies certain other requirements, or otherwise establishes an exemption. Generally, information reporting and backup withholding will not apply to a payment of disposition proceeds to a non-U.S. holder where the transaction is effected outside the United States through a non-U.S. office of a broker. However, information reporting but not backup withholding will apply in a manner similar to dispositions effected through a U.S. office of a broker, if a non-U.S. holder sells our common stock through a non-U.S. office of a broker that is:

- a U.S. person (including a foreign branch or office of such person),

- a “controlled foreign corporation” for U.S. federal income tax purposes,
- a foreign person 50% or more of whose gross income from certain periods is effectively connected with a U.S. trade or business, or
- a foreign partnership if at any time during its tax year (a) one or more of its partners are U.S. persons who, in the aggregate, hold more than 50% of the income or capital interests of the partnership or (b) the foreign partnership is engaged in a U.S. trade or business.

Non-U.S. holders should consult their own tax advisors regarding the application of the information reporting and backup withholding rules to them.

Copies of information returns may be made available to the tax authorities of the country in which the non-U.S. holder resides or is incorporated under the provisions of a specific treaty or agreement.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules from a payment to a non-U.S. holder may be allowed as a credit against the non-U.S. holder’s U.S. federal income tax liability, if any, and may entitle such holder to a refund, provided that the required information is timely furnished to the IRS.

FATCA Withholding

The Code, U.S. Treasury Regulations and other applicable guidance, commonly referred to as “FATCA,” generally impose a U.S. federal withholding tax of 30% on dividends on stock in a U.S. corporation paid to (i) a “foreign financial institution” (as specifically defined for this purpose), unless such institution enters into an agreement with the U.S. government to, among other things, withhold on certain payments and to collect and provide to the U.S. tax authorities substantial information regarding U.S. account holders of such institution (which includes certain equity and debt holders of such institution, as well as certain account holders that are foreign entities with U.S. owners) or otherwise qualifies for an exemption from these rules and (ii) a “non-financial foreign entity” (as defined in the Code), unless such entity provides the withholding agent with either a certification that it does not have any substantial direct or indirect U.S. owners or provides information regarding substantial direct and indirect U.S. owners of the entity, or otherwise qualifies for an exemption from these rules. Treasury regulations proposed in December 2018 (and upon which taxpayers and withholding agents are entitled to rely) eliminate possible FATCA withholding on the gross proceeds from any sale or other disposition of shares of stock of a U.S. corporation, previously scheduled to apply beginning January 1, 2019. Under certain circumstances, a non-U.S. holder might be eligible for refunds or credits of such taxes. An intergovernmental agreement between the United States and an applicable foreign country may modify the requirements described in this paragraph.

EACH PROSPECTIVE INVESTOR SHOULD CONSULT ITS OWN TAX ADVISOR REGARDING THE PARTICULAR U.S. FEDERAL, STATE AND LOCAL AND NON-U.S. TAX CONSEQUENCES OF THE PURCHASE, OWNERSHIP AND DISPOSITION OF OUR COMMON STOCK, INCLUDING THE CONSEQUENCES OF ANY PROPOSED CHANGE IN APPLICABLE LAWS.

PLAN OF DISTRIBUTION

A.G.P./Alliance Global Partners has agreed to act as our exclusive placement agent in connection with this offering subject to the terms and conditions of the placement agency agreement dated February , 2023. The Placement Agent is not purchasing or selling any of the shares of common stock offered by this prospectus supplement, nor is it required to arrange the purchase or sale of any specific number or dollar amount of shares, but has agreed to use its best efforts to arrange for the sale of all of the shares offered hereby. Therefore, we have entered into a securities purchase agreement directly with certain investors in connection with this offering and we may not sell the entire amount of securities offered pursuant to this prospectus supplement. The securities purchase agreement contains customary representations, warranties and covenants.

We will deliver the shares of common stock being issued to each investor upon receipt of such investor's funds for the purchase of the common stock offered pursuant to this prospectus supplement. We expect to deliver the securities being offered pursuant to this prospectus supplement on or about February 17, 2023.

We have agreed to indemnify the Placement Agent against specified liabilities, including liabilities under the Securities Act, and to contribute to payments the Placement Agent may be required to make in respect thereof.

Fees and Expenses

We have engaged A.G.P./Alliance Global Partners as our exclusive placement agent in connection with this offering. This offering is being conducted on a "best efforts" basis and the Placement Agent has no obligation to buy any of the securities from us or to arrange for the purchase or sale of any specific number or dollar amount of securities. We have agreed to pay the Placement Agent a fee based on the aggregate proceeds as set forth in the table below:

	Per Share	Total
Public offering price	$	$
Placement Agent fees[1]	$	$
Proceeds, before expenses, to us	$	$

(1) We have agreed to pay the Placement Agent a cash placement commission equal to 7.0% of the gross proceeds from the sale of shares of our common stock offered in this offering. The Placement Agent fee in this table reflects a per share weighted average assuming we sell the maximum number of shares offered hereby. We have also agreed to reimburse the Placement Agent for certain expenses incurred in connection with this offering.

We have also agreed to reimburse the Placement Agent at closing for legal and other expenses incurred by them in connection with this Offering in an aggregate amount up to $75,000, as well as non-accountable expenses equal to $15,000. We estimate the total expenses payable by us for this offering, excluding the Placement Agent fees and commissions and estimated offering expenses payable by us, will be approximately $.

Regulation M

The Placement Agent may be deemed to be an underwriter within the meaning of Section 2(a)(11) of the Securities Act, and any commissions received by it and any profit realized on the resale of the shares sold by it while acting as principal might be deemed to be underwriting discounts or commissions under the Securities Act. As an underwriter, the Placement Agent would be required to comply with the requirements of the Securities Act and the Exchange Act, including, without limitation, Rule 415(a)(4) under the Securities Act and Rule 10b-5 and Regulation M under the Exchange Act. These rules and regulations may limit the

timing of purchases and sales of shares by the Placement Agent acting as principal. Under these rules and regulations, the Placement Agent:

- may not engage in any stabilization activity in connection with our securities; and
- may not bid for or purchase any of our securities or attempt to induce any person to purchase any of our securities, other than as permitted under the Exchange Act, until they have completed their participation in the distribution.

LEGAL MATTERS

The validity of the shares of common stock being offered hereby will be passed upon for us by Connell Foley LLP, Roseland, New Jersey. Certain legal matters in connection with this offering will be passed upon for the Placement Agent by Sullivan & Worcester LLP, New York, New York.

EXPERTS

The consolidated financial statements of EMCORE Corporation as of September 30, 2022 and 2021, and for each of the years in the three-year period ended September 30, 2022 and management's assessment of the effectiveness of internal control over financial reporting as of September 30, 2022, have been incorporated by reference herein in reliance upon the report of KPMG LLP, independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing. 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.

The financial statements of the KVH Inertial Navigation Segment as of December 31, 2021 and 2020 and for each of the two years in the period ended December 31, 2021, incorporated by reference in this prospectus and elsewhere in the registration statement have been so incorporated by reference in reliance upon the report of Grant Thornton LLP, independent certified public accountants, upon the authority of said firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to the shares of common stock offered by this prospectus supplement. This prospectus supplement and the accompanying prospectus are part of the registration statement, but the registration statement includes and incorporates by reference additional information and exhibits. This prospectus supplement does not contain all the information set forth in the registration statement and its exhibits and schedules, portions of which have been omitted as permitted by the rules and regulations of the SEC. For further information about us, we refer you to the registration statement and to its exhibits and schedules. Certain information in the registration statement has been omitted from this prospectus supplement and the accompanying prospectus in accordance with the rules of the SEC.

We are subject to the information requirements of the Exchange Act. We file annual, quarterly, and current reports, proxy statements and other information with the SEC. The SEC maintains a website that contains reports, proxy and information statements and other information regarding companies, such as ours, that file documents electronically with the SEC. The address of that site is http://www.sec.gov. You may also access the documents we file with the SEC on our website at www.emcore.com. The information on the SEC's website and on our website are not part of this prospectus supplement or the accompanying prospectus, and any references to these websites or any other website are inactive textual references only.

INCORPORATION OF INFORMATION BY REFERENCE

The SEC permits us to "incorporate by reference" the information contained in documents we file with the SEC, which means that we can disclose important information to you by referring you to those documents rather than by including them in this prospectus supplement or the accompanying prospectus. Information that is incorporated by reference is considered to be part of this prospectus supplement and the accompanying prospectus and you should read it with the same care that you read this prospectus supplement and the accompanying prospectus. Later information that we file with the SEC will automatically update and supersede the information that is either contained, or incorporated by reference, in this prospectus supplement and the accompanying prospectus, and will be considered to be a part of this prospectus supplement and the accompanying prospectus from the date those documents are filed. We have filed with the SEC, and incorporate by reference in this prospectus supplement and the accompanying prospectus:

- our Annual Report on Form 10-K for the fiscal year ended September 30, 2022;
- our Quarterly Report on Form 10-Q for the quarter ended December 31, 2022;
- our Current Reports on Form 8-K filed with the SEC on November 2, 2022, November 3, 2022, November 23, 2022, December 15, 2022 and January 9, 2023; and
- the description of our common stock contained in Exhibit 4.2 of our Annual Report on Form 10-K for the fiscal year ended September 30, 2022, filed with the SEC on December 28, 2022, which updated the description thereof contained in our Registration Statement on Form 8-A, filed with the SEC on February 26, 1997 (File No. 000-22175).

We also incorporate by reference all additional documents that we file with the SEC under the terms of Section 13(a), 13(c), 14, or 15(d) of the Exchange Act that are made after the initial filing date of the registration statement of which this prospectus supplement and the accompanying prospectus is a part and the effectiveness of the registration statement, as well as between the date of this prospectus supplement and the termination of any offering of securities offered by this prospectus supplement and the accompanying prospectus. We are not, however, incorporating, in each case, any documents or information that we are deemed to furnish and not file in accordance with SEC rules.

Upon request, we will provide, without charge, to each person, including any beneficial owner, to whom a copy of this prospectus is delivered, a copy of any or all of the documents incorporated by reference into this prospectus but not delivered herewith. You may request a copy of these filings, any exhibits we have specifically incorporated by reference as an exhibit in this prospectus, at no cost by writing us at the following address: 2015 W. Chestnut Street, Alhambra, California, or telephoning us at (626) 293-3400. You may also access these documents, free of charge on the SEC's website at www.sec.gov or on our website at www.emcore.com. Information contained on our website and on the SEC's website is not incorporated by reference into this prospectus supplement or the accompanying prospectus and you should not consider any information on, or that can be accessed from, our website or the SEC's website as part of this prospectus supplement or the accompanying prospectus.

PROSPECTUS

EMCORE Corporation

$150,000,000
Common Stock
Preferred Stock
Debt Securities
Warrants
Rights
Units

From time to time, we may offer to sell the securities described in this prospectus separately or together in any combination, in one or more classes or series, in amounts, at prices and on terms that we will determine at the time of any such offering.

This prospectus describes some of the general terms that may apply to the offered securities. Each time any securities are offered pursuant to this prospectus, we will provide the specific terms of the securities to be offered in one or more supplements to this prospectus. Prospectus supplements will also describe the manner in which these securities will be offered and may also add, update or change information in this prospectus.

The securities offered by this prospectus and any accompanying prospectus supplement may be offered by us directly to investors, to or through underwriters, dealers or other agents, or through a combination of these methods. The prospectus supplement for each offering will describe in detail the plan of distribution for that offering and will set forth the names of any underwriters, dealers or agents involved in the offering and any applicable fees, commissions or discount arrangements.

Our common stock is listed on the Nasdaq Global Market under the symbol “EMKR.” On May 12, 2021, the last reported sale price of our common stock on the Nasdaq Global Market was $7.07 per share. Any prospectus supplement will indicate if the securities offered thereby will be listed on any securities exchange.

You should carefully read this prospectus and any applicable prospectus supplement, together with the documents we incorporate by reference, before you invest in our securities. This prospectus may not be used to offer and sell our securities unless accompanied by a prospectus supplement describing the method and terms of the offering.

Investing in any of our securities involves a high degree of risk. Please read carefully the section entitled “Risk Factors” on page 6 of this prospectus and the “Risk Factors” section contained in any applicable prospectus supplement and in the documents incorporated by reference in this prospectus before investing in our securities.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is May 20, 2021

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ABOUT THIS PROSPECTUS

This prospectus is part of a “shelf” registration statement on Form S-3 that we filed with the Securities and Exchange Commission (the “SEC”) using a “shelf” registration process. Under this shelf registration process, we may, from time to time, sell any combination of the securities described in this prospectus in one or more offerings.

This prospectus provides you with a general description of the securities we may offer pursuant to the registration statement of which this prospectus forms a part. Each time we sell securities pursuant to the registration statement of which this prospectus forms a part, we will provide a prospectus supplement that contains specific information about the terms of that offering. The prospectus supplement may also add to, update or change the information contained in or incorporated by reference in this prospectus.

We are responsible only for the information contained in or incorporated by reference in this prospectus, any prospectus supplement and any free writing prospectus prepared by or on behalf of us or to which we have referred you. We have not authorized anyone to provide you with different information. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. We are not making offers to sell the securities described in this prospectus in any jurisdiction in which an offer or solicitation is not authorized or in which the person making such offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make an offer or solicitation.

Before purchasing any securities, you should carefully read both this prospectus and any prospectus supplement, together with the additional information described under the heading “Where You Can Find More Information” and “Information We Incorporate by Reference.” You should assume that the information contained in this prospectus, any prospectus supplement or any free writing prospectus is accurate only as of the date on its respective cover, and that any information incorporated by reference is accurate only as of the date of the document incorporated by reference, unless we indicate otherwise. Our business, financial condition, results of operations and prospects may have changed since those dates.

References in this prospectus to the terms “we,” “us,” “our,” “EMCORE,” “the Company” or other similar terms refer to EMCORE Corporation and its consolidated subsidiaries.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public at the SEC’s website at *www.sec.gov*. Our website is located at *www.emcore.com*. Through links on the “Investors” portion of our website, we make available free of charge our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, any amendments to those reports and other information filed with, or furnished to, the SEC pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). Such material is made available through our website as soon as reasonably practicable after we electronically file the information with, or furnish it to, the SEC. The information contained on or that can be accessed through our website does not constitute part of this prospectus, except for reports filed with the SEC that are specifically incorporated herein by reference.

This prospectus is part of a registration statement on Form S-3 that we filed with the SEC. This prospectus does not contain all of the information included in the registration statement. Forms of any indenture or other documents establishing the terms of the offered securities are filed as exhibits to the registration statement of which this prospectus forms a part or will be filed through an amendment to our registration statement on Form S-3 or under cover of a Current Report on Form 8-K or other filed document and incorporated into this prospectus by reference. Statements in this prospectus about these documents are summaries and each statement is qualified in all respects by reference to the document to which it refers. You should refer to the actual documents for a more complete description of the relevant matters. The full registration statement, including exhibits thereto, may be obtained from the SEC or us as indicated above.

INFORMATION WE INCORPORATE BY REFERENCE

The SEC allows us to "incorporate by reference" information into this prospectus, which means that we can disclose important information to you by referring you to another document filed separately with the SEC. We incorporate by reference in this prospectus the following documents and reports (other than, in each case, the portions that are deemed to have been furnished and not filed in accordance with SEC rules):

- our Annual Report on Form 10-K for the fiscal year ended September 30, 2020;
- our Quarterly Reports on Form 10-Q for the fiscal quarters ended December 31, 2020 and March 31, 2021;
- our Current Reports on Form 8-K filed with the SEC on December 16, 2020, January 13, 2021, February 10, 2021, February 11, 2021, February 16, 2021, March 23, 2021 and May 13, 2021; and
- the description of our common stock contained in Exhibit 4.2 of our Annual Report on Form 10-K for the fiscal year ended September 30, 2020, filed with the SEC on December 8, 2020, which updated the description thereof contained in our Registration Statement on Form 8-A, filed with the SEC on February 26, 1997 (File No. 000-22175).

We also incorporate by reference the information contained in all other documents that we file with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (other than the portions that are deemed to have been furnished and not filed in accordance with SEC rules, unless otherwise indicated therein), on or after the date of the registration statement of which this prospectus forms a part and prior to its effectiveness and prior to the completion of the offering of all securities under this prospectus and any prospectus supplement. The information contained in any such document will be considered part of this prospectus from the date the document is filed with the SEC. Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this prospectus and any accompanying prospectus to the extent that a statement contained herein or therein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein or therein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus or any accompanying prospectus supplement. We will provide to each person, including any beneficial owner, to whom a prospectus (or a notice of registration in lieu thereof) is delivered, a copy of any or all of the documents incorporated by reference in this prospectus or any accompanying prospectus supplement (other than an exhibit to these filings, unless the exhibit is specifically incorporated by reference in the document requested) at no cost. Any such request can be made by writing or telephoning us at the following address and telephone number:

Ryan Hochgesang
Vice President, General Counsel
EMCORE Corporation
2015 W. Chestnut Street
Alhambra, California 91803
Telephone: (626) 293-3400

FORWARD-LOOKING STATEMENTS

This prospectus, including the documents we have filed with the SEC that are incorporated by reference, contains “forward-looking statements” within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. These forward-looking statements are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These forward-looking statements are based on our current expectations and projections about future events and financial trends affecting the financial condition of our business. Such forward-looking statements include, in particular, projections about our future results included in our Exchange Act reports and statements about our plans, strategies, business prospects, changes and trends in our business and the markets in which we operate. All statements other than statements of fact, including statements identified by words, 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 are forward-looking statements. Additionally, statements concerning future matters such as our expected liquidity, development of new products, enhancements or technologies, sales levels, expense levels, expectations regarding the outcome of legal proceedings and other statements regarding matters that are not historical are forward-looking statements.

We have based these forward-looking statements on our current expectations and projections about future events and trends that we believe may affect our financial condition, results of operations, strategy, short- and long-term business operations and objectives, and financial requirements. These statements are subject to known and unknown risks, uncertainties and assumptions that could cause actual results to differ materially from those projected or otherwise implied by the forward-looking statements. Factors which may cause actual results to vary materially from those contained in the forward-looking statements include, without limitation: (a) uncertainties regarding the effects of the COVID-19 pandemic and the impact of measures intended to reduce its spread on our business and operations, which is evolving and beyond our control; (b) the rapidly evolving markets for our products and uncertainty regarding the development of these markets; (c) our historical dependence on sales to a limited number of customers and fluctuations in the mix of products and customers in any period; (d) delays and other difficulties in commercializing new products; (e) the failure of new products: (i) to perform as expected without material defects, (ii) to be manufactured at acceptable volumes, yields, and cost, (iii) to be qualified and accepted by our customers, and (iv) to successfully compete with products offered by our competitors; (f) uncertainties concerning the availability and cost of commodity materials and specialized product components that we do not make internally; (g) actions by competitors; (h) risks and uncertainties related to applicable laws and regulations, including the impact of changes to applicable tax laws and tariff regulations; (i) acquisition-related risks, including that (1) the revenues and net operating results obtained from the Systron Donner Inertial (“SDI”) business may not meet our expectations, (2) the costs and cash expenditures for integration of the SDI business operations may be higher than expected, (3) there could be losses and liabilities arising from the acquisition of SDI that we will not be able to recover from any source, and (4) we may not realize sufficient scale in our Navigation and Inertial Sensing product line from the SDI acquisition and will need to take additional steps, including making additional acquisitions, to achieve our growth objectives for this product line; (j) risks related to our ability to obtain capital; (k) risks related to the transition of certain of our manufacturing operations from our Beijing facility to a contract manufacturer’s facility; (l) risks and uncertainties related to manufacturing and production capacity and expansion plans related thereto; (m) risks related to the conversion of order backlog into product revenue; and (n) other risks described in our most recent Annual Report on Form 10-K and our subsequent periodic reports filed with the SEC, and in any prospectus supplement.

You should not place undue reliance on these forward-looking statements. We discuss in greater detail in this prospectus and in the documents incorporated by reference many of these risks, uncertainties, and assumptions under the headings “Risk Factors.” Additional cautionary statements or discussions of risks, uncertainties and assumptions that could affect our results or the achievement of the expectations described in forward-looking statements are also contained in the documents we incorporate by reference into this prospectus. Any forward-looking statement made by us in this prospectus or in any of the documents incorporated by reference in this prospectus speaks only as of the date on which it was made. We expressly disclaim any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements contained herein to reflect any change in our expectations with regard thereto or any change in

events, conditions or circumstances on which any such statement is based. You should, however, review additional disclosures we make in our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, and Current Reports on Form 8-K filed with the SEC.

You should read this prospectus and the documents incorporated by reference completely and with the understanding that our actual future results, levels of activity and performance as well as other events and circumstances may be materially different from what we expect. We qualify all of our forward-looking statements by these cautionary statements.

EMCORE CORPORATION

EMCORE Corporation was established in 1984 as a New Jersey corporation. We became publicly traded in 1997 and our common stock is listed on the Nasdaq Global Market under the ticker symbol "EMKR." EMCORE is a leading provider of sensors for navigation in the Aerospace and Defense market as well as a manufacturer of lasers and optical subsystems for use in the cable TV industry. EMCORE pioneered the linear fiber optic transmission technology that enabled the world's first delivery of Cable TV directly on fiber, and today is a leading provider of advanced *Mixed-Signal Optics* products that enable communications systems and service providers to meet growing demand for increased bandwidth and connectivity. The *Mixed-Signal Optics* technology at the heart of our broadband communications products is shared with our fiber optic gyros and inertial sensors to provide the aerospace and defense markets with state-of-the-art navigations systems technology. With the acquisition of SDI, a navigation systems provider with a scalable, chip-based platform for higher volume gyro applications utilizing Quartz MEMS technology, in June 2019, EMCORE further expanded its portfolio of gyros and inertial sensors with SDI's quartz MEMS gyro and accelerometer technology.

EMCORE's headquarters and principal executive offices are located at 2015 W. Chestnut Avenue, Alhambra, California, 91803, our main telephone number is (626) 293-3400 and our website is *www.emcore.com*. The information contained on or that can be accessed through our website does not constitute part of this prospectus, except for reports filed with the SEC that are specifically incorporated herein by reference.

RISK FACTORS

Investing in any of our securities involves significant risks. Before making an investment decision, in addition to the other information contained in or incorporated by reference in this prospectus and any prospectus supplement, you should carefully consider the specific risks set forth under the heading “Risk Factors” in our most recent Annual Report on Form 10-K filed with the SEC, as such risk factors may be amended, supplemented or superseded from time to time by other reports we file with the SEC, including subsequent Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, and the risk factors described under the caption “Risk Factors” in any applicable prospectus supplement. See “Where You Can Find More Information” and “Information We Incorporate by Reference.” If any of these risks actually occurs, our business, results of operations and financial condition could suffer. In that case, the trading price of our securities could decline, and you could lose all or part of your investment.

USE OF PROCEEDS

We intend to use the net proceeds from the sale of any securities covered by this prospectus as set forth in the applicable prospectus supplement. Pending any specific application, we may temporarily invest funds in short-term investments, including marketable securities.

DESCRIPTION OF CAPITAL STOCK

General

The following is a summary of the material provisions of our Restated Certificate of Incorporation, as amended (our "Certificate of Incorporation"), and By-Laws, as amended (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 Certificate of Incorporation and Bylaws. 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").

As of March 31, 2021, approximately 43.7 million shares of our Common Stock were issued, approximately 36.8 million shares of our Common Stock were outstanding, and no shares of Preferred Stock were issued or outstanding.

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 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 will entitle 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 will 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 will have no 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 of directors 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.

The particular terms of any series of Preferred Stock, and the transfer agent and registrar for that series, will be described in a prospectus supplement. Any material United States federal income tax consequences and other special considerations with respect to any Preferred Stock offered under this prospectus will also be described in the applicable prospectus supplement.

As of March 31, 2021, we have no outstanding shares of Preferred Stock. All shares of Preferred Stock will be, if and when issued, fully paid and nonassessable.

Anti-Takeover Effects of Our Certificate of Incorporation and Bylaws 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 of directors may consider inadequate and to encourage persons seeking to acquire control of our company to first negotiate with our board of directors.

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 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 directors 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 shareholder 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 of directors or to propose matters that can be acted on by shareholders at shareholder meetings;
- provide for the filling of vacancies on our board of directors by action of 66 2/3% of the directors and not by the shareholders; and
- provide that the authorized number of directors may be changed only by resolution of the board of directors.

New Jersey Shareholders Protection Act

We are subject to NJBCA Section 14A-10A, which is also known 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 shareholder 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, directly or indirectly, 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 shareholder or any corporation that is, or after the merger or consolidation would be, an affiliate or associate of the interested shareholder;
- the sale, lease, exchange, mortgage, pledge, transfer or other disposition to an interested shareholder or any affiliate or associate of the interested shareholder of 10% or more of the aggregate market value of the corporation’s assets; or
- the issuance or transfer to an interested shareholder or any affiliate or associate of the interested shareholder 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 Exchange Act.

Listing

Our Common Stock is listed on the Nasdaq Global 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.

DESCRIPTION OF DEBT SECURITIES

The following description, together with the additional information we include in any applicable prospectus supplement, summarizes certain general terms and provisions of the debt securities that we may offer in one or more series under this prospectus. When we offer to sell a particular series of debt securities, we will describe the specific terms of the series in a supplement to this prospectus. We will also indicate in the supplement to what extent the general terms and provisions described in this prospectus apply to a particular series of debt securities. To the extent the information contained in the prospectus supplement differs from this summary description, you should rely on the information in the prospectus supplement.

We will issue any senior debt securities under the senior indenture which we will enter into with the trustee to be named in the senior indenture. We will issue any subordinated debt securities under the subordinated indenture which we will enter into with the trustee to be named in the subordinated indenture. We have filed forms of these indentures as exhibits to the registration statement of which this prospectus is a part, and supplemental indentures and forms of debt securities containing the terms of the debt securities being offered will be filed as exhibits to the registration statement of which this prospectus is a part or will be incorporated by reference from reports that we file with the SEC. Unless the context requires otherwise, we use the term “indenture” to refer to both the senior indenture and the subordinated indenture, as well as to refer to any supplemental indentures that specify the terms of a particular series of debt securities. Except as we may otherwise indicate, the terms of the senior indenture and the subordinated indenture are identical.

The indenture will be qualified under the Trust Indenture Act of 1939. We use the term “trustee” to refer to either the senior trustee or the subordinated trustee, as applicable.

The following summary of material provisions of the senior debt securities, the subordinated debt securities and the indenture is subject to, and is qualified in its entirety by reference to, all the provisions of the indenture applicable to a particular series of debt securities. We urge you to read the applicable prospectus supplement related to the debt securities that we sell under this prospectus, as well as the complete indenture that contains the terms of the debt securities.

General

The indenture does not limit the aggregate principal amount of debt securities that may be issued thereunder. The debt securities may be issued from time to time in one or more series and the terms of each series of debt securities will be established by or pursuant to a resolution of our board of directors and set forth in an officer’s certificate or a supplemental indenture. The particular terms of each series of debt securities will be described in a prospectus supplement relating to that series (including any pricing supplement or term sheet), including the following terms, if applicable:

- the title of the debt securities;
- the price or prices (expressed as a percentage of the principal amount) at which we will sell the debt securities;
- the aggregate principal amount of the debt securities being offered and any limit on the aggregate principal amount of that series of debt securities;
- whether any of our direct or indirect subsidiaries will guarantee the debt securities, including the terms of subordination, if any, of those guarantees;
- the terms of the subordination of any series of subordinated debt securities;
- the date or dates on which the principal of the securities of the series is payable;
- the interest rate, if any, and the method for calculating the interest rate;
- the identity of the trustee;
- the dates from which interest will accrue, the interest payment dates and the record dates for the interest payments;

- the place or places where the principal of (and premium, if any) and interest on the debt securities shall be payable, where the securities of that series may be surrendered for registration of transfer or exchange, and where notices and demands to us in respect of the debt securities may be delivered;
- any mandatory or optional redemption terms;
- any obligation we have to redeem or purchase the debt securities pursuant to any sinking fund or analogous provisions or at the option of a holder of debt securities and the period or periods within which, the price or prices at which and the terms and conditions upon which securities of the series shall be redeemed or purchased, in whole or in part, pursuant to that obligation;
- any dates, if any, on which, and the price or prices at which, we will repurchase debt securities at the option of the holders of debt securities and other detailed terms and provisions of any such repurchase obligations;
- the denominations in which the debt securities will be issued;
- whether the debt securities will be issued in the form of certificated debt securities or global debt securities;
- if other than the principal amount thereof, the portion of the principal amount of the debt securities of the series that shall be payable upon declaration of acceleration of the maturity thereof;
- if the debt securities are denominated in other than United States dollars, the currency or currencies (including composite currencies) in which the debt securities are denominated;
- the designation of the currency, currencies or currency units in which payment of the principal of (and premium, if any) and interest, if any, on the debt securities of the series will be made;
- if payments of principal (and premium, if any) or interest, if any, in respect of the debt securities will be made in one or more currencies or currency units other than that or those in which the debt securities are denominated, the manner in which the exchange rate with respect to those payments will be determined;
- the manner in which the amounts of payment of principal of, or any interest on, the debt securities will be determined, if these amounts may be determined by reference to an index based on a currency or currencies or by reference to a commodity, commodity index, stock exchange index or financial index;
- any provisions relating to any security provided for the debt securities;
- any addition to, deletion of or change in the events of default described in this prospectus or in the indenture with respect to the debt securities and any change in the acceleration provisions described in this prospectus or in the indenture with respect to the debt securities;
- any addition to, deletion of or change in the covenants described in this prospectus or in the indenture with respect to the debt securities;
- any depositaries, interest rate calculation agents, exchange rate calculation agents or other agents appointed with respect to the debt securities;
- the provisions, if any, relating to conversion or exchange of any series of debt securities, including if applicable, the conversion or exchange price and period, the securities or other property into which the debt securities will be convertible, provisions as to whether conversion or exchange will be mandatory, at the option of the holders thereof or at our option, the events requiring an adjustment of the conversion price or exchange price and provisions affecting conversion or exchange if that series of debt securities is redeemed; and
- any other terms of the series of debt securities that may supplement, modify or delete any provision of the indenture as it applies to that series, including any terms that may be required under applicable law or regulations or advisable in connection with the marketing of the debt securities.

In addition, we will provide you with information on the federal income tax considerations and other special considerations applicable to any of these debt securities in the applicable prospectus supplement.

If we denominate the purchase price of any of the debt securities in a foreign currency or currencies or a foreign currency unit or units, or if the principal of and any premium and interest on any series of debt securities is payable in a foreign currency or currencies or a foreign currency unit or units, we will provide you with information on the restrictions, elections, general tax considerations, specific terms and other information with respect to that issue of debt securities and the foreign currency or currencies or foreign currency unit or units in the applicable prospectus supplement.

Transfer and Exchange

Each debt security will be represented by either one or more global securities registered in the name of The Depository Trust Company, as the depositary, or a nominee of the depositary (we will refer to any such debt security as a "global debt security"), or a certificate issued in definitive registered form (we will refer to any debt security represented by a certificate as a "certificated debt security") as set forth in the applicable prospectus supplement. Except as set forth below, global debt securities will not be issuable in certificated form.

Certificated Debt Securities. You may transfer or exchange certificated debt securities at any office we maintain for this purpose in accordance with the terms of the indenture. No service charge will be made for any transfer or exchange of certificated debt securities, but we may require payment of a sum sufficient to cover any tax or other governmental charge payable in connection with a transfer or exchange.

You may effect the transfer of certificated debt securities and the right to receive the principal of and any premium and interest on certificated debt securities only by surrendering the certificate representing those certificated debt securities and either reissuance by us or the trustee of the certificate to the new holder or the issuance by us or the trustee of a new certificate to the new holder.

Global Debt Securities and Book-Entry System. Each global debt security will be deposited with, or on behalf of, the depositary, and registered in the name of the depositary or a nominee of the depositary. Beneficial interests in global debt securities will not be issuable in certificated form unless (i) the depositary has notified us that it is unwilling or unable to continue as depositary for that global debt security or has ceased to be qualified to act as such as required by the indenture and we fail to appoint a successor depositary within 90 days of such event, (ii) we determine, in our sole discretion, not to have those securities represented by one or more global securities or (iii) any other circumstances shall exist, in addition to or in lieu of those described above, as may be described in the applicable prospectus supplement. Unless and until a global debt security is exchanged for certificated debt securities under the limited circumstances described in the previous sentence, a global debt security may not be transferred except as a whole by the depositary to its nominee or by the nominee to the depositary, or by the depositary or its nominee to a successor depositary or to a nominee of the successor depositary.

Consolidation, Merger and Sale of Assets

The indenture generally provides that we may not consolidate with or merge with or into, sell, convey, transfer or dispose of all or substantially all of our assets to another entity, whether in one transaction or a series of related transactions, unless: (i) the resulting, surviving or transferee entity (A) is a corporation, limited liability corporation, partnership or trust organized under the laws of the United States, any state thereof or the District of Columbia, and (B) expressly assumes by a supplemental indenture all of our obligations under the debt securities and the indenture, (ii) immediately after giving effect to such transaction no Event of Default (as defined herein) and no circumstances which, after notice or lapse of time or both, would become an Event of Default, shall have happened and be continuing, and (iii) we shall have delivered to the trustee an officers' certificate and an opinion of counsel, each stating that such consolidation, merger or transfer and such supplemental indenture comply with the indenture.

Events of Default

"Event of Default" means with respect to any series of debt securities, any of the following:

- default in the payment of any interest upon any debt security of that series when it becomes due andpayable, and continuance of such default for a period of 30 days (unless the entire amount of the payment is deposited by us with the trustee or with a paying agent prior to the expiration of the 30-dayperiod);

- default in the payment of principal of, or any premium on, any debt security of that series at its maturity;
- default in the performance or breach of any covenant by us in the indenture (other than defaults described above or defaults relating to a covenant that has been included in the indenture solely for the benefit of a series of debt securities other than that series), which default continues uncured for a period of 90 days after we receive written notice thereof;
- the occurrence of specified events of bankruptcy, insolvency or reorganization; and
- any other event of default provided with respect to a series of debt securities that is described in the applicable prospectus supplement.

No event of default with respect to a particular series of debt securities (except as to certain events of bankruptcy, insolvency or reorganization) necessarily constitutes an event of default with respect to any other series of debt securities. The occurrence of certain events of default or an acceleration under the indenture may constitute an event of default under certain indebtedness of ours or our subsidiaries outstanding from time to time.

If an event of default with respect to any series of debt securities at the time outstanding occurs and is continuing (other than an event of default resulting from certain events of bankruptcy, insolvency or reorganization), then the trustee or the holders of not less than 25% in principal amount of the outstanding debt securities of that series may, by a notice in writing to us (and to the trustee if given by the holders), declare to be due and payable immediately the principal of (or, if the debt securities of that series are discount securities, that portion of the principal amount as may be specified in the terms of that series) and accrued and unpaid interest, if any, on all debt securities of that series. In the case of an event of default resulting from certain events of bankruptcy, insolvency or reorganization, the principal amount (or such specified amount) of and accrued and unpaid interest, if any, on all outstanding debt securities will become and be immediately due and payable without any declaration or other act on the part of the trustee or any holder of outstanding debt securities. At any time after a declaration of acceleration with respect to debt securities of any series has been made, but before a judgment or decree for payment of the money due has been obtained by the trustee, the holders of a majority in principal amount of the outstanding debt securities of that series, by written notice to us and the trustee, may rescind and annul such declaration of acceleration and its consequences if all events of default, other than the non-payment of accelerated principal and interest, if any, with respect to debt securities of that series, have been cured or waived as provided in the indenture. We refer you to the prospectus supplement relating to any series of debt securities that are discount securities for the particular provisions relating to acceleration of a portion of the principal amount of those discount securities upon the occurrence of an event of default.

The indenture provides that the trustee will be under no obligation to perform any duty or exercise any of its rights or powers under the indenture unless the trustee receives indemnity satisfactory to it against any cost, liability or expense which might be incurred by it in performing that duty or exercising that right or power. Subject to certain rights of the trustee, the holders of a majority in principal amount of the outstanding debt securities of any series will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the trustee or exercising any trust or power conferred on the trustee with respect to the debt securities of that series.

No holder of any debt security of any series will have any right to institute any proceeding, judicial or otherwise, with respect to the indenture or for the appointment of a receiver or trustee, or for any remedy under the indenture, unless:

- that holder has previously given to the trustee written notice of a continuing event of default with respect to debt securities of that series;
- the holders of not less than 25% in principal amount of the outstanding debt securities of that series have made written request to the trustee to institute the proceedings in respect of that event of default in its own name as trustee under the indenture;
- such holder or holders have offered to the trustee indemnity or security satisfactory to the trustee against the costs, expenses and liabilities which might be incurred by the trustee in compliance with the request;

- the trustee has failed to institute any such proceeding for 60 days after its receipt of such notice, request and offer of indemnity; and
- no direction inconsistent with the written request has been given to the trustee during that 60-day period by holders of a majority in principal amount of the outstanding debt securities of that series.

Notwithstanding any other provision in the indenture, the holder of any debt security will have an absolute and unconditional right to receive payment of the principal of, and any interest on, that debt security on or after the due dates expressed in that debt security (or, in the case of redemption, on the redemption date) and to institute suit for the enforcement of any such payment, and such rights shall not be impaired without the consent of such holder.

The indenture requires us, within 120 days after the end of our fiscal year, to furnish to the trustee a statement as to compliance with the indenture from our principal executive officer, principal financial officer or principal accounting officer. If a default or event of default occurs and is continuing with respect to the debt securities of any series and if it is actually known to a responsible officer of the trustee, the trustee shall mail to each holder of the debt securities of that series notice of a default or event of default within 90 days after it occurs or, if later, after a responsible officer of the trustee has knowledge of such default or event of default. The indenture provides that the trustee may withhold notice to the holders of debt securities of any series of any default or event of default (except in payment on any debt securities of that series) with respect to debt securities of that series if the trustee determines in good faith that withholding notice is in the interest of the holders of those debt securities.

Modification and Waiver

We and the trustee may modify and amend or supplement the indenture or the debt securities of one or more series without the consent of any holder of any debt security:

- to add guarantees with respect to debt securities of a series or secure debt securities of a series;
- to surrender any of our rights or powers under the indenture;
- to add covenants or events of default for the benefit of the holders of any series of debt securities;
- to secure the debt securities;
- to comply with the applicable rules or procedures of any applicable depositary;
- to cure any ambiguity, defect or inconsistency;
- to comply with the provisions of the indenture concerning consolidations, mergers and transfers of all or substantially all of our assets;
- to provide for uncertificated securities in addition to or in place of certificated securities;
- to make any change that does not materially adversely affect the rights of any holder of that series of debt securities;
- to effect the appointment of a successor trustee with respect to the debt securities of any series and to add to or change any of the provisions of the indenture to provide for or facilitate administration by more than one trustee;
- to comply with requirements of the SEC in order to effect or maintain the qualification of the indenture under the Trust Indenture Act;
- to comply with the rules or regulations of any securities exchange or automated quotation system on which any of the debt securities may be listed or traded;
- to provide for the issuance of and establish the form and terms and conditions of debt securities of any series as permitted by the indenture; and
- for certain other reasons set forth in any prospectus supplement.

We may also modify and amend the indenture with the consent of the holders of at least a majority in principal amount of the outstanding debt securities of each series affected by the modifications or

amendments. We may not make any modification or amendment without the consent of the holders of each affected debt security then outstanding if that amendment will:

- reduce the principal amount of debt securities of that series whose holders must consent to an amendment, supplement or waiver;
- reduce the rate of or extend the time for payment of interest (including default interest) on any debt security or that series;
- reduce the principal of, or change the fixed maturity of, any debt security of that series or reduce the amount of, or postpone the date fixed for, the payment of any sinking fund or analogous obligation with respect to that series of debt securities;
- reduce the principal amount of discount securities of that series payable upon acceleration of maturity;
- waive a default in the payment of the principal of, or interest, if any, on any debt security of that series (except a rescission of acceleration of the debt securities of any series by the holders of at least a majority in principal amount of the then outstanding debt securities of that series and a waiver of the payment default that resulted from such acceleration);
- make the principal of, or any interest on, any debt security of that series payable in currency other than that stated in the debt security;
- make any change to certain provisions of the indenture relating to, among other things, (i) the right of holders of debt securities to receive payment of the principal of, and any interest on, those debt securities and to institute suit for the enforcement of any such payment and (ii) waivers or amendments; or
- waive a redemption payment with respect to any debt security of that series, provided that such redemption is made at our option.

Except for certain specified provisions, the holders of at least a majority in principal amount of the outstanding debt securities of any series may, on behalf of the holders of all debt securities of that series, by written notice to the trustee, waive our compliance with provisions of the indenture or the debt securities with respect to that series. The holders of a majority in principal amount of the outstanding debt securities of any series may, on behalf of the holders of all the debt securities of that series, waive any past default under the indenture with respect to that series and its consequences, except a default in the payment of the principal of, or any interest on, any debt security of that series; provided, however, that the holders of a majority in principal amount of the outstanding debt securities of any series may rescind an acceleration and its consequences, including any related payment default that resulted from the acceleration.

Satisfaction and Discharge of Indenture

The indenture shall cease to be of further effect with respect to a series of debt securities when either:

- we have delivered to the trustee for cancellation all outstanding debt securities of that series, other than any debt securities that have been destroyed, lost or stolen and that have been replaced or paid as provided in the indenture;
- all outstanding debt securities of that series that have not been delivered to the trustee for cancellation have become due and payable or are by their terms to become due and payable within one year or are to be called for redemption within one year under arrangements satisfactory to the trustee for the giving of notice of redemption, and we have irrevocably deposited with the trustee as trust funds the entire amount, in cash in U.S. dollars or U.S. governmental obligations, sufficient to pay at maturity or upon redemption all debt securities of that series, including principal of and any premium and interest due or to become due to such date of maturity or date fixed for redemption, as the case may be; or
- we have properly fulfilled any other means of satisfaction and discharge that may be set forth in the terms of the debt securities of that series.

In each case, we will also pay all other sums payable by us under the indenture with respect to the debt securities of that series and deliver to the trustee an opinion of counsel and an officers' certificate, each stating that all conditions precedent to satisfaction and discharge with respect to the debt securities of that series have been complied with.

Defeasance

Legal Defeasance. The indenture provides that, unless otherwise provided by the terms of the applicable series of debt securities, we may be discharged from any and all obligations in respect of the debt securities of any series (subject to certain exceptions). We will be so discharged upon the deposit with the trustee, in trust, of money and/or U.S. government obligations or, in the case of debt securities denominated in a single currency other than U.S. dollars, government obligations of the government that issued or caused to be issued such currency, that, through the payment of interest and principal in accordance with their terms, will provide money in an amount sufficient in the opinion of a nationally recognized firm of independent public accountants or investment bank to pay and discharge each installment of principal of and interest, if any, on and any mandatory sinking fund payments in respect of the debt securities of that series on the stated maturity of those payments in accordance with the terms of the indenture and those debt securities.

This discharge may occur only if, among other things, we have delivered to the trustee an opinion of counsel stating that we have received from, or there has been published by, the United States Internal Revenue Service a ruling or, since the date of execution of the indenture, there has been a change in the applicable United States federal income tax law, in either case to the effect that, and based thereon such opinion shall confirm that, the holders of the debt securities of that series will not recognize income, gain or loss for United States federal income tax purposes as a result of the deposit, defeasance and discharge and will be subject to United States federal income tax on the same amounts and in the same manner and at the same times as would have been the case if the deposit, defeasance and discharge had not occurred.

Defeasance of Certain Covenants. The indenture provides that, unless otherwise provided by the terms of the applicable series of debt securities, upon compliance with certain conditions:

- we may be released from our obligations with respect to certain covenants set forth in the indenture, as well as any additional covenants which may be set forth in the applicable prospectus supplement and supplemental indenture; and
- any omission to comply with those covenants will not constitute a default or an event of default with respect to the debt securities of that series ("covenant defeasance").

The conditions include:

- depositing with the trustee money and/or U.S. government obligations or, in the case of debt securities denominated in a single currency other than U.S. dollars, government obligations of the government that issued or caused to be issued such currency, that, through the payment of interest and principal in accordance with their terms, will provide money in an amount sufficient in the opinion of a nationally recognized firm of independent public accountants or investment bank to pay and discharge each installment of principal of and interest, if any, on and any mandatory sinking fund payments in respect of the debt securities of that series on the stated maturity of those payments in accordance with the terms of the indenture and those debt securities;
- delivering to the trustee an opinion of counsel to the effect that the holders of the debt securities of that series will not recognize income, gain or loss for United States federal income tax purposes as a result of the deposit and related covenant defeasance and will be subject to United States federal income tax on the same amounts and in the same manner and at the same times as would have been the case if the deposit and related covenant defeasance had not occurred; and
- delivering to the trustee an opinion of counsel and an officer's certificate, each stating that all conditions precedent to defeasance with respect to the debt securities of that series have been complied with.

Governing Law

The indenture and any debt securities issued thereunder will be governed by and construed in accordance with the laws of the State of New York (without regard to the conflicts of law provisions other than Section 5-1401 of the New York General Obligations Law).

Subordination of Subordinated Debt Securities

The subordinated debt securities will be subordinate and junior in priority to certain of our other indebtedness to the extent described in a prospectus supplement.

DESCRIPTION OF WARRANTS

We may issue warrants to purchase shares of our common stock, shares of our preferred stock or debt securities. We may issue warrants independently of or together with shares of our common stock, shares of our preferred stock, debt securities or other securities offered by any prospectus supplement. Warrants sold with other securities may be attached to or separate from shares of our common stock, shares of our preferred stock, debt securities or other securities. We will issue warrants under one or more warrant agreements between us and a bank or trust company, as warrant agent, that we will name in the prospectus supplement relating to the particular issue of offered warrants. The warrant agent will act solely as our agent in connection with the warrants and will not assume any obligation or relationship of agency or trust for or with any holders or beneficial owners of warrants.

The prospectus supplement relating to any warrants we offer will include specific terms relating to the offering. These terms may include some or all of the following:

- the title of the warrants;
- the aggregate number of warrants to be offered;
- the price or prices at which the warrants will be issued;
- the currency or currencies, including composite currencies, in which the price of the warrants may be payable;
- the designation and terms of the securities purchasable upon exercise of the warrants and the number of securities issuable upon exercise of the warrants;
- the price at which and the currency or currencies, including composite currencies, in which the securities purchasable upon exercise of the warrants may be purchased;
- the date on which the right to exercise the warrants shall commence and the date on which that right will expire;
- if applicable, the minimum or maximum amount of the warrants that may be exercised at any one time;
- if applicable, the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each such security;
- if applicable, the terms related to any permitted adjustment in the exercise price of or number of securities covered by the warrants;
- if applicable, the date on and after which the warrants and the related securities will be separately transferable;
- if applicable, a discussion of any material federal income tax considerations; and
- any other terms of the warrants, including terms, procedures and limitations relating to the exchange and exercise of warrants.

Exercise of Warrants

Each warrant will entitle the holder to purchase the securities that we specify in the applicable prospectus supplement at the exercise price that we describe in the applicable prospectus supplement. Holders of the warrants may exercise the warrants at any time up to the specified time on the expiration date that we set forth in the applicable prospectus supplement. After the specified time on the expiration date, unexercised warrants will become void.

Warrants may be exercised as described in the applicable prospectus supplement. Upon receipt of the required payment and the warrant certificate properly completed and duly executed at the corporate trust office of the warrant agent or any other office indicated in the applicable prospectus supplement, we will, as soon as practicable, issue and deliver the underlying securities purchasable upon such exercise. If fewer than all of the warrants represented by a warrant certificate are exercised, we will issue a new warrant certificate for the remaining amount of warrants.

The description in the applicable prospectus supplement of any warrants we offer will not necessarily be complete and will be qualified in its entirety by reference to the applicable form of warrant agreement, including a form of warrant certificate, which will describe the terms of the series of warrants being offered and which will be filed with the SEC and incorporated by reference in the registration statement of which this prospectus is a part.

DESCRIPTION OF RIGHTS

We may issue rights for the purchase of shares of our common stock, shares of our preferred stock or debt securities. Each series of rights will be issued under a separate rights agreement to be entered into with a bank or trust company, as rights agent, all as set forth in the applicable prospectus supplement. The rights agent will act solely as our agent in connection with the certificates relating to the rights and will not assume any obligation or relationship of agency or trust with any holders of rights certificates or beneficial owners of rights.

The prospectus supplement relating to any rights we offer will describe the specific terms of those rights. These terms may include some or all of the following:

- the date for determining the persons entitled to participate in the rights distribution;
- the title and aggregate number or amount of underlying securities purchasable upon exercise of the rights and the exercise price;
- the aggregate number of rights being issued;
- the date, if any, on and after which the rights may be transferable separately;
- the date on which the right to exercise the rights will commence and the date on which the right will expire;
- the number of rights outstanding, if any;
- if applicable, a discussion of any material federal income tax considerations; and
- any other terms of the rights, including the terms, procedures and limitations relating to the distribution, exchange and exercise of the rights.

Rights will be exercisable for U.S. dollars only and will be in registered form only.

The description in the applicable prospectus supplement of any rights we offer will not necessarily be complete and will be qualified in its entirety by reference to the applicable form of rights agreement, which will describe the terms of the series of rights being offered and which will be filed with the SEC and incorporated by reference in the registration statement of which this prospectus is a part.

DESCRIPTION OF UNITS

We may issue units comprising two or more securities described in this prospectus in any combination. For example, we might issue units consisting of a combination of debt securities and warrants to purchase common stock. The following description sets forth certain general terms and provisions of the units that we may offer pursuant to this prospectus. The particular terms of the units and the extent, if any, to which the general terms and provisions may apply to the units so offered will be described in the applicable prospectus supplement.

Each unit will be issued so that the holder of the unit also is the holder of each security included in the unit. Thus, the unit will have the rights and obligations of a holder of each included security. Units will be issued pursuant to the terms of a unit agreement, which may provide that the securities included in the unit may not be held or transferred separately at any time or at any time before a specified date.

The prospectus supplement relating to any particular issuance of units we offer will describe the terms of those units. These terms may include some or all of the following:

- the designation and terms of the units and the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;
- any provision for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units; and
- whether the units will be issued in fully registered or global form.

The description in the applicable prospectus supplement of any units we offer will not necessarily be complete and will be qualified in its entirety by reference to the applicable form of unit agreement, including a form of unit certificate, which will describe the terms of the series of units being offered and which will be filed with the SEC and incorporated by reference in the registration statement of which this prospectus is a part.

PLAN OF DISTRIBUTION

We may offer and sell the securities described in this prospectus from time to time in one or more transactions, including without limitation:

- directly to one or more investors, including through a specific bidding, auction or other process;
- to investors through agents;
- directly to agents;
- to or through brokers or dealers;
- to the public through underwriting syndicates led by one or more managing underwriters;
- to one or more underwriters acting alone for resale to investors or to the public; or
- through a combination of any of these methods or any other method permitted pursuant to applicable law.

In addition, the manner in which we may offer and sell some or all of the securities described in this prospectus includes, without limitation, through:

- a block trade in which a broker-dealer will attempt to sell as agent, but may position or resell a portion of the block, as principal, in order to facilitate the transaction;
- purchases by a broker-dealer, as principal, and resale by the broker-dealer for its account;
- ordinary brokerage transactions and transactions in which a broker solicits purchasers; or
- privately negotiated transactions.

A prospectus supplement with respect to each offering of securities will set forth the terms of the offering and the method of distribution of the securities and will identify any firms acting as underwriters, dealers or agents in connection with the offering, including:

- the name or names of any underwriters, dealers or agents and the amounts of securities underwritten or purchased by each of them, if any;
- the purchase price of the securities being offered and the net proceeds to be received by us from the sale;
- any public offering price;
- any over-allotment options under which the underwriters may purchase additional securities from us;
- any delayed delivery arrangements;
- any underwriting discounts or commissions or agency fees and other items constituting compensation to underwriters, dealers or agents;
- any discounts or concessions allowed or reallowed or paid to dealers; and
- any securities exchange or markets on which the securities offered in the prospectus supplement may be listed.

The offer and sale of the securities described in this prospectus by us, the underwriters or the third parties described above may be effected from time to time in one or more transactions, including privately negotiated transactions, either:

- at a fixed price or prices, which may be changed;
- at market prices prevailing at the time of sale;
- in “at the market offerings,” within the meaning of Rule 415(a)(4) of the Securities Act, to or through a market maker or into an existing trading market, on an exchange or otherwise;

- at prices related to the prevailing market prices; or
- at negotiated prices.

In connection with the sale of the securities, underwriters, dealers or agents may be deemed to have received compensation from us in the form of underwriting discounts or commissions and also may receive commissions from securities purchasers for whom they may act as agent. Underwriters may sell the securities to or through dealers, and the dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters or commissions from the purchasers for whom they may act as agent.

Underwriters, dealers and agents participating in the securities distribution may be deemed to be underwriters, and any discounts and commissions they receive and any profit they realize on the resale of the securities may be deemed to be underwriting discounts and commissions under the Securities Act. Underwriters and their controlling persons, dealers and agents may be entitled, under agreements entered into with us, to indemnification against and contribution toward specific civil liabilities, including liabilities under the Securities Act.

Any securities we sell pursuant to a prospectus supplement may or may not be listed on a national securities exchange. It is possible that one or more underwriters may make a market in the securities, but such underwriters will not be obligated to do so and may discontinue any market making at any time without notice. No assurance can be given as to the liquidity of, or the trading market for, any offered securities.

In connection with any offering, the underwriters may purchase and sell securities in the open market. These transactions may include short sales, stabilizing transactions and purchases to cover positions created by short sales. Short sales involve the sale by the underwriters of a greater number of securities than they are required to purchase in an offering. Stabilizing transactions consist of bids or purchases made for the purpose of preventing a decline in the market price of the securities while an offering is in progress. The underwriters also may impose a penalty bid. This occurs when a particular underwriter repays to the underwriters a portion of the underwriting discount received by it because the underwriters have repurchased securities sold by or for the account of that underwriter in stabilizing or short-covering transactions. These activities by the underwriters may stabilize, maintain or otherwise affect the market price of the securities. As a result, the price of the securities may be higher than the price that otherwise might exist in the open market. If these activities are commenced, they may be discontinued by the underwriters at any time. Underwriters may engage in over-allotment. If any underwriters create a short position in the securities in an offering in which they sell more securities than are set forth on the cover page of the applicable prospectus supplement, the underwriters may reduce that short position by purchasing the securities in the open market.

Underwriters, dealers or agents that participate in the offer of securities, or their affiliates or associates, may have engaged or engage in transactions with and perform services for, us or our affiliates in the ordinary course of business for which they may have received or receive customary fees and reimbursement of expenses.

LEGAL MATTERS

Certain legal matters relating to the issuance and sale of the securities will be passed upon for us by Connell Foley LLP, Roseland, New Jersey.

EXPERTS

The consolidated financial statements of EMCORE Corporation as of September 30, 2020 and 2019, and for each of the years in the three-year period ended September 30, 2020, have been incorporated by reference herein in reliance upon the report of KPMG LLP, independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing. The audit report covering the September 30, 2020 consolidated financial statements refers to a change to the method of accounting for leases due to the adoption of the Financial Accounting Standards Board's Accounting Standards Codification Topic 842, *Leases*.

Shares

emcore®

Common Stock

PROSPECTUS SUPPLEMENT

A.G.P.

Sole Placement Agent

, 2023