

EMCORE CORP
Form 424B5
March 18, 2010

PROSPECTUS SUPPLEMENT
To Prospectus dated October 1, 2009

Filed Pursuant to Rule 424(b)(5)
Registration Statement No. 333-160437

EMCORE Corporation

1,870,042 Shares
Common Stock

Pursuant to this prospectus supplement and the accompanying prospectus, we are offering 1,870,042 shares of our common stock to Commerce Court Small Cap Value Fund, Ltd., or Commerce Court, pursuant to a Common Stock Purchase Agreement, dated October 1, 2009, between us and Commerce Court, at a price of approximately \$1.07 per share.

This prospectus supplement and the accompanying prospectus also cover the sale of the shares offered to Commerce Court by Commerce Court to the public. Commerce Court is an “underwriter” within the meaning of Section 2(a)(11) of the Securities Act of 1933, as amended, and any profits on the sales of shares of our common stock by Commerce Court and any discounts, commissions or concessions received by Commerce Court may be deemed to be underwriting discounts and commissions under the Securities Act.

We expect to issue the shares to Commerce Court on or about March 18, 2010. Our common stock is listed on The NASDAQ Global Market under the symbol “EMKR.” On March 17, 2010, the last reported sale price of our common stock on The NASDAQ Global Market was \$1.09 per share.

Investing in our common stock involves risk. See “Risk Factors” on page S-7. You should carefully review the risks and uncertainties described under the heading “Risk Factors” contained in the applicable prospectus supplement and under similar headings in the documents that are incorporated by reference in this 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.

The date of this prospectus supplement is March 18, 2010

You should rely only on the information contained or incorporated by reference in this prospectus supplement. We have not authorized anyone to provide you with additional information or information different from that contained in this prospectus supplement. The information contained or incorporated by reference in this prospectus supplement is accurate only as of the date of this prospectus supplement, regardless of the time of delivery of this prospectus supplement or of any sale of securities offered by this prospectus supplement. Our business, financial condition, results of operations and prospects may have changed since that date.

In this prospectus supplement, the “Company”, “EMCORE”, “we”, “us”, and “our” refer to EMCORE Corporation and its subsidiaries. Our fiscal year ends on September 30 of each calendar year. For example, fiscal year 2009 refers to the year ended September 30, 2009. EMCORE is a registered trademark of EMCORE Corporation.

TABLE OF CONTENTS

Prospectus Supplement

	Page
About this Prospectus Supplement	S-3
Special Note Regarding Forward-Looking Statements	S-4
Prospectus Supplement Summary	S-5
EMCORE Corporation	S-5
Recent Developments	S-5
The Offering	S-7
Risk Factors	S-8
Use of Proceeds	S-28
Dilution	S-28
Dividend Policy	S-28
Plan of Distribution	S-28
Legal Matters	S-29
Where You Can Find More Information	S-29
Information Incorporated by Reference	S-30

Prospectus

	Page
About this Prospectus	1
Special Note Regarding Forward-Looking Statements	2
EMCORE Corporation	3
Risk Factors	4
Use of Proceeds	5
Ratio of Earnings to Fixed Charges and Preferred Stock	5
Dividends	5
Description of Common Stock	6
Description of Preferred Stock	6
Description of Debt Securities	7
Description of Warrants	14
Description of Units	15

Plan of Distribution	15
Anti-takeover Effects of Provisions of Our Restated Certificate of Incorporation and Amended By-laws	19
New Jersey Shareholders Protection Act	19
Legal Matters	21
Experts	21
Where You Can Find More Information	21
Information Incorporated by Reference	22

ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying prospectus dated October 1, 2009 relate to a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or SEC, using a “shelf” registration process. Under this shelf registration statement, we may sell from time to time in one or more offerings up to \$50 million in shares of our common stock as described in the accompanying prospectus. Each time we sell any of our common stock under the accompanying prospectus, we will provide a prospectus supplement that will contain more specific information about the terms of that offering. We may also add, update or change in a prospectus supplement any of the information contained in the accompanying prospectus or in documents we have incorporated by reference into the accompanying prospectus. The accompanying prospectus, together with any applicable prospectus supplement and the documents incorporated by reference into the accompanying prospectus, include all material information relating to this offering. You should carefully read the accompanying prospectus and any applicable prospectus supplement together with the additional information described under “Where You Can Find More Information” before buying common stock in this offering.

S-3

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the information incorporated by reference include forward-looking statements, within the meaning of Section 27A of the Securities Act of 1933, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, or the Exchange Act. These statements are based on management's current expectations or predictions of future results or events. We make these forward-looking statements in reliance on the safe harbor provisions provided under the Private Securities Litigation Reform Act of 1995.

All statements, other than statements of historical fact, included in this prospectus and information incorporated by reference which relate to performance, development or activities that we expect or anticipate will or may happen in the future, are forward-looking statements. Other forward-looking statements may be identified by the use of forward-looking words such as "believe," "expect," "may," "might," "will," "should," "seek," "could," "approximately," "estimate," or "anticipate" or the negative of those words or other similar expressions.

Forward-looking statements involve inherent risks and uncertainties and are based on numerous assumptions. They are not guarantees of future performance. A number of important factors could cause actual results to differ materially from those in the forward-looking statement. Some factors include:

- our ability to obtain financing or sell assets and achieve levels of revenue and cost reductions that are adequate to support our capital and operating requirements;
- our ability to successfully consummate and implement our joint venture and recapitalization transaction with Tangshan Caofeidian Investment Corporation;
- our abilities to remain competitive and a leader in our industries and the future growth of the Company, our industries, and the economy in general;
- our ability to achieve structural and material cost reductions without impacting product development or manufacturing execution;
 - expected improvements in our product and technology development programs;
- our ability to successfully develop, introduce, market and qualify new products, including our terrestrial solar products;
- other risks and uncertainties described in our filings with the SEC such as: cancellations, rescheduling, or delays in product shipments; manufacturing capacity constraints; lengthy sales and qualification cycles; difficulties in the production process; changes in semiconductor industry growth; increased competition; delays in developing and commercializing new products; and other factors.

Forward-looking statements contained herein are made only as of the date made, and we do not undertake any obligation to update them to reflect events or circumstances after the date of this prospectus to reflect the occurrence of unanticipated events.

PROSPECTUS SUPPLEMENT SUMMARY

The following summary does not contain all the information that may be important to purchasers of our common stock. Prospective purchasers of our common stock should carefully review the entire prospectus, including the financial statements and other information incorporated by reference in this prospectus and any prospectus supplement, before making an investment decision.

EMCORE CORPORATION

We are a provider of compound semiconductor-based components and subsystems for the fiber optics and solar power markets. We were established in 1984 as a New Jersey corporation and have two reporting segments: Fiber Optics and Photovoltaics. Our Fiber Optics segment offers optical components, subsystems and systems that enable the transmission of video, voice and data over high-capacity fiber optic cables for high-speed data and telecommunications, cable television (“CATV”) and fiber-to-the-premises (“FTTP”) networks. Our Photovoltaics segment provides solar products for satellite and terrestrial applications. For satellite applications, we offer high-efficiency compound semiconductor-based multi-junction solar cells, covered interconnected cells (“CICs”) and fully integrated solar panels. For terrestrial applications, we offer concentrating photovoltaic (“CPV”) power systems for commercial and utility scale solar applications as well as high-efficiency multi-junction solar cells and integrated CPV components for use in other solar power concentrator systems.

Our headquarters and principal executive offices are located at 10420 Research Road, SE, Albuquerque, New Mexico, 87123, and our main telephone number is (505) 332-5000. For specific information about our Company, our products, or the markets we serve, please visit our website at <http://www.emcore.com>. The information contained in or linked to our website is not part of this prospectus.

RECENT DEVELOPMENTS

Avago-related Litigation

On March 12, 2010, the Company was advised that an initial determination had been issued by the administrative law judge of the International Trade Commission (the “ITC”) in “In the Matter of Certain Optoelectronic Devices, Components Thereof and Products Containing the Same”, Inv. No. 337-TA-669, that found that one of the two patents asserted against certain of the Company’s products was both valid and infringed. This initial determination is subject to review and confirmation by the ITC itself and to further review by the President of the United States. Any orders which might issue following such review are subject to appeal to the U.S. Court of Appeals for the Federal Circuit. The initial determination will also not be binding in the patent case currently pending between the Company and Avago in the Northern District of California, which will remain stayed until all appeals of the initial determination have been exhausted.

The Company plans to follow all available avenues of appeal with respect to the adverse aspects of this initial determination and to petition the Patent and Trademark Office for a re-examination of both of the patents in question based on evidence presented in the ITC matter. The Company is also evaluating non-judicial approaches, including

product redesign and manufacturing relocation, to minimize the impact of any exclusionary or cease and desist order which may be issued.

S-5

Line of Credit

As previously disclosed in our Exchange Act filings, in September 2008, the Company closed a \$25 million asset-backed revolving credit facility with Bank of America which can be used for working capital, letters of credit, and other general corporate purposes. Subsequently, the credit facility was amended resulting in a reduction in the total loan availability to \$14 million. The credit facility matures in September 2011 and is secured by virtually all of the Company's assets. The credit facility is subject to a borrowing base formula based on eligible accounts receivable and provides for prime-based borrowings.

The facility is also subject to certain financial covenants, including an EBITDA financial covenant and a fixed charge ratio covenant. Based on current estimates, the Company expects that it will not meet the requirements under these two covenants for the quarter ended March 31, 2010. The Company is currently in negotiations with Bank of America to obtain a waiver or amendment to the credit facility in order to address any noncompliance that may result under the financial covenants, but we cannot provide any assurance that we will be successful in obtaining such financial covenant relief, or as to the terms upon which such relief may be granted.

As of December 31, 2009, the Company had a \$10.7 million prime rate loan outstanding, with an interest rate of 8.25%, and approximately \$2.9 million in outstanding standby letters of credit under this credit facility.

THE OFFERING

Common stock offered	1,870,042 shares
Common stock to be outstanding after this offering	83,763,127 shares
Manner of offering	We may offer and sell, from time to time, up to \$25,000,000 in shares of our common stock, not to exceed 15,971,169 shares. These sales will be made pursuant to our Common Stock Purchase Agreement with Commerce Court. The per share purchase price of these shares are calculated based on a 5% discount to the prevailing market price for our common stock, as reported on The NASDAQ Global Market. Commerce Court may also use this prospectus and prospectus supplement to sell the shares that they purchase from us in this offering. See "Plan of Distribution."
Use of proceeds	We intend to use the net proceeds from this offering for general corporate purposes, including working capital.
Risk factors	You should read the "Risk Factors" section of this prospectus supplement and documents incorporated by reference in this prospectus and prospectus supplement for a discussion of factors to consider before deciding to purchase shares of our common stock.

NASDAQ Global Market symbol EMKR

The number of shares of common stock to be outstanding after this offering, as reflected in the table above, is based on the actual number of shares outstanding as of March 17, 2010, which was 81,893,085 shares, and does not include, as of that date:

- 1,400,003 shares of our common stock issuable upon the exercise of warrants, exercisable at \$15.06 per share until February 15, 2013;
- 666,667 shares of our common stock issuable upon the exercise of a warrant, exercisable at \$1.69 per share between April 1, 2010 and April 1, 2015;
- 666,667 shares of our common stock issuable upon the exercise of a warrant, exercisable at \$2.02 per share between April 1, 2010 and April 1, 2015;
- 266,666 shares of our common stock issuable upon the exercise of a warrant, exercisable at \$2.36 per share between April 1, 2010 and April 1, 2015;
- 9,890,367 shares of our common stock issuable upon exercise of outstanding stock options at a weighted average exercise price of \$4.77;

Edgar Filing: EMCORE CORP - Form 424B5

- 1,710,149 shares of our common stock available for purchase under our employee stock purchase plan; and
- 2,317,913 shares of our common stock available for future issuance under our equity compensation plans.

S-7

RISK FACTORS

Investing in our securities involves a high degree of risk. You should carefully read and consider the risks described below and the risk factors and other disclosures relating to any investment in securities issued by EMCORE Corporation described in our most recent Annual Report on Form 10-K and our most recent Quarterly Report on Form 10-Q, both of which have been filed with the SEC and are incorporated herein by reference in their entirety, as well as other information in this prospectus and prospectus supplement and in any other documents incorporated by reference before purchasing any of our securities. The risks and uncertainties we have described are not the only ones facing our Company. Additional risks and uncertainties not presently known to us or that we currently consider immaterial may also affect our business operations.

Risks Relating to our Business

We have a history of incurring significant net losses and our future profitability is not assured.

We commenced operations in 1984 and as of December 31, 2009, we had an accumulated deficit of \$574.5 million. We incurred a net loss of \$13.6 million for the three months ended December 31, 2009, \$136.1 million in fiscal 2009, net loss of \$80.9 million in fiscal 2008, and a net loss of \$58.7 million in fiscal 2007. Our operating results for future periods are subject to numerous uncertainties and we cannot assure you that we will not continue to experience net losses for the foreseeable future. If we are not able to increase revenue and reduce our costs, we may not be able to achieve profitability.

Negative worldwide economic conditions could continue to result in a decrease in our sales and revenue and an increase in our operating costs, which could continue to adversely affect our business and operating results.

If the recent worldwide economic downturn continues, many of our direct and indirect customers may delay or reduce their purchases of our products and systems containing our products. In addition, several of our customers rely on credit financing in order to purchase our products. If the negative conditions in the global credit markets prevent our customers' access to credit, orders for our products may decrease, which would result in lower revenue. Likewise, if our suppliers face challenges in obtaining credit, in selling their products or otherwise in operating their businesses, they may become unable to offer the materials we use to manufacture our products. These actions could result in reductions in our revenue, increased price competition and increased operating costs, which could adversely affect our business, results of operations and financial condition.

Our agreement for the sale of a majority of our fiber optics business and the creation of a joint venture in China is subject to the satisfaction of material conditions. A failure of the transaction to close would likely have a material adverse effect on the Company.

Our agreement with Tangshan Caofeidian Investment Corporation, or TCIC, for the sale of a majority interest in our telecom, enterprise, CATV, FTTP, and video transport product lines is subject to the approval of our and TCIC's boards of directors, which means that, until these approvals are obtained, the agreement would not be enforceable by either party against the other. In addition, the closing of the transaction is subject to the satisfaction of material conditions, including regulatory and government approvals in the U.S. and China. In the event these conditions are not satisfied, we may be unable to consummate the transaction, and, if U.S. regulatory approvals are not obtained, the Company may be liable for the payment of a \$2,775,000 termination fee to TCIC.

The Company has also agreed to relocate its China CPV manufacturing facility to the Caofeidian Industry Zone. It is uncertain whether this manufacturing facility can be successfully relocated, and failure to successfully do so may have an adverse impact on these operations as well as other aspects of the Company's CPV business, which may be dependent on these operations.

S-8

A failure to close the joint venture transaction for any reason may have a material adverse effect on the Company. Our relationships or credibility with customers could suffer if transition arrangements for the joint venture transactions are planned but not implemented due to a failure to close. In addition, we would not realize the expected benefits under the terms of the joint venture arrangement, and, because we are restricted by the stock purchase agreement from conducting the business of the joint venture assets in ways other than the ordinary course during the pendency of the closing, we would not have had the opportunity to pursue other strategic transactions involving those assets.

If the joint venture transaction is consummated, the successful implementation of the joint venture will be subject to additional risks and uncertainties that may have an adverse material effect on the joint venture's performance. If the joint venture is not successful, the Company may suffer losses under its obligation to provide debt financing to the joint venture.

If the transaction is closed, the implementation of the joint venture transaction will also be subject to additional risks and uncertainties. The assets included in the transaction will need to be transitioned to the joint venture, and in some cases will be relocated geographically to the Caofeidian Industry Zone in China, which may lead to unexpected cost and could result in business interruptions or other adverse consequences to the business. A failure by the joint venture to retain key employees may also have an adverse material effect on the business and performance of the joint venture. Because we will share ownership and management of the joint venture, the management of these risks will not be entirely within our control.

In addition, the Company has agreed to make \$3.0 million in additional debt financing available to the joint venture following the closing, and to pledge 50% of its interest in the joint venture as collateral for the \$27.0 million in working capital loans to the joint venture to be arranged by TCIC. The Company will likely suffer losses of these amounts if the joint venture is unable to repay its debts.

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

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

- market acceptance of our products;
- market demand for the products and services provided by our customers;
- disruptions or delays in our manufacturing processes or in our supply of raw materials or product components;
- changes in the timing and size of orders by our customers;
- cancellations and postponements of previously placed orders;
- reductions in prices for our products or increases in the costs of our raw materials;

- the introduction of new products and manufacturing processes;
- fluctuations in manufacturing yields;
- the emergence of new industry standards;
- failure to anticipate changing customer product requirements;
- the loss or gain of important customers;
- product obsolescence;

S-9

- the amount of research and development expenses associated with new product introductions;
- the continuation or worsening of the current global economic slowdown;
- economic conditions in various geographic areas where we or our customers do business;
- acts of terrorism and international conflicts or crises;
- other conditions affecting the timing of customer orders;
- a downturn in the markets for our customers' products, particularly the telecommunications components markets;
- significant warranty claims, including those not covered by our suppliers;
- intellectual property disputes;
- loss of key personnel or the shortage of available skilled workers; and
- the effects of competitive pricing pressures, including decreases in average selling prices of our products.

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

Our credit facility agreement with Bank of America, N.A., contains customary covenants and defaults, including among others, limitations on dividends, incurrence of indebtedness and liens and mergers and acquisitions and may restrict our operating flexibility. The facility is also subject to certain financial covenants, including an EBITDA financial covenant and a fixed charge ratio covenant. Based on current estimates, the Company expects that it will not meet the requirements under these two covenants for the quarter ended March 31, 2010. The Company is currently in negotiations with Bank of America to obtain a waiver or amendment to the credit facility in order to address any noncompliance that may result under the financial covenants, but we cannot provide any assurance that we will be successful in obtaining such financial covenant relief, or as to the terms upon which such relief may be granted.

As a result of the foregoing, we believe that period-to-period comparisons of our results of operations should not be relied upon as indications of future performance. In addition, our results of operations in one or more future quarters may fail to meet the expectations of analysts or investors, which would likely result in a decline in the trading price of our common stock.

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

We have implemented a number of operational and material cost reductions and productivity improvement initiatives, which are intended to reduce our expense structure at both the cost of goods sold and the operating expense levels. Cost reduction initiatives often involve facility consolidation and re-design of our products, which requires our customers to accept and qualify the new designs, potentially creating a competitive disadvantage for our products. These initiatives can be time-consuming and disruptive to our operations and costly in the short-term. Successfully implementing these and other cost-reduction initiatives throughout our operations is critical to our future competitiveness and ability to achieve long-term profitability. However, there can be no assurance that these initiatives will be successful in creating profit margins sufficient to sustain our current operating structure and business.

S-10

Financial markets worldwide have recently experienced an unprecedented crisis which may have a continuing materially adverse impact on the Company, our customers and our suppliers.

Financial markets have recently experienced an unprecedented financial crisis worldwide, affecting both debt and equity markets, which has substantially limited the amount of financing available to all companies, including companies with substantially greater resources, better credit ratings and more successful operating histories than us. It is impossible to predict how long the impact of this crisis will last or how it will be resolved. It may, however, have a materially adverse affect on the Company for a number of reasons, such as:

- The Company's historic lack of profitability has caused it to consume cash, through acquisitions, operations and as a result of the research and development and capital expenditures necessary to expand the market which the Company serves (particularly the terrestrial solar market), as discussed in more detail below. The Company may be unable to acquire the cash necessary to finance these activities from either the debt or the equity markets and as a result the Company may be unable to continue operations.
- The Company's fiber optics products are sold principally to large publicly held companies which are also dependent on public debt and equity markets. Our customers may be unable to obtain the financing necessary to continue their own operations.
- The market for the products of the Company's fiber optics customers, into which the Company's fiber optics products are incorporated, is dependent on capital spending from telecommunications and data communications companies, which may also be adversely affected by the lack of financing.
- The market for the Company's satellite solar cells may also be adversely affected by the worldwide financial crisis, because the market for commercial satellites depends on capital spending by telecommunications companies and the market for military satellites depends on resources allocated for military intelligence spending, which may be restricted. The market for the Company's terrestrial solar products is dependent on the availability of project financing for photovoltaic projects, which may no longer be available, and is also largely dependent on government support of various types, such as investment tax credits, which may no longer be available as governments allocate scarce resources to deal with the financial crisis.
- A reduction in the Company's sales will adversely affect the Company's ability to draw on its existing line of credit with Bank of America because that line of credit is largely dependent on the level of the Company's accounts receivable.
- Negative worldwide economic conditions and market instability make it difficult for us, our customers and our suppliers to accurately forecast future product demand trends, which could cause us to produce excess products that can depress product prices, increase our inventory carrying costs and result in obsolete inventory. Alternatively, this forecasting difficulty could cause a shortage of products, or materials used in our products, that could result in an inability to satisfy demand for our products and a loss of market share.

- Negative global economic conditions increase the risk that we could suffer unrecoverable losses on our customers' accounts receivable, which would adversely affect our financial results. We extend credit and payment terms to some of our customers. We could suffer significant losses if customers fail to pay us, which would have a negative impact on our financial results.

In addition, the worldwide financial crisis may adversely affect certain assets held by the Company.

S-11

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

The closing price of our common stock fluctuated from a high of \$5.50 per share to a low of \$0.50 per share during the fiscal year ended September 30, 2009. As of March 17, 2010 the closing price of our common stock was \$1.09. Our stock price is likely to experience significant volatility in the future as a result of numerous factors outside our control. Significant declines in our stock price may interfere with our ability to raise additional funds through equity financing or to finance strategic transactions with our 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. 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 could have the effect of diverting management's attention and could materially harm our business, and could be exacerbated by the recent worldwide financial crisis.

We have significant liquidity and capital requirements and may require additional capital in the future. If we are unable to obtain the additional capital necessary to meet our requirements, our business may be adversely affected.

Historically, the Company has consumed cash from operations. We have managed our liquidity situation through a series of cost reduction initiatives, capital markets transactions and the sale of assets. We had approximately \$32.0 million in working capital as of December 31, 2009. The global credit market crisis has had a dramatic effect on the markets we serve and has created a substantially more difficult business environment for us. We do not believe it is likely that these adverse economic conditions, and their effect on the technology industry, will improve significantly in the near term, notwithstanding the unprecedented intervention by the U.S. and other governments in the global banking and financial systems.

If our cash on hand is not sufficient to fund the cash used by our operating activities and meet our other liquidity requirements, we will seek to obtain additional equity or debt financing or dispose of assets to provide additional working capital in the future.

Due to the unpredictable nature of the capital markets, particularly in the technology sector, we cannot assure you that we will be able to raise additional capital if and when it is required, especially if we experience disappointing operating results. If adequate funds are not available or not available on acceptable terms, our ability to continue to fund expansion, develop and enhance products and services, or otherwise respond to competitive pressures may be severely limited. Such a limitation could have a material adverse effect on our business, financial condition, results of operations and cash flow.

The market for our terrestrial solar power products for utility-scale applications may take time to develop, is rapidly changing and extremely price-sensitive, involves issues with which the Company has little experience, and is currently dependent on the policy decisions of governments both inside and outside the United States.

We have invested and intend to continue to invest significant resources in the adaptation of our high-efficiency compound semiconductor-based multi-junction solar cell products for terrestrial applications, including the sale of both concentrator photovoltaics ("CPV") components and systems. We generated our first revenue from the sale of CPV systems in 2008, which involved the design, manufacture and installation of large and complex structures intended for outdoor operation, with which the Company has had no previous experience.

Factors such as changes in energy prices or the development of new and efficient alternative energy technologies could also limit growth in, or reduce the market for, our terrestrial solar power products. In addition, we experienced difficulties in applying our satellite-based solar products to terrestrial applications. We may experience further difficulties in the future in competing with new and emerging terrestrial solar power products, which we have determined to be extremely price sensitive and rapidly changing as well as obtaining financing for utility-scale projects utilizing our technology, particularly in view of the recent worldwide financial crisis.

We have determined that the terrestrial solar power business will require substantial additional funding for the hiring of employees, research and development and investment in capital equipment in order to successfully compete. In addition, historically much of the market for CPV systems has been outside the U.S. This has involved partnering with non-U.S. entities, which (because terrestrial solar power generation is a relatively new industry) may have little experience in the field and which may be new companies. Participation in non-U.S. markets will involve evaluation and compliance with non-U.S. laws, regulations, and government electric supply contracts which the Company has limited experience in. The rates available under non-U.S. government electric supply contracts are subject to policy decisions of these governments, which can change in unpredictable ways. Because of a reduction in rates offered under non-U.S. electric supply contracts, we believe that most of our future business in the near term will involve projects located within the United States, which has a substantially less developed program for encouraging the use of solar power and where the economic competitiveness of our products will be even more significant. There can be no assurance that our bids on solar power installations will be accepted, that we will win any of these bids, that our CPV systems will be qualified for these projects, or that governments will continue to offer electric supply contracts and other incentives that will make our products economically viable. If our terrestrial solar power cell products are not cost competitive or accepted by the market, our business, financial condition and results of operations may be materially and adversely affected.

Successful deployment of our solar power systems may require us to assume roles with respect to solar power projects with which we have limited or no experience (such as acting as general contractor) and which may expose us to certain financial risks (such as cost overruns and performance guaranties) which we may not have the expertise to properly evaluate or manage. In addition, we may be subject to unexpected warranty expense; if we are subject to warranty and product liability claims, such claims could adversely affect our business, financial condition, results of operations, and cash flow.

Our Photovoltaics segment recognizes certain contract revenue on a “percentage-of-completion” basis and upon the achievement of contractual milestones and any delay or cancellation of a project could adversely affect our business.

Our Photovoltaics segment recognizes certain revenue on a “percentage-of-completion” basis and, as a result, revenue from this segment is driven by the performance of our contractual obligations. The percentage-of-completion method of accounting for revenue recognition is inherently subjective because it relies on management estimates of total project cost as a basis for recognizing revenue and profit. Accordingly, revenue and profit we have recognized under the percentage-of-completion method are potentially subject to adjustments in subsequent periods based on refinements in estimated costs of project completion that could materially impact our future revenue and profit.

As with any project-related business, there is the potential for delays within or cancellation of any particular customer project. Variation of project timelines and estimates may impact our ability to recognize revenue in a particular period. Moreover, incurring penalties involving the return of the contract price to the customer for failure to timely install one project could negatively impact our ability to continue to recognize revenue on a “percentage-of-completion” basis generally for other projects. In addition, certain customer contracts may include payment milestones due at specified points during a project. Because our Photovoltaics segment usually must invest substantial time and incur significant expense in advance of achieving milestones and the receipt of payment, failure to achieve such milestones could adversely affect our business, financial condition, results of operations, and cash flows.

As supply of polysilicon increases, the corresponding increase in the global supply of silicon-based solar cells and panels may cause substantial downward pressure on the prices of our terrestrial solar power products, resulting in lower revenues.

As additional polysilicon becomes available, we expect solar panel production globally to increase. Decreases in polysilicon pricing and increases in silicon-based solar panel production could each result in substantial downward pressure on the price of solar cells and panels, including our terrestrial solar power products. Such price reductions could have a negative impact on our revenue, and our business, financial condition results of operations and cash flows may be materially and adversely affected.

We are substantially dependent on a small number of customers and the loss of any one of these customers could adversely affect our business, financial condition and results of operations.

In fiscal 2009, 2008, and 2007, our top five customers accounted for 43%, 46%, and 48%, respectively of our total annual consolidated revenue. There can be no assurance that we will continue to achieve historical levels of sales of our products to our largest customers. Even though our customer base is expected to increase and our revenue streams to diversify, a substantial portion of our net revenues could continue to depend on sales to a limited number of customers. Our agreements with these customers may be cancelled if we fail to meet certain product specifications or materially breach the agreement, and our customers may seek to renegotiate the terms of current agreements or renewals. The loss of or a reduction in sales to one or more of our larger customers could have a material adverse affect on our business, financial condition and results of operations.

Long-term, firm commitment supply agreements could result in insufficient or excess inventory or place us at a competitive disadvantage.

We manufacture our products utilizing materials, components, and services provided by third parties. We seek to obtain a lower cost of inventory by negotiating multi-year, binding contractual commitments directly with our suppliers. Under such agreements, we may be required to purchase a specified quantity of products or use a certain amount of services, which is often over a period of twelve months or more. We also may be required to make substantial prepayments or issue secured letters of credit to these suppliers against future deliveries. These contractual commitments, or any other “take or pay” agreement we enter into, allows the supplier to invoice us for the full purchase price of product or services that we are under contract for, whether or not we actually order the required volume or services. If for any reason we fail to order the required volume or services, the resulting monetary damages could have a material adverse effect on our business, financial condition, results of operations, and cash flows.

We do not obtain contracts or commitments from customers for all of our products manufactured with materials purchased under such firm commitment contracts. Instead, we rely on our long-term internal forecasts to determine the timing of our production schedules and the volume and mix of products to be manufactured. The level and timing of orders placed by customers may vary for many reasons. As a result, at any particular time, we may have insufficient or excess inventory, which could render us unable to fulfill customer orders or increase our cost of production. This would place us at a competitive disadvantage to our competitors, and could have a material adverse effect on our business, financial condition, results of operations, and cash flows.

Long-term contractual commitments also expose us to specific counter-party risk, which can be magnified when dealing with suppliers without a long, stable production and financial history. For example, if one or more of our contractual counterparties is unable or unwilling to provide us with the contracted amount of product, we could be required to attempt to obtain product in the open market, which could be unavailable at that time, or only available at prices in excess of our contracted prices. In addition, in the event any such supplier experiences financial difficulties, it may be difficult or impossible, or may require substantial time and expense, for us to recover any or all of our

prepayments. Any of the foregoing could have a material adverse effect on our business, financial condition, results of operations, and cash flows.

S-14

Our operating results could be harmed if we lose access to sole or limited sources of materials, components or services.

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

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

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

If these contract manufacturers do not fulfill their obligations to us, or if we do not properly manage these relationships and the transition of production to these contract manufacturers, our existing customer relationships may suffer. In addition, by undertaking these activities, we run the risk that the reputation and competitiveness of our products and services may deteriorate as a result of the reduction of our ability to oversee and control quality and delivery schedules.

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

- unexpected changes in regulatory requirements;
- legal uncertainties regarding liability, tariffs and other trade barriers;
- inadequate protection of intellectual property in some countries;
- greater incidence of shipping delays;
- greater difficulty in overseeing manufacturing operations;
- greater difficulty in hiring talent needed to oversee manufacturing operations;
- potential political and economic instability;
- potential adverse actions by the U.S. government pursuant to its stated intention to reduce the loss of U.S. jobs; and

- the outbreak of infectious diseases such as the H1N1 influenza virus, severe acute respiratory syndrome (“SARS”), or the avian flu, which could result in travel restrictions or the closure of our facilities or the facilities of our customers and suppliers.

Any of these factors could significantly impair our ability to source our contract manufacturing requirements internationally.

S-15

Prior to our customers accepting products manufactured at our contract manufacturers, they must requalify the product and manufacturing processes. The qualification process can be lengthy and expensive, with no guarantee that any particular product qualification process will lead to profitable product sales. The qualification process determines whether the product manufactured at our contract manufacturer achieves our customers' quality, performance and reliability standards. Our expectations as to the time periods required to qualify a product line and ship products in volumes to customers may be erroneous. Delays in qualification can impair the expected timing of the transfer of a product line to our contract manufacturer and may impair the expected amount of sales of the affected products. We may, in fact, experience delays in obtaining qualification of products produced by our contract manufacturers and, therefore, our operating results and customer relationships could be materially adversely affected.

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

We compete in markets that are characterized by rapid technological change, frequent new product introductions, changes in customer requirements, evolving industry standards, continuous improvement in products and the use of our existing products in new applications. We may not be able to develop the underlying core technologies necessary to create new products and enhancements at the same rate as or faster than our competitors, or to license the technology from third parties that is necessary for our products.

Product development delays may result from numerous factors, including:

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

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

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

We may need to increase our capital expenditures and expenses above our historical run-rate model in order to attempt to improve our existing technology and develop new technology. Increasing our investments in research and development of technology could cause our cost structure to fall out of alignment with demand for our products, which would have a negative impact on our financial results.

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

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

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

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

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

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

We manufacture many of our wafers and devices in our own production facilities. Difficulties in the production process, such as contamination, raw material quality issues, human error or equipment failure, can cause a substantial percentage of wafers and devices to be nonfunctional. Lower-than-expected production yields may delay shipments or result in unexpected levels of warranty claims, either of which can materially adversely affect our results of operations. We have experienced difficulties in achieving planned yields in the past, particularly in pre-production and upon initial commencement of full production volumes, which have adversely affected our gross margins. Because the majority of our manufacturing costs are fixed, achieving planned production yields is critical to our results of operations. Because we manufacture many of our products in a single facility, we have greater risk of interruption in manufacturing resulting from fire, natural disaster, equipment failures, or similar events than we would if we had back-up facilities available for manufacturing these products. We could also incur significant costs to repair and/or replace products that are defective and in some cases costly product redesigns and/or rework may be required to correct a defect. Additionally, any defect could adversely affect our reputation and result in the loss of future orders.

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

We are subject to warranty claims, product recalls and product liability.

We may be subject to warranty or product liability claims that may lead to increased expenses in order to defend or settle such claims. Such warranty claims may arise in areas such as terrestrial solar components or systems where our operating experience is limited. We maintain product liability insurance, but such insurance is subject to significant deductibles and there is no guarantee that such insurance will be available or adequate to protect against all such claims. We may incur costs and expenses relating to a recall of one of our customers' products containing one of our products. The process of identifying a recalled product in devices that have been widely distributed may be lengthy and require significant resources, and we may incur significant replacement costs, contract damage claims from our customers and reputational harm. Payments and expenses in connection with warranty and product liability claims could materially affect our financial condition and results of operations.

We face lengthy sales and qualifications cycles for our new products and, in many cases, must invest a substantial amount of time and funds before we receive orders.

Most of our products are tested by current and potential customers to determine whether they meet customer or industry specifications. The length of the qualification process, which can span a year or more, varies substantially by product and customer, and thus can cause our results of operations to be unpredictable. During a given qualification period, we invest significant resources and allocate substantial production capacity to manufacture these new products prior to any commitment to purchase by customers. In addition, it is difficult to obtain new customers during the qualification period as customers are reluctant to expend the resources necessary to qualify a new supplier if they have one or more existing qualified sources. If we are unable to meet applicable specifications or do not receive sufficient orders to profitably use the allocated production capacity, our business, financial condition and results of operations could be materially adversely affected.

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

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

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

Remaining inventory balances are adjusted to approximate the lower of our manufacturing cost or market value.

S-18

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

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

In our Fiber Optics reporting segment, we generally do not have long-term supply contracts with our customers and we typically sell our products pursuant to purchase orders with short lead times, and even where we do have supply contracts, our customers are not obligated to purchase any minimum amount of our products. As a result, our customers could stop purchasing our products at any time and we must fulfill orders in a timely manner to keep our customers. Risks associated with the absence of long-term purchase commitments with our customers include the following:

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

These risks are increased by the fact that our customers in this market are large, sophisticated companies which have considerable purchasing power and control over their suppliers. In the Fiber Optics market, we generally sell our products pursuant to individual purchase orders, which often have extremely short lead times. If we are unable to fulfill these orders in a timely manner, it is likely that we will lose sales and customers. In addition, we sell some of our products to the U.S. government and related entities. These contracts are generally subject to termination for convenience provisions and may be cancelled at any time. Cancellations or rescheduling of customer orders could result in the delay or loss of anticipated sales without allowing us sufficient time to reduce, or delay the incurrence of, our corresponding inventory and operating expenses. In addition, changes in forecasts or the timing of orders from these or other customers expose us to the risks of inventory shortages or excess inventory.

In contrast, in our Photovoltaics reporting segment, we generally enter into long-term firm fixed-price contracts, which could subject us to losses if we have cost overruns. While firm fixed-price contracts allow us to benefit from cost savings, they also expose us to the risk of cost overruns. If the initial estimates we used to determine the contract price and the cost to perform the work prove to be incorrect, we could incur losses. In addition, some of our contracts have specific provisions relating to cost, schedule, and performance. If we fail to meet the terms specified in those contracts, then our cost to perform the work could increase or our price could be reduced, which would adversely affect our financial condition. These programs have risk for reach-forward losses if our estimated costs exceed our estimated price.

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

in the financial statements are appropriate, future events could result in either favorable or unfavorable adjustments to those estimates.

The risk of fixed price contracts in the photovoltaics market is increased by the new and rapidly changing nature of the terrestrial photovoltaics market and the Company's limited experience in that market.

S-19

We are a party to several U.S. government contracts, which are subject to unique risks.

We intend to continue our policy of selectively pursuing contract research, product development and market development programs funded by various agencies of the U.S. federal and state governments to complement and enhance our own resources. Depending on the type of contract, funding from government grants is either recorded as revenue or as an offset to our research and development expense.

In addition to normal business risks, our contracts with the U.S. government are subject to unique risks, some of which are beyond our control. We have had government contracts modified, curtailed or terminated in the past and we expect this will continue to happen from time to time.

The funding of U.S. government programs is subject to Congressional appropriations. Many of the U.S. government programs in which we participate may extend for several years; however, these programs are normally funded annually. Long-term government contracts and related orders are subject to cancellation if appropriations for subsequent performance periods are not made. The termination of funding for a U.S. government program would result in a loss of anticipated future revenue attributable to that program, which could have a material adverse effect on our operations.

The U.S. government may modify, curtail, or terminate our contracts. The U.S. government may modify, curtail, or terminate its contracts and subcontracts without prior notice at its convenience upon payment for work done and commitments made at the time of termination. A reduction or discontinuance of these programs or of our participation in these programs would materially increase our research and development expenses, which would adversely affect our profitability and could impair our ability to develop our solar power products and services. Modification, curtailment or termination of our major programs or contracts could have a material adverse effect on our results of operations and financial condition.

Our contract costs are subject to audits by U.S. government agencies. U.S. government representatives may audit the costs we incur on our U.S. government contracts, including allocated indirect costs. Such audits could result in adjustments to our contract costs. Any costs found to be improperly allocated to a specific contract will not be reimbursed, and such costs already reimbursed must be refunded. We have recorded contract revenue based upon costs we expect to realize upon final audit. However, we do not know the outcome of any future audits and adjustments and we may be required to reduce our revenue or profits upon completion and final negotiation of audits. If any audit uncovers improper or illegal activities, we may be subject to civil and criminal penalties and administrative sanctions, including termination of contracts, forfeiture of profits, suspension of payments, fines and suspension or prohibition from doing business with the U.S. government. We have been audited in the past by the U.S. government and expect that we will be in the future.

Our business is subject to potential U.S. government review. We are sometimes subject to certain U.S. government reviews of our business practices due to our participation in government contracts. Any such inquiry or investigation could potentially result in a material adverse effect on our results of operations and financial condition.

Our U.S. government business is also subject to specific procurement regulations and other requirements. These requirements, although customary in U.S. government contracts, increase our performance and compliance costs. These costs might increase in the future, reducing our margins, which could have a negative effect on our financial condition. Failure to comply with these regulations and requirements could lead to suspension or debarment, for cause, from U.S. government contracting or subcontracting for a period of time and could have an adverse effect on our reputation and ability to secure future U.S. government contracts.

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

Sales to customers located outside the U.S. accounted for approximately 38% of our consolidated revenue in fiscal 2009, 44% of our revenue in fiscal 2008 and 27% of our revenue in fiscal 2007, with revenue assigned to geographic regions based on our customers' billing address. Sales to customers in Asia represent the majority of our international sales. We believe that international sales will continue to account for a significant percentage of our revenue as we seek international expansion opportunities. Because of this, the following international commercial risks may materially adversely affect our revenue:

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

In addition, we may be exposed to additional legal risks under the laws of both the countries in which we operate and in the United States, including the Foreign Corrupt Practices Act.

We are increasing operations in China, which exposes us to risks inherent in doing business in China.

In May 2007, EMCORE Hong Kong, Ltd., a wholly owned subsidiary of EMCORE Corporation, announced the opening of a new manufacturing facility in Langfang, China. Our Chinese subsidiary, Langfang EMCORE Optoelectronics Co. Ltd., is located approximately 20 miles southeast of Beijing and currently occupies a space of 48,000 square feet with a Class-10,000 clean room for optoelectronic device packaging. Another 40,000 square feet is available for future expansion. We have begun the transfer of our most cost sensitive optoelectronic devices to this facility. This facility, along with a strategic alignment with our existing contract-manufacturing partners, should enable us to improve our cost structure and gross margins across product lines. We expect to develop and provide improved service to our global customers by having a local presence in Asia. As we continue to consolidate our manufacturing operations, we will incur additional costs to transfer product lines to our China facility, including costs of qualification testing with our customers, which could have a material adverse impact on our operating results and financial condition.

S-21

Our China-based activities are subject to greater political, legal and economic risks than those faced by our other operations. In particular, the political, legal and economic climate in China (both at national and regional levels) is extremely fluid and unpredictable. Our ability to operate in China may be adversely affected by changes in Chinese laws and regulations, such as those relating to taxation, import and export tariffs, environmental regulations, land use rights, intellectual property and other matters, which laws and regulations remain highly underdeveloped and subject to change, with little or no prior notice, for political or other reasons. Moreover, the enforceability of applicable existing Chinese laws and regulations is uncertain. In addition, we may not obtain the requisite legal permits to continue to operate in China and costs or operational limitations may be imposed in connection with obtaining and complying with such permits. Our business could be materially harmed by any changes in the political, legal or economic climate in China or the inability to enforce applicable Chinese laws and regulations.

As a result of a government order to ration power for industrial use, operations in our China facility may be subject to possible interruptions or shutdowns, adversely affecting our ability to complete manufacturing commitments on a timely basis. If we are required to make significant investments in generating capacity to sustain uninterrupted operations at our facility, we may not realize the reductions in costs anticipated from our expansion in China.

We intend to export the majority of the products manufactured at our facilities in China. Accordingly, upon application to and approval by the relevant governmental authorities, we will not be subject to certain Chinese taxes and are exempt from customs duty assessment on imported components or materials when the finished products are exported from China. We are, however, required to pay income taxes in China, subject to certain tax relief. As the Chinese trade regulations are in a state of flux, we may become subject to other forms of taxation and duty assessments in China or may be required to pay for export license fees in the future. In the event that we become subject to any increased taxes or new forms of taxation imposed by authorities in China, our results of operations could be materially and adversely affected.

We will lose sales if we are unable to obtain government authorization to export our products.

Exports of our products are subject to export controls imposed by the U.S. government and administered by the U.S. Departments of State and Commerce. In certain instances, these regulations may require pre-shipment authorization from the administering department. For products subject to the Export Administration Regulations (“EAR”) administered by the Department of Commerce’s Bureau of Industry and Security, the requirement for a license is dependent on the type and end use of the product, the final destination and the identity of the end user. Virtually all exports of products subject to the International Traffic in Arms Regulations (“ITAR”) regulations administered by the Department of State’s Directorate of Defense Trade Controls require a license. Most of our fiber optics products, terrestrial solar power products, and commercially available solar cell satellite power products are subject to EAR; however, certain fiber optics products and certain solar cell satellite power products with an efficiency rating above 31% are currently subject to ITAR.

Given the current global political climate, obtaining export licenses can be difficult and time-consuming. Failure to obtain export licenses for product shipments could significantly reduce our revenue and could materially adversely affect our business, financial condition and results of operations. Compliance with U.S. government regulations may also subject us to additional fees and costs. The absence of comparable restrictions on foreign competitors may adversely affect our competitive position.

Protecting our trade secrets and obtaining patent protection is critical to our ability to effectively compete.

Our success and competitive position depend on protecting our trade secrets and other intellectual property. Our strategy is to rely on trade secrets and patents to protect our manufacturing and sales processes and products. Reliance on trade secrets is only an effective business practice if trade secrets remain undisclosed and a proprietary product or process is not reverse engineered or independently developed. We take measures to protect our trade secrets, including executing non-disclosure agreements with our employees, customers and suppliers. If parties breach these agreements, the measures we take are not properly implemented, or if a competitor is able to reproduce or otherwise capitalize on our technology despite the safeguards we have in place, it may be difficult, expensive or impossible for us to obtain necessary legal protection. Disclosure of our trade secrets or reverse engineering of our proprietary products, processes, or devices could materially adversely affect our business, financial condition and results of operations.

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

The compound semiconductor, optoelectronics and fiber optic communications industries are characterized by frequent litigation regarding patent and other intellectual property rights. From time to time we have received, and may receive in the future; notice of claims of infringement of other parties' proprietary rights and licensing offers to commercialize third party patent rights. There can be no assurance that:

- infringement claims (or claims for indemnification resulting from infringement claims) will not be asserted against us or that such claims will not be successful;
- future assertions will not result in an injunction against the sale of infringing products, which could significantly impair our business and results of operations;
- any patent owned or licensed by us will not be invalidated, circumvented or challenged; or
- we will not be required to obtain licenses, the expense of which may adversely affect our results of operations and profitability.

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

Protection of the intellectual property owned or licensed to us may require us to initiate litigation, which can be an extremely expensive, protracted procedure with an uncertain outcome. The availability of financial resources may limit the Company's ability to commence or defend such litigation.

Failure to comply with environmental and safety regulations, resulting in improper handling of hazardous raw materials used in our manufacturing processes or waste product generated there from, could result in costly remediation fees, penalties or damages.

We are subject to laws and regulations and must obtain certain permits and licenses relating to the use of hazardous materials. Our production activities involve the use of certain hazardous raw materials, including, but not limited to, ammonia, gallium, phosphine and arsine. If our control systems are unsuccessful in preventing a release of these

materials into the environment or other adverse environmental conditions or human exposures occur, we could experience interruptions in our operations and incur substantial remediation and other costs or liabilities. In addition, certain foreign laws and regulations place restrictions on the concentration of certain hazardous materials, including, but not limited to, lead, mercury and cadmium, in our products. Failure to comply with such laws and regulations could subject us to future liabilities or result in the limitation or suspension of the sale or production of our products. These regulations include the European Union's ("EU") Restrictions on Hazardous Substances and Directive on Waste Electrical and Electronic Equipment.

S-23

Failure to comply with environmental and health and safety laws and regulations may limit our ability to export products to the EU and could materially adversely affect our business, financial condition and results of operations. In addition, the Department of Homeland Security has commenced a program to evaluate the security of certain chemicals which may be of interest to terrorists, including chemicals utilized by the Company. This evaluation may lead to regulations or restrictions affecting the Company's ability to utilize these chemicals or the costs of doing so. In connection with our compliance with such environmental laws and regulations, as well as our compliance with industry environmental initiatives, the standards of business conduct required by some of our customers, and our commitment to sound corporate citizenship in all aspects of our business, we could incur substantial compliance and operating costs and be subject to disruptions to our operations. In addition, in the last few years, there has been increased media scrutiny and associated reports focusing on a potential link between working in semiconductor manufacturing clean room environments and certain illnesses, primarily different types of cancers. Regulatory agencies and industry associations have begun to study the issue to see if any actual correlation exists. Because we utilize clean rooms, we may become subject to liability claims. In addition, these reports may also affect our ability to recruit and retain employees. If we were found to be in violation of environmental and safety regulations laws or noncompliance with industry initiatives or standards of conduct, we could be subject to governmental fines or liability to our customers, which could adversely affect our business, results of operations, cash flows, and financial condition.

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

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

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

For certain risks, the Company does not maintain insurance coverage because of cost and/or availability. Because the Company retains some portion of its insurable risks, and in some cases self-insures completely, unforeseen or catastrophic losses in excess of insured limits may have a material adverse effect on the Company's results of operations and financial position.

Our business and operations would be adversely impacted in the event of a failure of our information technology infrastructure.

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

Despite our implementation of security measures, our systems are vulnerable to damages from computer viruses, natural disasters, unauthorized access and other similar disruptions. Our business is also subject to break-ins, sabotage and intentional acts of vandalism by third parties as well as employees. Any system failure, accident or security breach could result in disruptions to our operations. To the extent that any disruptions or security breach results in a loss or damage to our data, or inappropriate disclosure of confidential information, it could harm our business. In addition, we may be required to incur significant costs to protect against damage caused by these disruptions or security breaches in the future.

In addition, implementation of new software programs, including the implementation of an enterprise resource planning ("ERP") program which the Company intends to install at one of the Company's divisions during fiscal year 2010, may have adverse impact on the Company, including interruption of operations, loss of data, budget overruns and the consumption of management time and resources.

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

The Company is subject to the ongoing internal control provisions of Section 404 of the Sarbanes-Oxley Act of 2002. These provisions provide for the identification of material weaknesses in internal control over financial reporting, which is a process to provide reasonable assurance regarding the reliability of financial reporting for external purposes in accordance with U.S. GAAP. If we cannot provide reliable financial reports or prevent fraud, our brand, operating results and the market value of our equity securities could be harmed. We have in the past discovered, and may in the future discover, areas of our internal controls that need improvement.

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

Inadequate internal controls could also cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our equity securities. Further, the impact of these events could also make it more difficult for us to attract and retain qualified persons to serve on our Board of Directors or as executive officers, which could harm our business. The additions of our manufacturing facility in China and acquisitions increase the burden on our systems and infrastructure, and impose additional risk to the ongoing effectiveness of our internal controls, disclosure controls, and procedures.

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

New Jersey law and our certificate of incorporation, as amended, contain certain provisions that could delay or prevent a takeover attempt that our shareholders may consider in their best interests. Our Board of Directors is divided into three classes. Directors are elected to serve staggered three-year terms and are not subject to removal except for cause by the vote of the holders of at least 80% of our capital stock. In addition, approval by the holders of 80% of our voting stock is required 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. We may in the future adopt other measures that may have the effect of delaying or discouraging an unsolicited takeover, even if the takeover were at a

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

S-25

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

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

- insufficient experience with technologies and markets in which the acquired business is involved, which may be necessary to successfully operate and integrate the business;
- problems integrating the acquired operations, personnel, technologies or products with the existing business and products;
- diversion of management time and attention from the core business to the acquired business or joint venture;
- potential failure to retain key technical, management, sales and other personnel of the acquired business or joint venture;
- difficulties in retaining relationships with suppliers and customers of the acquired business, particularly where such customers or suppliers compete with us;
- reliance upon joint ventures which we do not control;
- subsequent impairment of the acquired assets, including intangible assets; and
- assumption of liabilities including, but not limited to, lawsuits, tax examinations, warranty issues, etc.

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

Changes to financial accounting standards may affect our consolidated results of operations and cause us to change our business practices.

We prepare our financial statements to conform to U.S. GAAP. These accounting principles are subject to interpretation by the American Institute of Certified Public Accountants, the SEC and various bodies formed to interpret and create appropriate accounting policies. A change in those policies can have a significant effect on our consolidated reported results and may affect our reporting of transactions completed before a change is announced. Changes to those rules or the questioning of current practices may adversely affect our reported financial results or the way we conduct our business. For example, the Financial Accounting Standards Board issued authoritative guidance related to the consolidation of variable interest entities that may impact our accounting for future joint ventures or project companies. In the event that we are deemed the primary beneficiary of a variable interest entity, we may have to consolidate the assets, liabilities and financial results of the joint venture. This could have an adverse impact on our financial position, gross margin and operating results. Also, the Securities and Exchange Commission ("SEC") issued its long-anticipated proposed International Financial Reporting Standards ("IFRS") roadmap outlining milestones that, if

achieved, could lead to mandatory transition to IFRS for U.S. domestic registrants starting in 2014. IFRS is a comprehensive series of accounting standards published by the International Accounting Standards Board (“IASB”). Under the proposed roadmap, the Company could be required to prepare financial statements in accordance with IFRS, and the SEC will make a determination in 2011 regarding the mandatory adoption of IFRS for U.S. domestic registrants. Management is currently assessing the impact that this potential change would have on the Company’s consolidated financial statements, and will continue to monitor the development of the potential implementation of IFRS.

S-26

Natural disasters or other catastrophic events could have a material adverse affect on our business.

Natural disasters, such as hurricanes, earthquakes, and fires, particularly in California or in New Mexico, could unfavorably affect our operations and financial performance. Such events could result in physical damage to one or more of our facilities, the temporary closure of one or more of our facilities or those of our suppliers, the temporary lack of an adequate work force in a market, the temporary or long-term disruption in the supply of products from some local and overseas suppliers, the temporary disruption in the transport of goods from overseas, and delays in the delivery of goods. Public health issues, such as a potential H1N1 flu pandemic (swine flu), whether occurring in the United States or abroad, could disrupt our operations, disrupt the operations of suppliers or customers, or have an adverse impact on customer demand. We may be required to suspend operations in some or all of our locations, which could have a material adverse effect on our business, financial condition, and results of operations. These events could also reduce demand for our products or make it difficult or impossible to receive products from suppliers. Although we maintain business interruption insurance and other insurance intended to cover some or all of these risks, such insurance may be inadequate, whether because of coverage amount, policy limitations, the financial viability of the insurance companies issuing such policies, or other reasons.

Risks Relating to this Offering

Management will have broad discretion as to the use of proceeds from this offering, and we may not use the proceeds effectively.

We have not designated the amount of net proceeds from this offering to be used for any particular purpose. Accordingly, management of the Company will have broad discretion as to the application of the net proceeds from this offering and could use them for purposes other than those contemplated at the time of this offering. Our shareholders may not agree with the manner in which our management chooses to allocate and spend the net proceeds. Moreover, management may use the net proceeds for corporate purposes that may not increase the Company's profitability or market value.

Shareholders will experience an immediate dilution in the net tangible book value per share of the Company's common stock.

Since the price per share of our common stock being offered is substantially lower than the book value per share of our common stock, shareholders will experience an immediate dilution in the net tangible book value of the common stock purchased in this offering. See the section entitled "Dilution" below for a more detailed discussion of the dilution associated with this offering.

The issuance of the shares pursuant to this offering may depress the market value of our common stock.

A significant number of shares may be sold in the market following this offering, which may depress the market price of our common stock. Sales of a substantial number of shares of our common stock in the public market following this offering could cause the market price of our common stock to decline. If there are more shares of common stock offered for sale than buyers are willing to purchase, then the market price of our common stock may decline to a market price at which buyers are willing to purchase the offered shares of common and sellers remain willing to sell the shares. All of the shares sold in the offering will be freely tradable without restriction or further registration under the Securities Act of 1933, as amended.

S-27

USE OF PROCEEDS

We estimate that we will receive net proceeds of approximately \$2.0 million from the sale of the shares of common stock after paying the underwriting discounts and commissions, placement agent fee and other estimated expenses of this offering. We intend to use the net proceeds from this offering for general corporate purposes, including working capital.

DILUTION

The net tangible book value of our common stock on December 31, 2009 was approximately \$117.2 million, or approximately \$1.4338 per share. Net tangible book value per share is equal to the amount of out total tangible assets, less total liabilities, divided by the aggregate number of shares of common stock outstanding. Dilution per share represents the difference between the amount per share paid by purchasers of shares of common stock in this offering and the net tangible book value per share of our common stock immediately after this offering. After giving effect to the sale of 1,870,042 shares of common stock in this offering at a price of approximately \$1.07 per share, and after deducting the estimated offering expenses, our net tangible book value at December 31, 2009 would have been approximately \$119.2 million, or approximately \$1.4254 per share. This represents an immediate dilution of \$0.0084 per share to the Company's shareholders as a result of this offering.

The following table illustrates this dilution:

Assumed public offering price per share		\$1.07
Net tangible book value per share as of December 31, 2009	\$1.4338	
Decrease per share attributable to new investors	\$0.0084	
Net tangible book value per share as of December 31, 2009 after giving effect to this offering	\$1.4254	
Net dilution per share to shareholders		\$0.0084

DIVIDEND POLICY

We have never declared or paid dividends on our common stock since the Company's formation. We currently do not intend to pay dividends on our common stock in the foreseeable future, so that we may reinvest any earnings in our business. The payment of dividends, if any, in the future is at the discretion of the Board of Directors. Due to the Company's credit facility signed in September 2008, the Company agreed to not issue any dividends until full payment is made on any amounts outstanding under the credit facility.

PLAN OF DISTRIBUTION

Please see the information set forth under the caption “Plan of Distribution” in the accompanying prospectus, and the disclosure set forth in our Current Report on Form 8-K relating to our equity line of credit arrangement with Commerce Court, filed with the SEC on October 2, 2009, pursuant to the Securities Exchange Act, which is incorporated herein by reference. For more information, please see the section entitled “Information Incorporated by Reference” in this prospectus supplement.

S-28

LEGAL MATTERS

The validity of the shares of common stock offered hereby will be passed upon by Jenner & Block LLP and, with respect to matters governed by New Jersey law, by Dillon, Bitar & Luther, L.L.C.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly, and current reports, proxy statements and other information with the SEC. You may read and copy any document that we file at the Public Reference Room of the SEC located at 100 F Street, N.E., Washington, D.C. 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. In addition, the SEC maintains an internet site at www.sec.gov that contains reports, proxy and information statements and other information regarding registrants that file electronically, including EMCORE. Except as expressly set forth under “Information Incorporated by Reference,” we are not incorporating the contents of the SEC website into this prospectus supplement.

We have filed with the SEC a registration statement on Form S-3 (together with all amendments and exhibits, the “registration statement”) under the Securities Act of 1933, as amended with respect to the offering of common stock. This prospectus supplement, which constitutes part of the registration statement, does not contain all of the information set forth in the registration statement. Certain parts of the registration statement are omitted from the accompanying prospectus and this prospectus supplement in accordance with the rules and regulations of the SEC.

Our common stock is listed on The NASDAQ Global Market and similar information can be inspected and copied at the offices of the Financial Industry Regulatory Authority, 1735 K Street, N.W., Washington, D.C. 20006.

INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to incorporate by reference in this prospectus supplement the information in documents we file with the SEC, which means that we can disclose important information to you by referring you to those documents. The information in this prospectus supplement updates (and, to the extent of any conflict, supersedes) information incorporated by reference that we have filed with the SEC prior to the date of this prospectus supplement. You should read all of the information incorporated by reference because it is an important part of the accompanying prospectus and this prospectus supplement.

We incorporate by reference the documents listed below and any future filings made with the SEC by us under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 until we sell all of the securities (other than filings or portions of filings that are furnished under applicable SEC rules rather than filed):

- Annual report on Form 10-K for the fiscal year ended September 30, 2009, filed with the SEC on December 29, 2009, as amended by the Form 10-K/A filed on January 28, 2010.
- Quarterly Report on Form 10-Q for the quarter ended December 31, 2009, filed with the SEC on February 9, 2010.
- Current Reports on Forms 8-K filed with the SEC on February 26, 2010 and March 9, 2010.
- The description of our common stock contained in our Registration Statement on Form 8-A filed with the SEC on February 26, 1997.

You may also find additional information about us, including the documents mentioned above, on our website at www.emcore.com. The information included or linked to this website is not a part of this prospectus supplement.

We hereby undertake to provide without charge to each person, including any beneficial owner, to whom a copy of this prospectus supplement is delivered, upon written or oral request of any such person, a copy of any and all of the reports or documents that have been incorporated by reference in this prospectus supplement, other than exhibits to such documents unless such exhibits have been specifically incorporated by reference thereto. Requests for such copies should be directed to our Investor Relations Department, at the following address:

EMCORE Corporation
10420 Research Road, SE
Albuquerque, New Mexico 87123

S-30

PROSPECTUS

\$50,000,000

EMCORE Corporation

Debt Securities
Common Stock
Preferred Stock
Warrants
Units

This prospectus provides you with a general description of debt and equity securities that we may offer and sell from time to time. Each time we sell securities we will provide a prospectus supplement that will contain specific information about the terms of that sale and may add to or update the information in this prospectus. You should carefully read this prospectus and the applicable prospectus supplement as well as any documents incorporated or deemed to be incorporated in this prospectus before you invest in any of our securities offered hereby. This prospectus may not be used to sell securities unless accompanied by a prospectus supplement.

We may offer and sell securities to or through one or more underwriters, dealers and/or agents on a continuous or delayed basis. For additional information on the methods of sale, you should refer to the section entitled “Plan of Distribution.” If any underwriters are involved in the sale of any securities with respect to which this prospectus is being delivered, the names of such underwriters and any applicable discounts or commissions and over-allotment options will be set forth in the prospectus supplement. The price to the public of such securities and the net proceeds we expect to receive from such sale will also be set forth in a prospectus supplement.

We may also offer from time to time shares of our common stock pursuant to this prospectus and any applicable prospectus supplement in accordance with the terms of a stock purchase agreement we have entered into with Commerce Court Small Cap Value Fund, Ltd., or Commerce Court. The terms of the stock purchase agreement are described in this prospectus under the section entitled “Plan of Distribution.” Commerce Court is an “underwriter” within the meaning of Section 2(a)(11) of the Securities Act of 1933, as amended, with respect to the shares of our common stock that we may offer pursuant to the stock purchase agreement, and any profits on the sales of shares of our common stock by Commerce Court and any discounts, commissions or concessions received by Commerce Court may be deemed to be underwriting discounts and commissions under the Securities Act. We agreed to issue to Commerce Court pursuant to the registration statement of which this prospectus forms a part, as payment of a portion of its fees in connection with the stock purchase agreement, 185,185 shares of our common stock and warrants exercisable for an aggregate of 1,600,000 shares of our common stock, and this prospectus covers the sale to the public of those shares and the shares issuable upon exercise of the warrants.

We expect to deliver to Commerce Court the above-referenced shares of common stock on or about October 5, 2009 and the above-referenced warrants on or about October 1, 2009. Our common stock is listed on The Nasdaq Global Market under the symbol “EMKR.” On September 30, 2009, the last reported sale price of our common stock on The Nasdaq Global Market was \$1.30.

Investing in our common stock involves risk. See “Risk Factors” on page 4. You should carefully review the risks and uncertainties described under the heading “Risk Factors” contained in the applicable prospectus supplement and under similar headings in the documents that are incorporated by reference in this 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.

The date of this prospectus is October 1, 2009

You should rely only on the information contained or incorporated by reference in this prospectus. We have not authorized anyone to provide you with additional information or information different from that contained in this prospectus. The information contained or incorporated by reference in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of securities offered by this prospectus. Our business, financial condition, results of operations and prospects may have changed since that date.

In this prospectus, the “Company”, “EMCORE”, “we”, “us”, and “our” refer to EMCORE Corporation and its subsidiaries. Our fiscal year ends on September 30 of each calendar year. For example, fiscal year 2008 refers to the year ended September 30, 2008. EMCORE is a registered trademark of EMCORE Corporation. This prospectus contains product names, trade names and trademarks of EMCORE and other organizations.

TABLE OF CONTENTS

	Page
About this Prospectus	1
Special Note Regarding Forward-Looking Statements	2
EMCORE Corporation	3
Risk Factors	4
Use of Proceeds	5
Ratio of Earnings to Fixed Charges and Preferred Stock	
Dividends	5
Description of Common Stock	6
Description of Preferred Stock	6
Description of Debt Securities	7
Description of Warrants	14
Description of Units	15
Plan of Distribution	15
Anti-takeover Effects of Provisions of Our Restated Certificate of Incorporation and Amended By-laws	19
New Jersey Shareholders Protection Act	19
Legal Matters	21
Experts	21
Where You Can Find More Information	21
Information Incorporated by Reference	22

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we have filed with the Securities and Exchange Commission (the “SEC” or “Commission”) using a “shelf” registration process. Under this shelf process, we may sell:

- Debt securities;
- Common stock;
- Preferred stock;

- Warrants; and
- Units

either separately or in units, in one or more offerings. This prospectus provides you with a general description of those securities. We will offer our securities in amounts, at prices and on terms to be determined at the time we offer such securities. Each time we sell securities, we will provide a prospectus supplement that will contain specific information about the terms of that offering. The prospectus supplement may also add, update or change information contained in this prospectus. Before purchasing any securities, you should carefully read this prospectus and the applicable prospectus supplement and any applicable free writing prospectus together with the additional information described under the heading "Where You Can Find More Information." Under no circumstances should the delivery to you of this prospectus or any offering or sales made pursuant to this prospectus create any implication that the information contained in this prospectus is correct as of any time after the date of this prospectus.

SPECIAL NOTE REGARDING FORWARD LOOKING STATEMENTS

This prospectus and the information incorporated by reference include forward-looking statements, within the meaning of Section 27A of the Securities Act of 1933, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, or the Exchange Act. These statements are based on management's current expectations or predictions of future results or events. We make these forward-looking statements in reliance on the safe harbor provisions provided under the Private Securities Litigation Reform Act of 1995.

All statements, other than statements of historical fact, included in this prospectus and information incorporated by reference which relate to performance, development or activities that we expect or anticipate will or may happen in the future, are forward-looking statements. Other forward-looking statements may be identified by the use of forward-looking words such as "believe," "expect," "may," "might," "will," "should," "seek," "could," "approximately," "inter," "estimate," or "anticipate" or the negative of those words or other similar expressions.

Forward-looking statements involve inherent risks and uncertainties and are based on numerous assumptions. They are not guarantees of future performance. A number of important factors could cause actual results to differ materially from those in the forward-looking statement. Some factors include:

- our ability to obtain financing or sell assets and achieve levels of revenue and cost reductions that are adequate to support our capital and operating requirements in order to continue as a going concern;
- our abilities to remain competitive and a leader in our industries and the future growth of the Company, our industries, and the economy in general;
- our ability to achieve structural and material cost reductions without impacting product development or manufacturing execution;
 - expected improvements in our product and technology development programs;
- our ability to successfully develop, introduce, market and qualify new products, including our terrestrial solar products;
- our ability to identify and acquire suitable acquisition targets and difficulties in integrating recent or future acquisitions into our operations;
- other risks and uncertainties described in our filings with the SEC such as: cancellations, rescheduling, or delays in product shipments; manufacturing capacity constraints; lengthy sales and qualification cycles; difficulties in the production process; changes in semiconductor industry growth; increased competition; delays in developing and commercializing new products; and other factors.

Forward-looking statements contained herein are made only as of the date made, and we do not undertake any obligation to update them to reflect events or circumstances after the date of this prospectus to reflect the occurrence of unanticipated events.

EMCORE CORPORATION

We are a provider of compound semiconductor-based components and subsystems for the broadband, fiber optic, satellite, and terrestrial solar power markets. We were established in 1984 as a New Jersey corporation. We have two reporting segments: Fiber Optics and Photovoltaics. Our Fiber Optics segment offers optical components, subsystems, and systems that enable the transmission of video, voice, and data over high-capacity fiber optic cables for high-speed data and telecommunications, cable television (“CATV”) and fiber-to-the-premises (“FTTP”) networks. Our Photovoltaics segment provides solar products for satellite and terrestrial applications. For satellite applications, we offer high-efficiency compound semiconductor-based gallium arsenide (“GaAs”) solar cells, covered interconnect cells (“CICs”) and fully integrated solar panels. For terrestrial applications, we offer concentrating photovoltaic (“CPV”) systems for utility scale solar applications as well as our high-efficiency GaAs solar cells and CPV components for use in solar power concentrator systems.

Our headquarters and principal executive offices are located at 10420 Research Road, SE, Albuquerque, New Mexico, 87123, and our main telephone number is (505) 332-5000. For specific information about our company, our products or the markets we serve, please visit our website at <http://www.emcore.com>. The information contained in or linked to our website is not part of this prospectus.

RISK FACTORS

Investing in our securities involves risks. You should carefully read and consider the risk factors and other disclosures relating to any investment in securities issued by EMCORE Corporation described in our Annual Report on Form 10-K for the fiscal year ended September 30, 2008, as updated by annual, quarterly and other reports and documents we file with the SEC after the date of this prospectus and that are incorporated by reference herein. Before making an investment decision, you should carefully consider those risks as well as other information we include or incorporate by reference in this prospectus and the applicable prospectus supplement. The risks and uncertainties we have described are not the only ones facing our company. Additional risks and uncertainties not presently known to us or that we currently consider immaterial may also affect our business operations. To the extent a particular offering implicates additional risk, we will include a discussion of those risks in the applicable prospectus supplement.

USE OF PROCEEDS

Unless otherwise specified in the applicable prospectus supplement, we will use the net proceeds from the sale of securities for one or more of the following:

- repayment of debt;
- acquisitions;
- capital expenditures;
- redemption or repurchase of any preferred stock or debt outstanding; and
- working capital and general corporate purposes.

Pending any specific application, we may initially invest funds in marketable short-term, interest-bearing securities.

RATIO OF EARNINGS TO FIXED CHARGES AND PREFERRED STOCK DIVIDENDS

The following table sets forth our ratio of earnings to fixed charges for the periods indicated. No shares of preferred stock were outstanding during the periods indicated and we did not pay preferred stock dividends during these periods. Consequently, the ratio of earnings to fixed charges and preferred stock dividends is the same as the ratio of earnings to fixed charges for the periods indicated.

Quarter Ended June 30,	Fiscal Year Ended September 30,				
2009	2008	2007	2006	2005	2004
N/M*	N/M*	N/M*	9.0	N/M*	N/M*

We are presenting the ratios above pursuant to the requirements set forth in Item 503 of Regulation S-K under the Securities Act of 1933. The earnings and fixed charges in the above ratios are calculated using the definitions set forth by Regulation S-K under the Securities Act of 1933.

*The ratio of earnings to fixed charges for the nine-months ended June 30, 2009 and for the years ended September 30, 2008, 2007, 2005 and 2004 are not meaningful since earnings available for fixed charges is negative for those periods. The shortfall in the earnings available for fixed charges to achieve a ratio of earnings to fixed charges of 1.00 amounted to \$122.5 million for the nine months ended June 30, 2009 and \$80.9 million, \$58.7 million, \$24.7 million, and \$28.4 million for the years ended September 30, 2008, 2007, 2005 and 2004 respectively.

DESCRIPTION OF COMMON STOCK

The following is a description of our common stock. It does not purport to be complete and is subject to, and qualified in its entirety by, the provisions of our Restated Certificate of Incorporation and Amended By-Laws, forms of which have previously been filed and are incorporated by reference into this prospectus, and by the applicable provisions of New Jersey law. See “Anti-takeover Effects of Provisions of Our Restated Certificate of Incorporation and Amended By-laws” for more information regarding the provisions of our Restated Certificate of Incorporation and Amended By-laws that could effect an extraordinary corporate transaction.

General Matters

Our authorized capital stock consists of 200,000,000 shares of common stock, no par value and 5,882,352 shares of preferred stock, \$0.0001 par value. As of September 30, 2009, we had 80,781,775 shares of common stock issued and outstanding and no shares of preferred stock issued and outstanding.

Common Stock

Holders of common stock are entitled to one vote per share on matters to be voted upon by the shareholders of the Company. Subject to the preferences that may be applicable to any outstanding shares of preferred stock, the holders of common stock are entitled to receive ratably such dividends, if any, as may be declared by the Board of Directors out of funds legally available therefor. In the event of liquidation, dissolution or winding up of the Company, the holders of common stock are entitled to share ratably in all assets remaining after payment of liabilities, subject to the prior liquidation rights of any outstanding shares of preferred stock. The common stock has no preemptive, redemption, conversion or other subscription rights. The outstanding shares of common stock are, and the shares offered by the Company in the offering will be, when issued and paid for, fully paid and nonassessable. The rights, preferences and privileges of holders of common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock currently outstanding or which the Company may designate and issue in the future.

Transfer Agent and Registrar

The Transfer Agent and Registrar for our common stock is American Stock Transfer & Trust Company, New York, New York.

Listing

Our shares of common stock are quoted on The Nasdaq Global Market under the symbol “EMKR”.

DESCRIPTION OF PREFERRED STOCK

The Board of Directors has the authority, without action by the stockholders, to designate and issue preferred stock in one or more series and to designate the rights, preferences and privileges of each series, which may be greater than the rights of the common stock. It is not possible to state the actual effect of the issuance of any shares of preferred stock upon the rights of holders of the common stock until the Board of Directors determines the specific rights of the holders of this preferred stock. However, the effects might include, among other things:

- restricting dividends on the common stock;
- diluting the voting power of the common stock;
- impairing the liquidation rights of the common stock; or
- delaying or preventing a change in control of the company without further action by the stockholders.

No shares of preferred stock are outstanding. The summary above is qualified by provisions of applicable law. If we offer a specific series of preferred stock under this prospectus, we will describe the terms of the preferred stock in the prospectus supplement for such offering and will file a copy of the certificate establishing the terms of the preferred stock with the SEC. To the extent required, this description will include:

- the title and stated value;
- the number of shares offered, the liquidation preference per share and the purchase price;
- the dividend rate(s), period(s) and/or payment date(s), or method(s) of calculation for such dividends;
- whether dividends will be cumulative or non-cumulative and, if cumulative, the date from which dividends will accumulate;
 - the procedures for any auction and remarketing, if any;
 - the provisions for a sinking fund, if any;
 - the provisions for redemption, if applicable;
- any listing of the preferred stock on any securities exchange or market;
- whether the preferred stock will be convertible into our common stock, and, if applicable, the conversion price (or how it will be calculated) and conversion period;
- whether the preferred stock will be exchangeable into debt securities, and, if applicable, the exchange price (or how it will be calculated) and exchange period;
 - voting rights, if any, of the preferred stock;
- a discussion of any material and/or special U.S. federal income tax considerations applicable to the preferred stock;
 - the relative ranking and preferences of the preferred stock as to dividend rights and rights upon liquidation, dissolution or winding up of the affairs of EMCORE; and
- any material limitations on issuance of any class or series of preferred stock ranking senior to or on a parity with the series of preferred stock as to dividend rights and rights upon liquidation, dissolution or winding up of EMCORE.

DESCRIPTION OF DEBT SECURITIES

The following description of the terms of the debt securities sets forth certain general terms and provisions of the debt securities to which any prospectus supplement may relate. The particular terms of the debt securities offered by any prospectus supplement and the extent, if any, to which these general provisions may apply to those debt securities will be described in the prospectus supplement relating to those debt securities. Accordingly, for a description of the terms of a particular issue of debt securities, reference must be made to both the prospectus supplement relating thereto and to the following description.

General

We may issue debt securities from time to time in one or more series. The debt securities will be general obligations of EMCORE Corporation. The debt securities may be fully and unconditionally guaranteed on a secured or unsecured senior or subordinated basis, jointly and severally, by guarantors, if any. In the event that any series of debt securities will be subordinated to other indebtedness that we have outstanding or may incur, the terms of the subordination will be set forth in the prospectus supplement relating to the subordinated debt securities. Debt securities will be issued under one or more indentures between us and one or more trustees named in the prospectus supplement, which we refer to as the trustee. The statements made in this prospectus relating to the indenture and the debt securities to be issued under the indenture are summaries of certain terms and provisions of the form of indenture that has been filed as Exhibit 4.2 to the registration statement of which this prospectus forms a part and are not complete. You should read the indenture for provisions that may be important to you.

The prospectus supplement relating to a particular series of debt securities will describe the terms of such debt securities being offered, including:

- the title;
- the maturity date;
- the interest rate, if any, and the method for calculating the interest rate;
- the interest payment dates and the record dates for the interest payments;
- any mandatory or optional redemption terms or prepayment, conversion, and sinking fund terms;
- the place where we will pay principal and interest;
- if other than denominations of \$1,000 or multiples of \$1,000 in excess thereof, the denominations the debt securities will be issued in;
- whether the debt securities will be issued in the form of global securities or certificates;
- additional provisions, if any, relating to defeasance;
- the currency or currencies, if other than the currency of the United States, in which principal and interest will be paid;
- any United States federal income tax consequences;
- the dates on which premium, if any, will be paid;
- our right, if any, to defer payment of interest and the maximum length of this deferral period;
- any listing on a securities exchange;
- limits on aggregate principal amount;
- terms of subordination of any subordinated debt securities;
- the initial public offering price; and
- other specific terms, including any additional events of default or covenants.

We may, from time to time, without notice to or the consent of registered holders of a particular series of debt securities, create and issue further securities ranking pari passu with that series of debt securities in all respects (or in all respects except for the payment of interest accruing prior to the issue date of such further debt securities or except for the first payment of interest following the issue date of such further debt securities) and so that such further debt

securities shall be consolidated and form a single series with that particular series of debt securities and shall have the same terms as to status, redemption or otherwise as that series of debt securities.

We can issue an unlimited amount of debt securities under the indenture that may be in one or more series with the same or various maturities, at par, at a premium, or at a discount. The indenture does not limit our ability to issue convertible or subordinated debt securities. Any conversion or subordination provisions of a particular series of debt securities will be set forth in the officer's certificate or supplemental indenture related to that series of debt securities and will be described in the relevant prospectus supplement. Such terms may include provisions for conversions, either mandatory, at the option of the holder or at our option, in which case the number of shares of common stock, preferred stock or other securities to be received by the holders of debt securities would be calculated as of a time and in the manner stated in the prospectus supplement.

The debt securities will be issuable only in fully registered form without coupons or in the form of one or more global securities, as described below under “—Global Securities”. Unless the prospectus supplement specifies otherwise, debt securities denominated in U.S. dollars will be issued only in denominations of U.S.\$1,000 and any integral multiple of U.S.\$1,000 in excess thereof. The prospectus supplement relating to debt securities denominated in a foreign or composite currency will specify the authorized denominations.

If the amount of payments of principal of and premium, if any, or any interest on debt securities of any series is determined with reference to any type of index or formula or changes in prices of particular securities or commodities, the federal income tax consequences, specific terms and other information with respect to these debt securities and this index or formula, securities or commodities will be described in the relevant prospectus supplement.

If the principal of and premium, if any, or any interest on debt securities of any series are payable in a foreign or composite currency, the restrictions, elections, federal income tax consequences, specific terms and other information with respect to such debt securities and such currency will be described in the relevant prospectus supplement.

Payment of principal of and premium, if any, on debt securities will be made in the designated currency against surrender of any debt securities at the Corporate Trust Office of the trustee in The City of New York. Unless otherwise indicated in the prospectus supplement, payment of any installment of interest on debt securities will be made to the person in whose name a relevant debt security is registered at the close of business on the regular record date for such interest. Unless otherwise indicated in the prospectus supplement, payments of such interest will be made at the Corporate Trust Office of the trustee in The City of New York or by a check in the designated currency mailed to the holder at such holder's registered address.

Debt securities may be issued as original issue discount securities to be offered and sold at a substantial discount below their stated principal amount. Federal income tax consequences and other special considerations applicable to any original issue discount securities will be described in the relevant prospectus supplement. "Original issue discount security" means any debt security that provides for an amount less than the principal amount thereof to be due and payable upon a declaration of acceleration of the maturity thereof upon the occurrence of an event of default and the continuation thereof.

Covenants

Consolidation, Merger and Sale of Assets

We will agree under the indenture that we will not consolidate with or merge into, or convey, transfer or lease all or substantially all of our properties and assets to, any Person (a "Successor Person"), and will not permit any Person to merge into us in a transaction in which we are not the surviving entity, unless:

(i) the Successor Person (if not EMCORE) is a corporation, limited liability company, partnership or trust organized and validly existing under the laws of any domestic jurisdiction and assumes our obligations on any outstanding debt securities and under the indenture;

(ii) immediately after giving effect to the transaction, and treating any Indebtedness which becomes our obligation as a result of the transaction as having been incurred by us at the time of the transaction, no event of default and no event which, after notice or lapse of time or both, would become an event of default, shall have occurred and be continuing; and

(iii) the trustee receives an officers' certificate and an opinion of counsel stating that such action complies with this covenant.

Events of Default

The indenture specifies that each of the following will constitute an event of default with respect to the debt securities of a particular series:

- (a) failure to pay principal of any debt security of that series at its maturity;
- (b) failure to pay any interest on any debt security of that series when due, continued for 30 days;
- (c) failure to deposit any sinking fund payment, when and as due by the terms of that series;

(d) failure to perform any covenant of ours applicable to that series in the indenture, continued for 60 days after written notice of such failure is given by the trustee or the holders of at least 25% in principal amount of the outstanding debt securities of that series, as provided in the indenture; and

(e) certain events in bankruptcy, insolvency or reorganization.

If an event of default (other than an event of default described in clause (e) above) shall occur and be continuing, either the trustee or the holders of at least 25% in aggregate principal amount of the outstanding debt securities of that series by notice as provided in the indenture may declare the principal amount of such series of the debt securities to be due and payable immediately. If an event of default described in clause (e) above shall occur, the principal amount of all the outstanding debt securities of that series will automatically, and without any action by the trustee or any holder, become immediately due and payable. After any such acceleration, but before a judgment or decree for payment of the money due, the holders of a majority in aggregate principal amount of the outstanding debt securities of a particular series may, under certain circumstances, rescind and annul such acceleration if all events of default, other than the non-payment of accelerated principal, have been cured or waived as provided in the indenture. For information as to waiver of defaults, see “—Modification and Waiver.”

Subject to the provisions of the indenture relating to the duties of the trustee in case an event of default shall occur and be continuing, the trustee will be under no obligation to exercise any of its rights or powers under the indenture at the request or direction of any of the holders, unless such holders shall have offered to the trustee reasonable indemnity. Subject to such provisions for the indemnification of the trustee, the holders of a majority in aggregate principal amount of the outstanding debt securities of that 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 such series of the debt securities.

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

(i) such holder has previously given to the trustee written notice of a continuing event of default with respect to such series of the debt securities;

(ii) the holders of at least 25% in aggregate principal amount of the outstanding debt securities of that series have made written request, and such holder or holders have offered reasonable indemnity, to the trustee to institute such proceeding as trustee; and

(iii) the trustee has failed to institute such proceeding, and has not received from the holders of a majority in aggregate principal amount of the outstanding debt securities of that series a direction inconsistent with such request, within 60 days after such notice, request and offer. However, such limitations do not apply to a suit instituted by a holder of a debt security for the enforcement of payment of the principal of or interest on such debt security on or after the applicable due date specified in such debt security.

Modification and Waiver

Together with the trustee, we may modify the indenture without the consent of any holder for certain purposes, including evidencing the succession of another person to us and such person’s assumption of our obligations under the

indenture, adding to our covenants or events of default, establishing forms or terms of debt securities, curing ambiguities and other purposes which do not adversely affect the holders in any material respect.

Other modifications and amendments of the indenture may be made by us and the trustee with the consent of the holders of at least a majority in aggregate principal amount of each series of the outstanding debt securities that is affected by such modification or amendment, all holders of all such affected series voting together as one class.

No such modification or amendment may, without the consent of the holder of each outstanding debt security affected thereby:

- (a) change the stated maturity of the principal of, or any installment of interest on, or the redemption price of, any such debt security;
- (b) reduce the principal amount of or interest on, any such debt security;
- (c) change currency of payment of principal of or interest on, any such debt security;
- (d) impair the right to institute suit for the enforcement of any payment on any such debt security;
- (e) reduce the percentage in principal amount of outstanding debt securities of a particular series, the consent of whose holders is required for modification or amendment of the indenture, or for waiver of compliance with certain provisions of the indenture or waiver of certain defaults; or
- (f) modify such provisions with respect to modification and waiver.

The holders of at least a majority in principal amount of each series of the outstanding debt securities that is affected by such waiver, all holders of all such affected series voting together as one class, may waive our compliance with certain restrictive provisions of the indenture, and may waive any past default under the indenture, except a default in the payment of principal or interest and certain covenants and provisions of the indenture which cannot be amended without the consent of the holder of each outstanding debt security affected by such default.

Defeasance and Discharge; Covenant Defeasance

Unless the terms of a particular series provide otherwise, we may elect, at our option at any time, to have the indenture provisions relating to defeasance and discharge of indebtedness, or relating to defeasance of certain restrictive covenants in the indenture, applied to any series of the outstanding debt securities.

Defeasance and Discharge

The indenture provides that upon our exercise of our option to have the provisions relating to defeasance and discharge applied to a particular series of the debt securities, we will be discharged from all our obligations with respect to such series of the debt securities (except for certain obligations to exchange or register the transfer of debt securities, to replace stolen, lost or mutilated debt securities, to maintain paying agencies and to hold moneys for payment in trust) upon the deposit in trust for the benefit of the holders of the debt securities of such series of money or U.S. government obligations, or both, which, through the payment of principal and interest in respect thereof in accordance with their terms, will provide money in an amount sufficient to pay the principal of and interest on the debt securities of such series at maturity in accordance with the terms of the indenture and such debt securities. Such defeasance or discharge may occur only if, among other things, we have delivered to the trustee an opinion of counsel to the effect that we have received from, or there has been published by, the United States Internal Revenue Service a ruling, or there has been a change in tax law, in either case to the effect that holders of the debt securities of such series will not recognize gain or loss for federal income tax purposes as a result of such deposit, defeasance and discharge and will be subject to federal income tax on the same amount, in the same manner and at the same times as would have been the case if such deposit, defeasance and discharge were not to occur.

Defeasance of Certain Covenants

The indenture provides that, upon our exercise of our option to have the provisions relating to defeasance of certain restrictive covenants applied to a particular series of the debt securities, we may, with respect to such series, omit to comply with certain restrictive covenants, including those described under “—Consolidation, Merger and Sale of Assets,” and the occurrence of certain events of default, which are described above in clause (d) under “Events of Default,” will be deemed not to be or result in an event of default, in each case with respect to such series.

We, in order to exercise such option, will be required, among other things:

(1) to deposit, in trust for the benefit of the holders of such series of the debt securities, money or U.S. government obligations, or both, which, through the payment of principal and interest in respect thereof in accordance with their terms, will provide money in an amount sufficient to pay the principal of and interest on such series of the debt securities at maturity in accordance with the terms of the indenture and such debt securities, and

(2) to deliver to the trustee an opinion of counsel to the effect that holders of such series of the debt securities will not recognize gain or loss for federal income tax purposes as a result of such deposit and defeasance of certain obligations and will be subject to federal income tax on the same amount, in the same manner and at the same times as would have been the case if such deposit and defeasance were not to occur.

In the event we exercise this option and the debt securities are declared due and payable because of the occurrence of any event of default, the amount of money and U.S. government obligations so deposited in trust would be sufficient to pay amounts due on that series of the debt securities at maturity but may not be sufficient to pay amounts due on that series of the debt securities upon any acceleration resulting from such event of default. In such case, we would remain liable for such payments.

Regarding the Trustee

The indenture provides that, except during the continuance of an event of default, the trustee will perform only such duties as are specifically set forth in the indenture. During the existence of an event of default, the trustee will exercise such rights and powers vested in it under the indenture and use the same degree of care and skill in its exercise as a prudent person would exercise under the circumstances in the conduct of such person's own affairs.

The indenture and provisions of the Trust Indenture Act incorporated by reference therein contain limitations on the rights of the trustee, should it become a creditor of us, to obtain payment of claims in certain cases or to realize on certain property received by it in respect of any such claim as security or otherwise. The trustee is permitted to engage in other transactions with us or any affiliate of us; provided, however, that if it acquires any conflicting interest (as defined in the indenture or in the Trust Indenture Act), it must eliminate such conflict or resign.

The trustee for any debt securities will be set forth in the applicable prospectus supplement.

Form of Debt Securities

Each debt security will be represented either by a certificate issued in definitive form to a particular investor or by one or more global securities representing the entire issuance of securities. Certificated securities in definitive form and global securities will be issued in registered form.

Definitive securities name you or your nominee as the owner of the security, and in order to transfer or exchange these securities or to receive payments other than interest or other interim payments, you or your nominee must physically deliver the securities to the trustee, registrar, paying agent or other agent, as applicable.

Global securities name a depository or its nominee as the owner of the debt securities represented by these global securities. The depository maintains a computerized system that will reflect each investor's beneficial ownership of the securities through an account maintained by the investor with its broker/dealer, bank, trust company or other

representative, as we explain more fully below.

Global Securities

We may issue the debt securities in whole or in part in the form of one or more fully registered global securities that will be deposited with a depository or its nominee identified in the prospectus supplement relating to that series and registered in the name of that depository or nominee. In those cases, one or more registered global securities will be issued in a denomination or aggregate denominations equal to the portion of the aggregate principal or face amount of the securities to be represented by registered global securities. Unless and until it is exchanged in whole for securities in definitive registered form, a registered global security may not be transferred except as a whole by and among the depository for the registered global security, the nominees of the depository or any successors of the depository or those nominees.

If not described below, any specific terms of the depositary arrangement with respect to any securities to be represented by a registered global security will be described in the prospectus supplement relating to those securities. We anticipate that the following provisions will apply to all depositary arrangements.

Ownership of beneficial interests in a registered global security will be limited to persons, called participants, that have accounts with the depositary or persons that may hold interests through participants. Upon the issuance of a registered global security, the depositary will credit, on its book-entry registration and transfer system, the participants' accounts with the respective principal or face amounts of the securities beneficially owned by the participants. Any dealers, underwriters or agents participating in the distribution of the securities will designate the accounts to be credited. Ownership of beneficial interests in a registered global security will be shown on, and the transfer of ownership interests will be effected only through, records maintained by the depositary, with respect to interests of participants, and on the records of participants, with respect to interests of persons holding through participants. The laws of some states may require that some purchasers of securities take physical delivery of these securities in definitive form. These laws may impair your ability to own, transfer or pledge beneficial interests in registered global securities.

So long as the depositary, or its nominee, is the registered owner of a registered global security, that depositary or its nominee, as the case may be, will be considered the sole owner or holder of the securities represented by the registered global security for all purposes under the indenture. Except as described below, owners of beneficial interests in a registered global security will not be entitled to have the securities represented by the registered global security registered in their names, will not receive or be entitled to receive physical delivery of the securities in definitive form and will not be considered the owners or holders of the securities under the indenture. Accordingly, each person owning a beneficial interest in a registered global security must rely on the procedures of the depositary for that registered global security and, if that person is not a participant, on the procedures of the participant through which the person owns its interest, to exercise any rights of a holder under the indenture. We understand that under existing industry practices, if we request any action of holders or if an owner of a beneficial interest in a registered global security desires to give or take any action that a holder is entitled to give or take under the indenture, the depositary for the registered global security would authorize the participants holding the relevant beneficial interests to give or take that action, and the participants would authorize beneficial owners owning through them to give or take that action or would otherwise act upon the instructions of beneficial owners holding through them.

Principal, premium, if any, and interest payments on debt securities represented by a registered global security registered in the name of a depositary or its nominee will be made to the depositary or its nominee, as the case may be, as the registered owner of the registered global security. None of EMCORE, the trustee or any agent of EMCORE or agent of the trustee will have any responsibility or liability for any aspect of the records relating to payments made on account of beneficial ownership interests in the registered global security or for maintaining, supervising or reviewing any records relating to those beneficial ownership interests.

We expect that the depositary for any of the securities represented by a registered global security, upon receipt of any payment of principal, premium or interest to holders on that registered global security, will immediately credit participants' accounts in amounts proportionate to their respective beneficial interests in that registered global security as shown on the records of the depositary. We also expect that payments by participants to owners of beneficial interests in a registered global security held through participants will be governed by standing customer instructions and customary practices, as is now the case with the securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of those participants.

If the depositary for any of these securities represented by a registered global security is at any time unwilling or unable to continue as depositary or ceases to be a clearing agency registered under the Exchange Act and a successor depositary registered as a clearing agency under the Exchange Act is not appointed by us within 90 days, we will issue

securities in definitive form in exchange for the registered global security that had been held by the depositary. In addition, we may at any time and in our sole discretion decide not to have any of the securities represented by one or more registered global securities. If we make that decision, we will issue securities in definitive form in exchange for all of the registered global security or securities representing those securities. Any securities issued in definitive form in exchange for a registered global security will be registered in the name or names that the depositary gives to the trustee or other relevant agent of ours or theirs. It is expected that the depositary's instructions will be based upon directions received by the depositary from participants with respect to ownership of beneficial interests in the registered global security that had been held by the depositary.

DESCRIPTION OF WARRANTS

We may issue warrants to purchase shares of our common stock, preferred stock and/or debt securities in one or more series together with other securities or separately, as described in the applicable prospectus supplement. Below is a description of certain general terms and provisions of the warrants that we may offer. Particular terms of the warrants will be described in the warrant agreements and the prospectus supplement to the warrants.

The applicable prospectus supplement will contain, where applicable, the following terms of and other information relating to the warrants:

- the title of the warrants;
- the offering price of the warrants;
- the aggregate number of the warrants;
- the currency or currency units in which the offering price, if any, and the exercise price are payable;
- the designation, amount and terms of the securities purchasable upon exercise of the warrants;

if applicable, the exercise price for shares of our common stock and the number of shares of common stock to be received upon exercise of the warrants;

if applicable, the exercise price for shares of our preferred stock, the number of shares of preferred stock to be received upon exercise, and a description of that series of our preferred stock;

if applicable, the exercise price for our debt securities, the amount of debt securities to be received upon exercise, and a description of that series of debt securities;

the date on which the right to exercise the warrants will begin and the date on which that right will expire or, if you may not continuously exercise the warrants throughout that period, the specific date or dates on which you may exercise the warrants;

whether the warrants will be issued in fully registered form or bearer form, in definitive or global form or in any combination of these forms, although, in any case, the form of a warrant included in a unit will correspond to the form of the unit and of any security included in that unit;

- any applicable material U.S. federal income tax consequences;

the identity of the warrant agent for the warrants and of any other depositaries, execution or paying agents, transfer agents, registrars or other agents;

the proposed listing, if any, of the warrants or any securities purchasable upon exercise of the warrants on any securities exchange;

- if applicable, the date from and after which the warrants and the common stock, preferred stock and/or debt securities will be separately transferable;

- if applicable, the minimum or maximum amount of the warrants that may be exercised at any one time;
 - information with respect to book-entry procedures, if any;
 - the anti-dilution provisions of the warrants, if any;
 - any redemption or call provisions;
 - whether the warrants are to be sold separately or with other securities as parts of units; and
- any additional terms of the warrants, including terms, procedures and limitations relating to the exchange and exercise of the warrants.

Transfer Agent and Registrar

The transfer agent and registrar for any warrants will be set forth in the applicable prospectus supplement.

DESCRIPTION OF UNITS

We may issue units consisting of common stock, preferred stock, debt securities and/or warrants for the purchase of common stock, preferred stock and/or debt securities in one or more series. In this prospectus, we have summarized certain general features of the units. We urge you, however, to read the prospectus supplements related to the series of units being offered, as well as the unit agreements that contain the terms of the units. We will file as exhibits to an amendment to the registration statement of which this prospectus is a part, or will incorporate by reference from a current report on Form 8-K that we file with the SEC, as applicable, the form of unit agreement and any supplemental agreements that describe the terms of the series of units we are offering before the issuance of the related series of units.

We will evidence each series of units by unit certificates that we will issue under a separate agreement. We will enter into the unit agreements with a unit agent. Each unit agent will be a bank or trust company that we select. We will indicate the name and address of the unit agent in the applicable prospectus supplement relating to a particular series of units.

PLAN OF DISTRIBUTION

Any of the securities being offered hereby and in any accompanying prospectus supplement may be sold in any one or more of the following ways from time to time:

- directly to purchasers;
- through agents;
- to or through underwriters;
- through dealers;
- directly to our stockholders; or
- through a combination of any such methods of sale.

The distribution of the securities may be effected from time to time in one or more transactions at a fixed price or prices, which may be changed, at market prices prevailing at the time of sale, at prices related to such prevailing market prices or at negotiated prices.

We may solicit offers to purchase directly. Offers to purchase securities also may be solicited by agents designated by us from time to time. Any such agent involved in the offer or sale of the securities in respect of which this prospectus is delivered will be named, and any commissions payable by us to such agent will be set forth, in the applicable prospectus supplement. Unless otherwise indicated in such prospectus supplement, any such agent will be acting on a reasonable best efforts basis for the period of its appointment. Any such agent may be deemed to be an underwriter, as that term is defined in the Securities Act, of the securities so offered and sold.

If securities are sold by means of an underwritten offering, we will execute an underwriting agreement with an underwriter or underwriters at the time an agreement for such sale is reached, and the names of the specific managing underwriter or underwriters, as well as any other underwriters, the respective amounts underwritten and the terms of the transaction, including commissions, discounts and any other compensation of the underwriters and dealers, if any, will be set forth in the applicable prospectus supplement which will be used by the underwriters to make resales of the securities in respect of which this prospectus is being delivered to the public. If underwriters are utilized in the sale of any securities in respect of which this prospectus is being delivered, such securities will be acquired by the underwriters for their own account and may be resold from time to time in one or more transactions, including negotiated transactions, at fixed public offering prices, at market prices prevailing at the time of sale or at varying prices determined by the underwriters at the time of sale. Securities may be offered to the public either through underwriting syndicates represented by managing

underwriters or directly by one or more underwriters. If any underwriter or underwriters are utilized in the sale of securities, unless otherwise indicated in the applicable prospectus supplement, the underwriting agreement will provide that the obligations of the underwriters are subject to certain conditions precedent and that the underwriters with respect to a sale of such securities will be obligated to purchase all such securities if any are purchased.

We may grant to the underwriters options to purchase additional securities, to cover over-allotments, if any, at the initial public offering price (with additional underwriting commissions or discounts), as may be set forth in the prospectus supplement relating thereto. If we grant any over-allotment option, the terms of such over-allotment option will be set forth in the prospectus supplement for such securities.

If a dealer is used in the sale of the securities in respect of which this prospectus is delivered, we will sell such securities to the dealer, as principal. The dealer may then resell such securities to the public at varying prices to be determined by such dealer at the time of resale. Any such dealer may be deemed to be an underwriter, as such term is defined in the Securities Act, of the securities so offered and sold. The name of the dealer and the terms of the transaction will be set forth in the prospectus supplement relating thereto.

Offers to purchase securities may be solicited directly by us and the sale thereof may be made by us directly to institutional investors or others, who may be deemed to be underwriters within the meaning of the Securities Act with respect to any resale thereof. The terms of any such sales will be described in the prospectus supplement relating thereto.

We may offer our equity securities into an existing trading market on the terms described in the applicable prospectus supplement. Underwriters and dealers who may participate in any at-the-market offerings will be described in the prospectus supplement relating thereto.

Agents, underwriters and dealers may be entitled under relevant agreements with us to indemnification by us against certain liabilities, including liabilities under the Securities Act, or to contribution with respect to payments which such agents, underwriters and dealers may be required to make in respect thereof.

Any underwriter may engage in stabilizing and syndicate covering transactions in accordance with Rule 104 under Regulation M. Rule 104 permits stabilizing bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum. The underwriters may over-allot shares of the securities in connection with an offering of securities, thereby creating a short position in the underwriters' account. Syndicate covering transactions involve purchases of the securities in the open market after the distribution has been completed in order to cover syndicate short positions. Stabilizing and syndicate covering transactions may cause the price of the securities to be higher than it would otherwise be in the absence of such transactions. These transactions, if commenced, may be discontinued at any time.

We may elect to list any series of securities on an exchange but, unless otherwise specified in the applicable prospectus supplement, we shall not be obligated to do so. No assurance can be given as to the liquidity of the trading market for any of the securities.

Agents, underwriters and dealers may be customers of, engage in transactions with, or perform services for, us and our subsidiaries in the ordinary course of business.

The anticipated date of delivery of securities will be set forth in the applicable prospectus supplement relating to each offer.

Pursuant to a requirement by the Financial Industry Regulatory Authority, or FINRA, the maximum commission or discount to be received by any FINRA member or independent broker/dealer may not be greater than eight percent (8%) of the gross proceeds received by us for the sale of any securities being registered pursuant to SEC Rule 415 under the Securities Act of 1933.

Equity Line of Credit

On October 1, 2009, we entered into what is sometimes termed an equity line of credit arrangement with Commerce Court Small Cap Value Fund, Ltd., or Commerce Court. Specifically, we entered into a Common Stock Purchase Agreement, or the Purchase Agreement, that provides that, upon the terms and subject to the conditions set forth therein, Commerce Court is committed to purchase up to \$25 million worth of shares of our common stock over the 24-month term of the Purchase Agreement; provided, however, in no event may we sell under the Purchase Agreement more than

15,971,169 shares of common stock, which is equal to one share less than twenty percent of our outstanding shares of common stock on the closing date of the Purchase Agreement, less the number of shares of common stock we issued to Commerce Court on the closing date in partial payment of its commitment fee. Under the Purchase Agreement, on the closing date, we also issued warrants to purchase up to an aggregate of 1,600,000 shares of our common stock. The terms of the warrants are described below.

From time to time over the term of the Purchase Agreement, and at our sole discretion, we may present Commerce Court with draw down notices to purchase our common stock over ten consecutive trading days or such other period mutually agreed upon by us and Commerce Court, or the draw down period, with each draw down subject to limitations based on the price of our common stock and a limit of 2.5% of our market capitalization at the time of such draw down. We are able to present Commerce Court with up to 24 draw down notices during the term of the Purchase Agreement, with only one such draw down notice allowed per draw down period and a minimum of five trading days required between each draw down period.

Once presented with a draw down notice, Commerce Court is required to purchase a pro rata portion of the shares on each trading day during the trading period on which the daily volume weighted average price for our common stock exceeds a threshold price determined by us for such draw down. The per share purchase price for these shares will equal the daily volume weighted average price of our common stock on each date during the draw down period on which shares are purchased, less a discount of 5%. If the daily volume weighted average price of our common stock falls below the threshold price on any trading day during a draw down period, the Purchase Agreement provides that Commerce Court will not be required to purchase the pro-rata portion of shares of common stock allocated to that day. However, at its election, Commerce Court may buy the pro-rata portion of shares allocated to that day at the threshold price less the discount described above.

The Purchase Agreement also provides that, from time to time and at our sole discretion, we may grant Commerce Court the right to exercise one or more options to purchase additional shares of our common stock during each draw down period for an amount of shares specified by us based on the trading price of our common stock. Upon Commerce Court's exercise of an option, we would sell to Commerce Court the shares of our common stock subject to the option at a price equal to the greater of the daily volume weighted average price of our common stock on the day Commerce Court notifies us of its election to exercise its option or the threshold price for the option determined by us, less a discount calculated in the same manner as it is calculated in the draw down notices.

In addition to our issuance of shares of common stock to Commerce Court pursuant to the Purchase Agreement, the registration statement to which this prospectus relates also covers the sale of those shares from time to time by Commerce Court to the public. Commerce Court is an "underwriter" within the meaning of Section 2(a)(11) of the Securities Act. Commerce Court has informed us that it will use an unaffiliated broker-dealer to effectuate all sales, if any, of common stock that it may purchase from us pursuant to the Purchase Agreement. Such sales will be made on the Nasdaq Global Market at prices and at terms then prevailing or at prices related to the then current market price. Each such unaffiliated broker-dealer will be an underwriter within the meaning of Section 2(a)(11) of the Securities Act. Commerce Court has informed us that each such broker-dealer will receive commissions from Commerce Court which will not exceed customary brokerage commissions. Commerce Court may also pay other expenses associated with the sale of the common stock it acquires pursuant to the Purchase Agreement.

The shares of common stock issued under the Purchase Agreement may be sold in one or more of the following manners:

- ordinary brokerage transactions and transactions in which the broker solicits purchasers; or

-

a block trade in which the broker or dealer so engaged will attempt to sell the shares as agent, but may position and resell a portion of the block as principal to facilitate the transaction.

Commerce Court has agreed that during the term of and for a period of 90 days after the termination of the Purchase Agreement, neither Commerce Court nor any of its affiliates will, directly or indirectly, sell any of our securities except the shares that it owns or has the right to purchase pursuant to the provisions of a draw down notice.

Commerce Court has agreed that during the periods listed above neither it nor any of its affiliates will enter into a short position with respect to shares of our common stock except that Commerce Court may sell shares that it is obligated to purchase under a pending draw down notice but has not yet taken possession of so long as Commerce Court covers any such sales with the shares purchased pursuant to such draw down notice. Commerce Court has further agreed that during the periods listed

above it will not grant any option to purchase or acquire any right to dispose or otherwise dispose for value of any shares of our common stock or any securities convertible into, or exchangeable for, or warrants to purchase, any shares of our common stock, or enter into any swap, hedge or other agreement that transfers, in whole or in part, the economic risk of ownership of our common stock, except for the sales permitted by the prior two sentences.

In addition, Commerce Court and any unaffiliated broker-dealer will be subject to liability under the federal securities laws and must comply with the requirements of the Securities Act and the Exchange Act, including, without limitation, Rule 10b-5 and Regulation M under the Exchange Act. These rules and regulations may limit the timing of purchases and sales of shares of common stock by Commerce Court or any unaffiliated broker-dealer. Under these rules and regulations, Commerce Court and any unaffiliated broker-dealer:

- may not engage in any stabilization activity in connection with our securities;
- must furnish each broker which offers shares of our common stock covered by the prospectus that is a part of our Registration Statement with the number of copies of such prospectus and any prospectus supplement which are required by each broker; 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.

These restrictions may affect the marketability of the shares of common stock purchased and sold by Commerce Court and any unaffiliated broker-dealer.

We have agreed to indemnify and hold harmless Commerce Court, any unaffiliated broker-dealer and each person who controls Commerce Court or any unaffiliated broker-dealer against certain liabilities, including certain liabilities under the Securities Act. We have agreed to pay up to \$45,000 of Commerce Court's attorneys' fees and expenses incurred by Commerce Court in connection with the preparation, negotiation, execution and delivery of the Purchase Agreement and related transaction documentation. We have also agreed to pay certain fees and expenses incurred by Commerce Court in connection with any amendments, modifications or waivers of the Purchase Agreement, ongoing due diligence of our company and other transaction expenses associated with fixed requests made by us from time to time during the term of the Purchase Agreement, provided that we shall not be required to pay any reimbursement for any such expenses in any calendar quarter in which we provide a fixed request notice. Further, if we issue a draw down notice and fail to deliver the shares to Commerce Court on the applicable settlement date, and such failure continues for ten trading days, we have agreed to pay Commerce Court liquidated damages in cash or restricted shares of our common stock, at Commerce Court's option.

Commerce Court has agreed to indemnify and hold harmless us and each of our directors, officers and persons who control us against certain liabilities under the Securities Act that may be based upon written information furnished by Commerce Court to us for inclusion in this prospectus or any other prospectus or prospectus supplement related to this transaction.

Upon each sale of our common stock to Commerce Court under the Purchase Agreement, we have also agreed to pay Reedland Capital Partners, an Institutional Division of Financial West Group, a placement fee equal to 1% of the aggregate dollar amount of common stock purchased by Commerce Court. We have agreed to indemnify and hold harmless Reedland against certain liabilities, including certain liabilities under the Securities Act.

As payment of a portion of Commerce Court's fees in connection with the Purchase Agreement, we agreed to issue to Commerce Court upon the execution of the Purchase Agreement 185,185 shares of our common stock and three warrants representing the right to purchase up to an aggregate of 1,600,000 shares of our common stock, as follows: (i) a warrant, pursuant to which Commerce Court may purchase up to 666,667 shares of our common stock at an initial exercise price of \$1.69, which is equal to 125% of the average of the volume weighted average price of

our common stock for the three trading days immediately preceding the execution date of the Purchase Agreement, (ii) a warrant, pursuant to which Commerce Court may purchase from up to 666,667 shares of our common stock at an initial exercise price of \$2.02, which is equal to 150% of the average of the volume weighted average price of our common stock for the three trading days immediately preceding the execution date of the Purchase Agreement, and (iii) a warrant, pursuant to which Commerce Court may purchase up to 266,666 shares of our common stock at an initial exercise price of \$2.36, which is equal to 175% of the average of the volume weighted average price of our common stock for the three trading days immediately preceding the execution date of the Purchase Agreement. The warrants may be exercised at any time or from time to time between April 1, 2010 and April 1, 2015. The warrants may not be offered for sale, sold, transferred or assigned without our consent, in whole or in part, to any person other than an affiliate of Commerce Court. If we (i) pay a stock dividend on our

common stock or otherwise make a distribution that is payable in shares of common stock, (ii) subdivide our common stock into a larger number of shares or (iii) combine our then outstanding shares of common stock into a smaller number of shares, then in each case the exercise price of the warrants and the number of shares issuable upon the exercise of the warrants will be proportionately adjusted. If after April 1, 2010, our common stock trades at a price greater than 140% of the exercise price of any warrant for a period of 10 consecutive trading days and we meet certain equity conditions, then we have the right to effect a mandatory exercise of such warrant.

ANTITAKEOVER EFFECTS OF PROVISIONS OF OUR RESTATED CERTIFICATE OF INCORPORATION AND AMENDED BY-LAWS

Our Board of Directors is divided into three classes. As a result of this provision, at least two annual meetings of shareholders may be required for shareholders to change a majority of the Board of Directors. Our by-laws provide that the Board of Directors shall consist of not less than six nor more than twelve members, with the exact number to be determined by the vote of not less than 66 2/3 % of the Board of Directors from time to time. Directors are elected to serve staggered three-year terms and are not subject to removal except for cause by the vote of the holders of at least 80% of our capital stock. Unless otherwise required by law, vacancies on the Board of Directors, including vacancies resulting from an increase in the number of directors or the removal of directors, may only be filled by an affirmative vote of 66 2/3% of the directors then in office. The classification of directors, the ability of the Board of Directors to increase the number of directors, the inability of the shareholders to remove directors without cause or fill vacancies on the Board of Directors and the inability of holders of less than 80% of our capital stock to remove directors even with cause will make it more difficult to change the Board of Directors, and will promote the continuity of existing management.

These and other provisions also may have the effect of deterring, preventing or delaying changes in control or management. These provisions are intended to enhance the likelihood of continued stability in the composition of the Board of Directors and in the policies furnished by the Board of Directors and to discourage types of transactions that may involve an actual or threatened change of control. These provisions are designed to reduce our vulnerability to an unsolicited acquisition proposal. The provisions also are intended to discourage tactics that may be used in proxy fights. However, such provisions could have the effect of discouraging others from making tender offers for our shares and, as a consequence, they also may inhibit fluctuations in the market price of our shares that could result from actual or rumored takeover attempts. These provisions also may have the effect of preventing changes in our management.

NEW JERSEY SHAREHOLDERS PROTECTION ACT

The New Jersey Shareholders Protection Act, NJS 14A:10A-1 et seq., which we refer to as New Jersey Act, prohibits certain New Jersey corporations, such as us following this offering, from entering into certain “business combinations” with an “interested shareholder” (any person who is the beneficial owner of 10% or more of such corporation’s outstanding voting securities) for five years after such person became an interested shareholder, unless the business combination or the interested shareholder’s acquisition of stock was approved by the corporation’s Board of Directors prior to such interested shareholder’s stock acquisition date. After the five-year waiting period has elapsed, a business combination between such corporation and an interested shareholder will be prohibited unless the business combination is approved by the holders of at least two-thirds of the voting stock not beneficially owned by the interested shareholder, or unless the business combination satisfies the New Jersey Act’s fair price provision intended

to provide that all shareholders (other than the interested shareholders) receive a fair price for their shares.

The New Jersey Act defines “business combination” to include the following transactions between a corporation or a subsidiary and an interested shareholder or such interested shareholder’s affiliates: (1) the merger or consolidation of the corporation with the interested shareholder or any corporation that after the merger or consolidation would be an affiliate or associate of the interested shareholder; (2) any sale, lease, exchange, mortgage, pledge, transfer or other disposition to or with the interested shareholder, which has an aggregate market value equal to 10% or more of the aggregate market value of all of the assets or of the outstanding stock, or 10% or more of the income of the corporation or its subsidiaries; (3) the issuance or transfer to the interested shareholder of any stock of the corporation having an aggregate

market value equal to or greater than 5% of the corporation's outstanding stock; (4) the adoption of a plan or proposal for the liquidation or dissolution of the corporation proposed by the interested shareholder; (5) any reclassification of securities proposed by the interested shareholder that has the effect, directly or indirectly, of increasing any class or series of stock that is owned by the interested shareholder; and (6) the receipt by the interested shareholder of any loans or other financial assistance from the corporation.

The New Jersey Act does not apply to certain business combinations, including those with persons who acquired 10% or more of the voting power of the corporation prior to the time the corporation was required to file periodic reports pursuant to the Exchange Act or prior to the time the corporation's securities began to trade on a national securities exchange.

LEGAL MATTERS

The validity of the shares of common stock offered hereby will be passed upon by Jenner & Block LLP and, with respect to matters governed by New Jersey law, by Dillon, Bitar & Luther, L.L.C.

EXPERTS

The consolidated financial statements incorporated in this Prospectus by reference from the Company's Annual Report on Form 10-K, and the effectiveness of EMCORE Corporation's internal control over financial reporting have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their reports which are incorporated herein by reference (which reports (1) express an unqualified opinion on the consolidated financial statements and include an explanatory paragraph relating to the Company's ability to continue as a going concern and (2) express an unqualified opinion on the effectiveness of internal control over financial reporting). Such financial statements have been so incorporated in reliance upon the reports of such firm given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly, and current reports, proxy statements and other information with the Securities and Exchange Commission. You may read and copy any document that we file at the Public Reference Room of the SEC located at 100 F Street, N.E., Washington, D.C. 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. In addition, the SEC maintains an Internet site at www.sec.gov that contains reports, proxy and information statements and other information regarding registrants that file electronically, including EMCORE. Except as expressly set forth under "Information Incorporated by Reference," we are not incorporating the contents of the SEC website into this prospectus.

We have filed with the SEC a registration statement on Form S-3 (together with all amendments and exhibits, the "registration statement") under the Securities Act of 1933, as amended with respect to the offering of common stock. This prospectus, which constitutes part of the registration statement, does not contain all of the information set forth in the registration statement. Certain parts of the registration statement are omitted from the prospectus in accordance with the rules and regulations of the SEC.

Our common stock is listed on The NASDAQ Global Market and similar information can be inspected and copied at the offices of the Financial Industry Regulatory Authority, 1735 K Street, N.W., Washington, D.C. 20006.

INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to incorporate by reference in this prospectus the information in documents we file with the SEC, which means that we can disclose important information to you by referring you to those documents. The information in this prospectus updates (and, to the extent of any conflict, supersedes) information incorporated by reference that we have filed with the SEC prior to the date of this prospectus. You should read all of the information incorporated by reference because it is an important part of this prospectus.

We incorporate by reference the documents listed below and any future filings made with the SEC by us under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 until we sell all of the securities (other than filings or portions of filings that are furnished under applicable SEC rules rather than filed):

- Annual report on Form 10-K for the fiscal year ended September 30, 2008, filed with the SEC on December 30, 2008, as amended by the Form 10-K/A filed on January 28, 2009.
- Definitive Proxy Statement pursuant to Section 14(a) of the Exchange Act, filed with the SEC on March 27, 2009.
- Quarterly Reports on Form 10-Q for the quarters ended December 31, 2008, March 31, 2009, and June 30, 2009, filed with the SEC on February 17, 2009, May 11, 2009, and August 17, 2009, respectively.
- Current Reports on Forms 8-K filed with the SEC on February 10, 2009, March 6, 2009, May 6, 2009, May 15, 2009, June 4, 2009, August 18, 2009, September 16, 2009, and October 1, 2009.
- The description of our common stock contained in our Registration Statement on Form 8-A filed with the SEC on February 26, 1997.

You may also find additional information about us, including the documents mentioned above, on our website at www.emcore.com. The information included or linked to this website is not a part of this prospectus.

We hereby undertake to provide without charge to each person, including any beneficial owner, to whom a copy of this prospectus is delivered, upon written or oral request of any such person, a copy of any and all of the reports or documents that have been incorporated by reference in this prospectus, other than exhibits to such documents unless such exhibits have been specifically incorporated by reference thereto. Requests for such copies should be directed to our Investor Relations department, at the following address:

EMCORE Corporation
10420 Research Road, SE
Albuquerque, New Mexico 87123

PROSPECTUS