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.

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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, 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.

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.

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 83,763,127 shares

after this offering

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;

- 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.

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.

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;

- 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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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 ad 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.

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	\$1.4338	
December 31, 2009		
Decrease per share attributable to new	\$0.0084	
investors		
Net tangible book value per share as of	\$1.4254	
December 31, 2009 after giving effect to		
this offering		
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.

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

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. On 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.

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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; andUnits

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.

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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," "interfestimate," 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.

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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.

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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		Fiscal Year Ended September 30,					
June 30,							
2009 2008	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.

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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;