

EMCORE CORP  
Form S-1  
March 21, 2008

---

As filed with the Securities and Exchange Commission on March 21, 2008

Registration No. 333-

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

---

Form S-1  
REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

---

EMCORE Corporation

New Jersey  
(State or other jurisdiction of  
incorporation or organization)

3674  
(Primary Standard Industrial  
Classification Code Number)

22-2746503  
(I.R.S. Employer  
Identification Number)

EMCORE Corporation  
10420 Research Road, SE  
Albuquerque, New Mexico 87123  
(505-332-5000)

Agent For Service  
KEITH J. KOSCO, ESQ.  
EMCORE Corporation  
14020 Research Road, SE  
Albuquerque, New Mexico 87123  
(505-332-5000)

With Copies To:  
TOBIAS L. KNAPP, ESQ.  
Jenner & Block LLP  
919 Third Avenue  
37th Floor  
New York, New York 10022  
(212-891-1600)

Approximate date of commencement of proposed sale to the public: From time to time after this registration statement becomes effective.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box.

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. "

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. "

If this form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. "

Large accelerated filer  Accelerated filer  Non-accelerated filer  Smaller reporting company

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered	Proposed Maximum Offering Price Per Share	Proposed Maximum Aggregate Offering Price(1)	Amount of Registration Fee
Common Stock, no par value	9,400,003 shares(1)(2)	\$6.32(3)	\$59,408,018.96	\$2,334.74

(1) Includes 1,400,003 shares issuable upon exercise of warrants

(2) In accordance with Rule 416(a) under the Securities Act, the Registrant is also registering hereunder an indeterminate number of shares that may be issued and resold resulting from stock splits, stock dividends or similar transactions

(3) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(c) under the Securities Act of 1933 and based on the average of the high and low sale prices reported on The NASDAQ Global Market on March 20, 2008

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to Section 8(a), may determine.

---



---



---

The information in this prospectus is not complete and may be changed. Neither we nor the selling stockholders named in this prospectus may sell the securities described in this document until the registration statement filed with the Securities and Exchange Commission is declared effective. This prospectus is not an offer to sell these securities and neither we nor the selling stockholders are soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

PRELIMINARY PROSPECTUS

SUBJECT TO COMPLETION, DATED MARCH 21, 2008

9,400,003 Shares  
Common Stock

This prospectus relates to the registration for resale of up to 9,400,003 shares of our common stock.

The 9,400,003 shares of common stock relate to (i) 8,000,000 shares of common stock; and (ii) 1,400,003 shares of common stock issuable upon exercise of warrants. We issued the common stock and warrants to the selling stockholders named in this prospectus in a private placement that closed on February 20, 2008.

This prospectus will be used by the selling stockholders to resell their common stock. We will not receive any proceeds from this offering, though we may receive proceeds from any cash exercise of warrants by the selling stockholders. The registration of these securities does not necessarily mean that the selling stockholders will offer or sell all or any of these securities. We will incur the expenses in connection with the registration of these shares.

The selling stockholders from time to time may offer and resell the shares held by them directly or through agents or broker-dealers on terms to be determined at the time of sale. To the extent required, the names of any agent or broker-dealer and the applicable commissions or discounts and any other required information with respect to any particular offer will be set forth in a prospectus supplement that will accompany this prospectus. A prospectus supplement may also add, update or change information contained in this prospectus.

Our common stock is traded on The NASDAQ Global Market under the symbol "EMKR." The last reported sale price of our common stock on The NASDAQ Global Market on March 20, 2008 was \$6.17 per share.

Investing in our common stock involves risks.  
See "Risk Factors" beginning on page 5.

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 \_\_\_\_\_, 2008



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. Each selling stockholder is offering to sell, and seeking offers to buy, shares of our common stock only in jurisdictions where those offers and sales are permitted. 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 shares of common stock offered by this prospectus.

In this prospectus, the “Company,” “EMCORE,” “we,” “us,” and “our” refer to EMCORE Corporation and its subsidiaries. Our fiscal year ends on September 30 of each calendar year. For example, fiscal year 2007 refers to the year ended September 30, 2007. EMCORE is a registered trademark of EMCORE Corporation. This prospectus contains product names, trade names and trademarks of EMCORE and other organizations.

---

## TABLE OF CONTENTS

	Page
<u>Prospectus Summary</u>	2
<u>Risk Factors</u>	5
<u>Special Note Regarding Forward-Looking Statements</u>	20
<u>Use of Proceeds</u>	22
<u>Capitalization</u>	22
<u>Certain U.S. Federal Tax Considerations for non-U.S. Holders</u>	22
<u>Principal and Selling Stockholders</u>	26
<u>Plan of Distribution</u>	32
<u>Description of Common Stock to be Registered</u>	34
<u>Legal Matters</u>	37
<u>Experts</u>	37
<u>Where You Can Find More Information</u>	38
<u>Information Incorporated by Reference</u>	39

---

## ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we have filed with the Securities and Exchange Commission, or SEC, using a “shelf” registration process. This means the securities described in this prospectus may be offered and sold using this prospectus from time to time as described in the “Plan of Distribution.” You should carefully read this prospectus and the 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.



Table of Contents

PROSPECTUS SUMMARY

This summary highlights information about EMCORE Corporation and the offering contained elsewhere in this prospectus and is qualified in its entirety by the more detailed information and financial statements included elsewhere in this prospectus or otherwise incorporated by reference. You should carefully read the entire prospectus and other information incorporated by reference before making an investment decision, especially the information presented under the heading “Risk Factors.” In this prospectus, except as otherwise indicated or as the context may otherwise require, all references to “EMCORE”, “we”, “us” and “our” refer to EMCORE Corporation and its subsidiaries.

Business Overview

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 Systems (“CPV”) 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 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 connected to our website is not part of this prospectus.

Strategy

With several strategic acquisitions and divestures in the past few years, EMCORE has developed a strong business focus and comprehensive product portfolio in two main sectors: Fiber Optics and Photovoltaics. Our principal objective is to maximize shareholder value by leveraging our expertise in advanced compound semiconductor technologies to be a leading provider of high-performance, cost-effective product solutions in each of the markets that we serve. Key elements of our strategy include:

- Enhance Our Technology and Expand Our Product Leadership While Lowering Production Costs.

Through substantial investment in research and development and product engineering, we seek to expand our technological leadership position in compound semiconductor-based fiber optics and photovoltaics solutions. We work with our customers to enhance the performance of our processes, materials science and design expertise to develop new low-cost components, modules, subsystems and systems. In each product line, we offer our customers advanced cost-competitive solutions, which allows them to be leaders of technology and product solutions.

- Continue to Target Large Growth Market Opportunities.

We target market opportunities that we believe have large potential growth and where the favorable performance characteristics of our products and high volume production efficiencies may give us a competitive advantage over our competitors. We believe that as production costs continue to be reduced, existing and new customers will be compelled to increase their use of our products because of attractive performance characteristics and superior value.





Table of Contents

- Penetrate the Terrestrial Solar Power Market.

We are adapting our high-efficiency solar cell technology, developed for satellite space power, for terrestrial applications. We believe that solar concentrator systems assembled using our compound semiconductor-based solar cells will be competitive with silicon-based solar power generation systems because our products are more efficient than silicon and, when combined with the advantages of concentration, they will result in a lower cost of power generated.

- Expand Our Customer Relationships and the Breadth of Our Customer Base.

We are devoted to working directly with our customers from initial product design, product qualification and manufacturing to product delivery. Our customer base includes many of the largest telecommunication and data communication equipment manufacturers, computer manufacturing companies, and aerospace companies in the world. We intend to further strengthen our existing customer relationships and expand our customer base in each of our reporting segments. We work closely with many of our customers to anticipate their current and future needs through a collaborative process to develop next-generation technologies to help them achieve their product development objectives and seek to develop long-term relationships with leading companies in each of the markets that we serve.

- Pursue Strategic Acquisitions, Investments, and Partnerships.

We are committed to the ongoing evaluation of strategic opportunities that can expand our addressable markets and strengthen our competitive position. Where appropriate, we will acquire additional products, technologies, or businesses that are complementary to, or broaden the markets in which we operate. We plan to pursue strategic acquisitions, investments, and partnerships to increase revenue and allow for higher overhead absorption that will improve our gross margins. We will also consider strategic options to maximize shareholder value by separating Fiber Optics and Solar Photovoltaics when they are scaled to a level where they can operate profitably on a standalone basis.

Table of Contents

## The Offering

This prospectus covers the resale of up to 9,400,003 shares of our common stock. We issued and sold 8,000,000 shares of our common stock and warrants exercisable for 1,400,003 shares of our common stock to the selling stockholders in a private placement that closed on February 20, 2008. The summary below describes the principal terms of the offering. The “Description of Common Stock to be Registered” section of this prospectus contains a more detailed description of our common stock.

Issuer	EMCORE Corporation, a New Jersey corporation.
Selling stockholders	The shares of our common stock to be offered and sold using this prospectus will be offered and sold by the selling stockholders named in this prospectus or in any supplement to this prospectus. See “Principal and Selling Stockholders.”
Common stock offered	9,400,003 shares of our common stock, no par value.
Common stock outstanding after this offering	73,492,906 shares (this figure does not include shares issuable upon the exercise of the warrants or any outstanding options for the purchase of our common stock).
Registration rights	Pursuant to a registration rights agreement that we entered into with the selling stockholders in connection with the private placement of the common stock and warrants, we have filed with the SEC a registration statement, of which this prospectus is a part. We are obligated under the registration rights agreement to keep the registration statement effective until the earlier of (1) the date on which the selling stockholders shall have sold all of the shares of common stock registered pursuant to the registration statement and (2) the first date as of which all of the shares of common stock registered pursuant to the registration statement may be sold without restriction pursuant to Rule 144 under the Securities Act (the “Registration Period”). We will be required to pay liquidated damages to the holders of the common stock if we fail to comply with our obligations to register the common stock within the specified time period and if we fail to keep this registration statement effective for the duration of the Registration Period. See “Description of Common Stock to be Registered —Registration Rights.”
No proceeds	We will not receive any proceeds from the sale by any selling stockholder of the common stock. Upon any exercise of the warrants by payment of cash, however, we will receive the exercise price of the warrants, which will be used for general corporate purposes.
Trading	Our common stock is listed on the NASDAQ Global Market under the symbol “EMKR.”
Risk factors	

See “Risk Factors” beginning on page 5 of this prospectus and other information contained, or incorporated by reference, in this prospectus for a discussion of factors you should consider carefully before deciding to invest in the common stock.

Table of Contents

RISK FACTORS

Risks Related 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 September 30, 2007, we had an accumulated deficit of \$343.6 million. We incurred a net loss of \$58.7 million in fiscal 2007, net income of \$54.9 million in fiscal 2006 and a net loss of \$13.5 million in fiscal 2005. Fiscal 2006 results include the sale of our GELcore joint venture that resulted in a net gain, before tax, of \$88.0 million. 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. Although our revenue has grown in recent years, we may be unable to sustain such growth rates in light of potential changes in market or economic conditions. In addition, if we are not able to increase revenue and reduce our costs, we may not be able to achieve profitability.

Our future revenue is inherently unpredictable. As a result, our operating results are likely to fluctuate from period to period, 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; and
  - the introduction of new products and manufacturing processes.

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.

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 securities analysts or investors, which would likely result in a decline in the trading price of our common stock.

We enter into long-term firm fixed-price contracts in our Photovoltaics division, which could subject us to losses if we have cost overruns.

Many of our contracts in our Photovoltaics division are contracted on a firm fixed-price basis. 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.

Table of Contents

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.

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, particularly with regards to our Fiber Optics segment. 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.

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 2007, 2006 and 2005, our top five customers accounted for 49%, 39%, and 49%, 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. The loss of or a reduction in sales to one or more of our largest customers could have a material adverse affect on our business, financial condition and results of operations.

The market for utility-scale applications of our terrestrial solar technology may take time to develop.

We have invested and intend to continue to invest significant resources in the adaptation of our high-efficiency compound semiconductor-based GaAs solar cell products for terrestrial applications, and in mid-2006, we established a wholly-owned subsidiary, EMCORE Solar Power, Inc. (“ESP”) to conduct this business. ESP is in the development stages and the terrestrial solar power business will require substantial additional funding for the hiring of employees, research and development and investment in capital equipment. Factors such as changes in energy prices or the development of new and efficient alternative energy technologies could limit growth in or reduce the market for terrestrial solar power products. In addition, we may experience difficulties in applying our satellite-based solar products to terrestrial applications in competing with new and emerging terrestrial solar power products, an in obtaining financing for utility-scale projects utilizing our technology. The sale of concentrated photovoltaic (“CPV”) systems involve the design, manufacture and installation of large and complex structures intended for outdoor operation, regarding which the Company has had no previous experience. In addition, it is expected that much of the

market for our CPV systems will be outside the U.S. and will involve partnering with non-U.S. entities and evaluation and compliance with non-U.S. laws, regulations, and government electric supply contracts, which are also new areas for the Company. There can be no assurance that our bids on solar power installations will be accepted, that we will win any of these bids or that our solar power concentrator systems will be qualified for these projects. If our terrestrial solar 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.

Table of Contents

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

In 2007, 13% of our revenue was derived from U.S. Government contracts. 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. 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.

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.

7

---

Table of Contents

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.

The competitive and rapidly evolving nature of our industry 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 expend 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.

## Table of Contents

We may not be successful in implementing our growth strategy if we are unable to identify and acquire suitable acquisition targets. In addition, our acquisitions may not have the anticipated effect on our financial results.

Finding and consummating acquisitions is an important component of our growth strategy. Our continued ability to grow by acquisition is dependent upon the availability of suitable acquisition candidates and may be dependent on our ability to obtain acquisition financing on acceptable terms. We experience competition from larger companies with significantly greater resources in making acquisitions. There can be no assurance that we will be able to procure the necessary funds to effectuate our acquisition strategy on commercially reasonable terms, or at all.

Future acquisitions by us may involve the following:

- use of significant amounts of cash;
- potentially dilutive issuances of equity securities on potentially unfavorable terms; and
  - incurrence of debt on potentially unfavorable terms.

In addition, acquisitions involve numerous risks, including:

- inability to achieve anticipated synergies;
- difficulties in the integration of the operations, technologies, products and personnel of the acquired company;
  - diversion of management's attention from other business concerns;
  - risks of entering markets in which we have limited or no prior experience;
  - potential loss of key employees of the acquired company or of us; and
  - risk of assuming unforeseen liabilities or becoming subject to litigation.

If these factors limit our ability to integrate the operations of our acquisitions successfully or on a timely basis, our expectations of future results of operations may not be met. In addition, our growth and operating strategies for businesses we acquire may be different from the strategies that such business currently is pursuing. If our strategies are not the proper strategies for a company we acquire, it could materially adversely affect our business, financial condition and results of operations. Further, there can be no assurance that we will be able to maintain or enhance the profitability of any acquired business or consolidate the operations of any acquired business to achieve cost savings.

In addition, there may be liabilities that we fail, or are unable, to discover in the course of performing due diligence investigations on each company, business or asset we have already acquired or may acquire in the future. Such liabilities could include those arising from employee benefits contribution obligations of a prior owner or non-compliance with, or liability pursuant to, applicable federal, state or local environmental requirements by prior owners for which we, as a successor owner, may be responsible. In addition, there may be additional costs relating to acquisitions including, but not limited to, possible purchase price adjustments. We cannot assure you that rights to indemnification by sellers of assets to us, even if obtained, will be enforceable, collectible or sufficient in amount, scope or duration to fully offset the possible liabilities associated with the business or property acquired. Any such liabilities, individually or in the aggregate, could materially adversely affect our business, financial condition and results of operations.

In the past several years we have completed several acquisitions, which have broadened our product lines within our target markets and increased the level of vertical integration within those product lines. However, if customer demand in these markets does not meet current expectations, our revenue could be significantly reduced and we could suffer a material adverse affect on our business, financial condition and results of operations.



## Table of Contents

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 low of \$3.84 per share to a high of \$12.65 per share during the fiscal year ended September 30, 2007. 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. 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.

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.

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.

## Table of Contents

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 substantial portion of our high-volume parts. 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. For example, in the past, we experienced difficulties filling orders in our fiber-to-the-premises business due to capacity limitations at one of our contract manufacturers. 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 hiring talent needed to oversee manufacturing operations; and
- potential political and economic instability.

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.

Our supply chain and manufacturing processes rely on accurate forecasting to provide us with optimal margins and profitability. Because of market uncertainties, forecasting is becoming much more difficult. In addition, as we come to rely more heavily on contract manufacturers, we may have fewer personnel with expertise to manage these third-party arrangements.

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 or the measures we take are not properly implemented, we may not have an adequate remedy. 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.



There is also no assurance that any patents will afford us commercially significant protection of our technologies or that we will have adequate financial resources to enforce our patents. Nor can there be any assurance that the significant number of patent applications that we have filed and are pending, or those we may file in the future, will result in patents being issued. In addition, the laws of certain other countries may not protect our intellectual property to the same extent as U.S. laws.

## Table of Contents

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. Although we are not currently involved in any litigation relating to claims of infringement from other parties' intellectual property, 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.

In our Fiber Optics business, we generally do not have long-term contracts with our customers and we typically sell our products pursuant to purchase orders with short lead times. 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.

Generally, we do not have long-term contracts with customers that purchase our fiber optic products. As a result, our agreements with our customers do not provide any assurance of future sales. Risks associated with the absence of long-term contracts 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.

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 governmental entities. These contracts are generally subject to termination for convenience provisions and may be cancelled at any time.

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

Sales to customers located outside the U.S. accounted for approximately 27% of our consolidated revenue in fiscal 2007, 24% of our revenue in fiscal 2006 and 17% of our revenue in fiscal 2005. 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 and we are seeking international expansion opportunities. Because of this, the following international commercial risks may materially adversely affect our revenue:



## Table of Contents

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 may make our products less cost competitive, affecting overseas demand for our products; 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, 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, Directive on Waste Electrical and Electronic Equipment and the directive on End of Life for Vehicles. 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.

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 and our terrestrial solar power products are subject to EAR; however, certain fiber optics products and all of our commercially available solar cell satellite power products 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 competitors in those countries may adversely affect our competitive position.

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. For example, in the past, we experienced difficulties filling orders in our

fiber-to-the-premises business due to limited available capacity of one of our contract manufacturers. 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.

Table of Contents

A failure to attract and retain 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. The competition for attracting and retaining these employees (especially scientists, technical and financial personnel) 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.

We depend on senior management and key personnel to manage our business effectively and may not be successful in attracting and retaining such personnel.

We depend on the performance of our senior management team and other key employees. Our success also depends on our ability to attract, integrate, train, retain and motivate these individuals and additional highly skilled technical and sales and marketing personnel, both in the United States and abroad. The loss of the services of any of our senior management team or other key employees or failure to attract, integrate, train, retain and motivate additional key employees could harm our business.

Failure to comply with environmental and safety regulations, resulting in improper handling of hazardous raw materials used in our manufacturing processes, 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, Directive on Waste Electrical and Electronic Equipment and the directive on End of Life for Vehicles. 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.

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.



Table of Contents

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 new company, Langfang EMCORE Optoelectronics Co. Ltd., is located approximately 30 miles southeast of Beijing and currently occupies a space of 22,000 square feet with a Class-10,000 clean room for optoelectronic device packaging. Another 60,000 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. In addition, future outbreaks of avian influenza, or other communicable diseases, could result in quarantines or closures of our facility, thereby disrupting our operations and 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.

Our corporate or business strategy may change.

We continuously evaluate our assets on an ongoing basis with a view to maximizing their value to us and determining which are core to our operations. We also regularly evaluate our corporate and business strategies, and they are influenced by factors beyond our control, including changes in the competitive landscape we face. Our corporate and business strategies are, therefore, subject to change.



In December 2007, we announced that we were conducting a strategic value review involving, among other things, the status of our Fiber Optics and Solar Photovoltaics business, and this review is continuing. The purpose of the review is to determine whether there exists the potential for unlocking additional stockholder value with respect to these strategic assets through some type of separation transaction. A separation may take the form of a spin-off transaction or a public offering of securities, and we may have discussions from time-to-time with third parties involving these possibilities. There can be no assurances that our strategic review will lead to the completion of any separation transactions or as to the impact of these transactions on stockholder value or on us.

Table of Contents

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. 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.

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 debt and 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. In fiscal 2006 and 2007, the Company identified deficiencies in our internal controls over financial reporting.

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. Consequently, we expect to expend significant resources and effort in this regard, but are not certain that our efforts will be successful.

Table of Contents

Our cost reduction programs may be insufficient to achieve long-term profitability.

We are undertaking cost reduction measures intended to reduce our expense structure at both the cost of goods sold and the operating expense levels. We believe these measures are a necessary response to, among other things, declining average sales prices across our product lines. These measures may be unsuccessful in creating profit margins sufficient to sustain our current operating structure and business.

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 are provided. 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.

Certain provisions of New Jersey law and our charter may make a takeover of EMCORE 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.

Table of Contents

Additional litigation may arise in the future relating to our historical stock option practices and other issues.

Although we have entered into a settlement that has received preliminary court approval of the three derivative actions which were filed against certain of our current and former directors and officers relating to historical stock options practices, and the SEC has indicated that it has terminated its investigation of the matters, additional securities-related litigation (including possible litigation involving employees) may still arise. Additional lawsuits, regardless of their underlying merit, could become time consuming and expensive, and if they result in unfavorable outcomes, there could be material adverse effect on our business, financial condition, results of operations and cash flows. We may be required to pay substantial damages or settlement costs in excess of our insurance coverage related to these matters, which would have a further material adverse effect on our financial condition or results of operations.

In addition, subject to certain limitations, we are obligated to indemnify our current and former directors, officers and employees in connection with certain types of expenses, including certain litigation-related expenses.

It may be difficult or costly to obtain director and officer insurance coverage as a result of our historical stock option granting practices.

Although we have recently renewed our directors and officer insurance coverage on what we believe to be favorable terms, it may become more difficult to obtain director and officer insurance coverage in the future. If we are able to obtain this coverage, it could be significantly more expensive than in the past, which would have an adverse effect on our financial results and cash flow. As a result of this and related factors, our directors and officers could face increased risks of personal liability in connection with the performance of their duties. As a result, we may have difficulty attracting and retaining qualified directors and officers, which could adversely affect our business.

We may not be able to obtain additional capital in the future, and failure to do so may harm our business.

We believe that our current liquidity should be sufficient to meet our cash needs including working capital, capital expenditures and research and development costs through the next twelve months. If cash generated from operations and cash on hand are not sufficient to satisfy EMCORE's liquidity requirements, EMCORE will seek to obtain additional equity or debt financing. 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 EMCORE's business, financial condition, results of operations, and cash flow.

If the recent weakness in credit markets conditions continues or worsens, it could adversely impact our investment portfolio.

We have historically invested in U.S. government agencies, municipal notes which may have an auction reset feature, corporate notes and bonds, commercial paper, money market funds meeting certain criteria. Certain of these investments are subject to general credit, liquidity, market and interest rate risks, which may be exacerbated by U.S. sub-prime mortgage defaults that have affected various sectors of the financial markets and caused credit and liquidity issues. There may be declines in the value of these investments, which we may determine to be other-than-temporary. These market risks associated with our investment portfolio may have a negative adverse effect on our results of operations, liquidity and financial condition.



## Table of Contents

At February 29, 2008, we held approximately \$5.4 million of investments with an auction reset feature (“auction rate securities”) whose underlying assets are generally student loans which are substantially backed by the federal government and AAA rated municipality and corporate securities. On February 19, 2008 auctions failed in the markets for these particular auction rate securities. Further, we have not been able to obtain current market values for these securities as pricing mechanisms are traditionally dependent on successful auctions, none of which have occurred subsequent to the initial auction failure. An auction failure means that the parties wishing to sell securities could not. If the issuers are unable to successfully close future auctions and their credit ratings deteriorate, we may in the future be required to record an impairment charge on these investments. We believe we will be able to liquidate our investment without significant loss within the next year, and we currently believe these securities are not significantly impaired, primarily due to the government guarantee of the underlying securities for the \$1.4 million backed by student loans and the triple AAA rating of the remaining \$4.0 million. However, it could take until the final maturity of the underlying notes (up to 30 years) to realize our investments’ recorded value. We may never fully realize the value of our investment if the underlying securities are determined to be impaired. As a result of this uncertainty, we have reclassified these amounts from current assets to non-current assets on our balance sheet. Based on our expected operating cash flows, and our other sources of cash, we do not anticipate the potential lack of liquidity on these investments will affect our ability to execute our current business plan. We are in the process of seeking alternative pricing mechanisms for utilization in the close of our second quarter period ending March 31, 2008.

## Risks Related to this Offering

If our stock price fluctuates after this offering, you could lose a significant part of your investment

The market price of our stock may be influenced by many factors, some of which are beyond our control, including those described above under “Risks Related to Our Business” and the following:

- the failure of securities analysts to cover our common stock or changes in financial estimates by analysts;
  - the inability to meet the financial estimates of analysts who follow our common stock;
- announcements by us or our competitors of significant contracts, productions, acquisitions or capital commitments;
  - variations in quarterly operating results;
  - general economic conditions;
  - terrorist acts;
  - future sales of our common stock and/or debt financing; and
  - investor perception of us and the industries in which we operate.

As a result of these factors, investors in our common stock may not be able to resell their shares at or above the offering price. These broad market and industry factors may materially reduce the market price of our common stock, regardless of our operating performance.



Table of Contents

Our stock price could be adversely affected by the issuance of preferred stock.

Our Board of Directors is authorized to issue up to 5,882,352 shares of preferred stock with such dividend rates, liquidation preferences, voting rights, redemption and conversion terms and privileges as our Board of Directors, in its sole discretion, may determine. The issuance of shares of preferred stock may result in a decrease in the value or market price of our common stock. Additionally, our Board of Directors could use the preferred stock to delay or discourage hostile bids for control of us in which shareholders may receive premiums for their common stock or to make the possible sale of EMCORE or the removal of our management more difficult. The issuance of shares of preferred stock could adversely affect the voting and other rights of the holders of common stock and may depress the price of our common stock.

We do not intend to pay cash dividends on our common stock in the foreseeable future, and therefore only appreciation of the price of our common stock will provide a return to our shareholders.

We currently anticipate that we will retain all future earnings, if any, to finance the growth and development of our business. We do not intend to pay cash dividends in the foreseeable future. As a result, only appreciation of the price of our common stock, which may not occur, will provide a return to our shareholders.

Shares eligible for future sale may cause the market price of our common stock to drop significantly, even if our business is doing well.

The market price of our common stock could decline as a result of sales of a large number of shares of our common stock in the market after this offering or the perception that these sales could occur. These sales, or the possibility that these sales may occur, also might make it more difficult for us to sell equity securities in the future at a time and at a price that we deem appropriate.

If we need to sell or issue additional common shares to finance future acquisitions, our existing shareholder ownership could be diluted.

Part of our business strategy is to expand into new markets and enhance our position in existing markets both domestically and internationally through the merging and acquiring of complementary businesses. We have in the past financed acquisitions in whole or in part by issuing shares of our common stock, including our recent issuance of \$10 million in shares of our common stock to pay a portion of the purchase price in our acquisition of the telecom portion of the Intel Corporation's Optical Platform Division. To successfully fund and complete future potential acquisitions, we may issue additional equity securities that have the potential to dilute our earnings per share and our existing shareholder ownership.

**SPECIAL NOTE REGARDING FORWARD LOOKING STATEMENTS**

In addition to the other information contained or incorporated by reference in this prospectus, you should carefully consider the risk factors beginning on page 5 of this prospectus in evaluating whether to purchase our common stock. Some of the statements in this prospectus and the documents incorporated herein by reference constitute forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and



Section 21E of the Securities Exchange Act of 1934, as amended. These statements are based largely on our current expectations and projections about future events and financial trends affecting the financial condition of our business, relate to future events or our future financial performance and involve known and unknown risks, uncertainties and other factors that may cause the actual results, levels of activity, performance or achievements of our business or our industry to be materially different from those expressed or implied by any forward-looking statements. Such statements include, in particular, projections about our future results included in our Exchange Act reports, statements about our plans, strategies, business prospects, changes and trends in our business and the markets in which we operate as described in this prospectus and the documents incorporated herein by reference. These forward-looking statements may be identified by the use of terms and phrases such as “expects,” “anticipates,” “intends,” “plans,” “believes,” “estimates,” “targets,” “can,” “may,” “could,” “will,” and variations of these terms and similar phrases. The information contained or incorporated by reference in this prospectus includes forward-looking statements concerning:

Table of Contents

- our ability to remain competitive and a leader in our industry and the future growth of the company, the industry, 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.

Neither management nor any other person assumes responsibility for the accuracy and completeness of the forward-looking statements. All forward-looking statements in this prospectus are made as of the date hereof, based on information available to us as of the date hereof, and we caution you not to rely on these statements without also considering the risks and uncertainties associated with these statements and our business that are addressed in this prospectus. Certain of the information included in this prospectus may supersede or supplement forward-looking statements in our Exchange Act reports incorporated herein by reference. We assume no obligation to update any forward-looking statement.

Table of Contents

## USE OF PROCEEDS

We will not receive any proceeds from the sale of shares of common stock by the selling stockholders in this offering, although upon any exercise of warrants by payment of cash, we will receive the exercise price of the warrants, which will be used for general corporate purposes. We cannot guarantee that the selling stockholders will exercise any warrants.

## CAPITALIZATION

The following table shows our capitalization as of December 31, 2007, and as adjusted to reflect the private placement of 8,000,000 shares of our common stock and warrants exercisable into 1,400,003 shares of our common stock and to give effect to the conversion of our convertible subordinated notes due 2011 (the “Notes”).

You should refer to “Selected Consolidated Financial Data,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our condensed consolidated financial statements and the notes thereto incorporated by reference in this prospectus in evaluating the material presented below.

	As of December 31, 2007	
	Actual	Adjusted
Long-term Debt		
Convertible subordinated notes	\$ 85,012	\$ -(1)
Stockholders’ Equity		
Common Stock, no par value, 100,000,000 shares authorized, 52,351,000 shares issued and 52,192,000 shares outstanding as of December 31, 2007	453,358	638,370 (1)(2)
Accumulated deficit	(358,309)	(358,309)
Accumulated other comprehensive loss	(10)	(10)
Treasury stock, at cost; 159,000 shares	(2,083)	(2,083)
Total stockholders’ equity	92,956	277,968
Total capitalization	\$ 177,968	\$ 277,968

(1) In January and February 2008, the Company converted its outstanding convertible subordinated notes for 12,186,656 shares of common stock.

(2) Adjusted to reflect the private placement of 8,000,000 shares of common stock and 1,400,003 warrants for common stock for \$100 million, including the fair value of warrants issued of \$9.8 million.

## CERTAIN U.S. FEDERAL TAX CONSIDERATIONS FOR NON-U.S. HOLDERS

The following is a discussion of the material U.S. federal income tax considerations generally applicable to the purchase, ownership and disposition of our common stock by non-U.S. holders. This discussion assumes that our common stock is held as a capital asset. This discussion does not cover all aspects of U.S. federal income taxation that may be relevant to the purchase, ownership or disposition of our common stock by prospective investors in light of their particular circumstances. In particular, this discussion does not address all of the tax considerations that may be relevant to certain types of investors subject to special treatment under U.S. federal income tax laws, such as:

- dealers in securities or currencies;

- financial institutions;

Table of Contents

- regulated investment companies;
  - real estate investment trusts;
  - tax-exempt entities;
  - insurance companies;
  - cooperatives;
- persons holding common stock as part of a hedging, integrated, conversion or constructive sale transaction or a straddle;
    - traders in securities that elect to use a mark-to-market method of accounting for their securities holdings;
    - U.S. expatriates; or
  - partnerships or entities or arrangements treated as a partnership or other pass-through entity for U.S. federal tax purposes (or investors therein).

Furthermore, this discussion is based upon the provisions of the Internal Revenue Code of 1986, as amended (the “Code”), the Treasury regulations promulgated thereunder and administrative and judicial interpretations thereof, all as of the date hereof. Such authorities may be repealed, revoked, modified or subject to differing interpretations, possibly on a retroactive basis, so as to result in U.S. federal income tax consequences different from those discussed below. We have not received a ruling from the Internal Revenue Service (the “IRS”) with respect to any of the matters discussed herein. This discussion does not address any state, local or non-U.S. tax considerations.

If you are considering the purchase of our common stock, we urge you to consult your own tax advisors concerning the particular U.S. federal income tax consequences to you of the purchase, ownership and disposition of our common stock, as well as any consequences to you arising under state, local and non-U.S. tax laws.

Consequences to Non-U.S. Holders

The following discussion applies only to non-U.S. holders. A “non-U.S. holder” is a beneficial owner of our common stock (other than a partnership or an entity or arrangement treated as a partnership for U.S. federal income tax purposes) that is not, for U.S. federal income tax purposes one of the following:

- a citizen or an individual resident of the United States;
- a corporation (or other entity taxable as a corporation) created or organized in or under the laws of the United States or any state thereof or the District of Columbia;
    - an estate the income of which is subject to U.S. federal income taxation regardless of its source; or
  - a trust if it (i) is subject to the primary supervision of a court within the United States and one or more U.S. persons have the authority to control all substantial decisions of the trust or (ii) has a valid election in effect under applicable U.S. Treasury regulations to be treated as a U.S. person.



## Table of Contents

Special rules may apply to you if you are a “controlled foreign corporation” or a “passive foreign investment company” or are otherwise subject to special treatment under the Code. Any such holders should consult their own tax advisors to determine the U.S. federal income, state, local and non-U.S. tax consequences that may be relevant to them.

### Dividends

Although we do not currently intend to pay cash dividends on our common stock in the foreseeable future, dividends paid to you (to the extent paid out of our current or accumulated earnings and profits, as determined for U.S. federal income tax purposes) generally will be subject to U.S. federal withholding tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty. Generally, if you wish to claim the benefit of an applicable treaty rate for dividends paid on our common stock, you must provide the withholding agent with a properly executed IRS Form W-8BEN, claiming an exemption from or reduction in withholding under the applicable income tax treaty. If you are eligible for a reduced rate of U.S. federal withholding tax pursuant to an applicable income tax treaty, you may obtain a refund of any excess amounts withheld by filing an appropriate claim for refund with the IRS.

Dividends that are effectively connected with a trade or business you conduct within the United States (and, if certain tax treaties apply, are attributable to a permanent establishment in the United States), are not subject to the U.S. federal withholding tax but, instead, are subject to regular U.S. federal income tax on a net income basis at applicable graduated rates. Corporate holders may also be subject to “branch profits tax.”

### Sale, Exchange or Other Taxable Disposition of Common Stock

You generally will not be subject to U.S. federal income tax with respect to gain recognized on a sale, exchange or other taxable disposition of shares of our common stock unless:

- the gain is effectively connected with your conduct of a trade or business in the United States (and, if certain tax treaties apply, is attributable to a permanent establishment in the United States);
- you are present in the United States for 183 or more days in the taxable year of the sale, and certain other conditions are met;
  - you are subject to provisions applicable to certain United States expatriates; or
- we are or have been a United States real property holding corporation (“USRPHC”) for U.S. federal income tax purposes at any time during the shorter of the five-year period preceding such disposition and your holding period in the common stock, and (i) you beneficially own, or have owned, more than 5% of the total fair market value of our common stock at any time during the five-year period preceding such disposition or (ii) our common stock has ceased to be traded on an established securities market prior to the beginning of the calendar year in which the sale or disposition occurs, and certain other conditions are met.

If a partnership or other entity or arrangement treated as a partnership for U.S. federal income tax purposes holds our common stock, the U.S. federal income tax treatment of a partner in such partnership will generally depend upon the status of the partner and the activities of the partnership. If you are a partner of a partnership holding our common stock, we urge you to consult your own tax advisors.

### U.S. Federal Estate Tax

Shares of our common stock held by an individual non-U.S. holder at the time of his or her death will be included in such non-U.S. holder's gross estate for U.S. federal estate tax purposes, unless an applicable estate tax treaty provides otherwise. Consequently, shareholders who are non-U.S. holders may be subject to U.S. federal estate tax on all or a portion of the value of the common stock owned at the time of their death.

#### Information Reporting and Backup Withholding

You may be subject to information reporting and backup withholding with respect to any dividends on, and the proceeds from dispositions of, our common stock paid to you unless you comply with certain reporting procedures (usually satisfied by providing an IRS Form W-8BEN) or otherwise establish an exemption. Additional rules relating to information reporting requirements and backup withholding with respect to the payment of proceeds from the disposition of shares of our common stock will apply as follows:



Table of Contents

- If the proceeds are paid to or through the U.S. office of a broker (U.S. or foreign), they generally will be subject to backup withholding and information reporting, unless you certify that you are not a U.S. person under penalties of perjury (usually on an IRS Form W-8BEN) or otherwise establish an exemption;
- If the proceeds are paid to or through a non-U.S. office of a broker that is not a U.S. person and is not a foreign person with certain specified U.S. connections (a “U.S. Related Person”), they will not be subject to backup withholding or information reporting; or
- If the proceeds are paid to or through a non-U.S. office of a broker that is a U.S. person or a U.S. Related Person, they generally will be subject to information reporting (but not backup withholding), unless you certify that you are not a U.S. person under penalties of perjury (usually on an IRS Form W-8BEN) or otherwise establish an exemption.

In addition, the amount of any dividends paid to you and the amount of tax, if any, withheld from such payment generally must be reported annually to you and the IRS. The IRS may make such information available under the provisions of an applicable income tax treaty to the tax authorities in the country in which you reside.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules will be allowed as a refund or a credit against your U.S. federal income tax liability provided the required information is timely furnished by you to the IRS. non-U.S. holders should consult their own tax advisors regarding the filing of a U.S. tax return for claiming a refund of such backup withholding.

Table of Contents

PRINCIPAL AND SELLING STOCKHOLDERS

Selling Stockholders

The shares of common stock being offered by the selling stockholders are those previously issued to the selling stockholders and those issuable to the selling stockholders upon the exercise of the warrants. We are registering the shares of common stock in order to permit the selling stockholders to offer the shares for resale from time to time. Except for the ownership of the shares of common stock and the warrants, the selling stockholders have not had any material relationship with us within the past three years.

The table below lists the selling stockholders and other information regarding the beneficial ownership of the shares of common stock held by each of the selling stockholders, as provided to us by representatives of the selling stockholders. The second column lists the number of shares of common stock beneficially owned by each selling stockholder, based on its ownership of the shares of common stock and the warrants as of February 29, 2008, assuming exercise of the warrants held by the selling stockholders on that date, without regard to any limitations on exercise.

The third column lists the shares of common stock being offered by this prospectus by the selling stockholders. In accordance with the terms of the registration rights agreement with the holders of the shares of common stock and the warrants, this prospectus generally covers the resale of the aggregate number of shares of common stock equal to the number of shares of common stock issued and the shares of common stock issuable upon exercise of the related warrants, determined as if the outstanding warrants were exercised, as applicable, in full, in each case, as of the trading day immediately preceding the date this registration statement was initially filed with the SEC. The fourth column assumes the sale of all of the shares offered by the selling stockholders pursuant to this prospectus and that any other shares of our common stock beneficially owned by these selling stockholders will continue to be beneficially owned. Under the terms of the warrants, a selling stockholder may not exercise the warrants, to the extent such exercise would cause such selling stockholder, together with its affiliates, to beneficially own a number of shares of common stock which would exceed 4.99% of our then outstanding shares of common stock following such exercise, excluding for purposes of such determination shares of common stock issuable upon exercise of the warrants which have not been exercised. The number of shares in each of the second and third columns does not reflect this limitation. The selling stockholders may sell all, some or none of their shares in this offering. See "Plan of Distribution."

Table of Contents

Name of Selling Stockholder	Number of Shares Owned Prior to Offering	Maximum Number of Shares to be Sold Pursuant to this Prospectus	Number of Shares Owned After Offering
Polar Securities Inc. (1)	987,001	987,001	-
The Quercus Trust (2)	6,266,727	883,600	5,383,127
Marathon Global Equity Master Fund, Ltd. (3)	705,000	705,000	-
UBS O'Connor LLC F/B/O: O'Connor Pipes Corporate Strategies Master Limited (4)	394,800	394,800	-
UBS O'Connor LLC F/B/O: O'Connor Global Convertible Arbitrage Master Limited (5)	247,408	247,408	-
UBS O'Connor LLC F/B/O: O'Connor Global Convertible Arbitrage II Master Limited (6)	15,792	15,792	-
The Tocqueville Fund (7)	599,250	599,250	-
Highbridge International LLC (8)	640,430	587,500	52,930
Ardsley Partners Fund II, L.P.(9)	502,238	148,638	353,600
Ardsley Partners Institutional Fund, L.P.(10)	324,115	96,115	228,000
Ardsley Partners Renewable Energy Fund, L.P. (11)	215,753	80,253	135,500
Ardsley Offshore Fund, Ltd. (12)	350,988	103,988	247,000
Ardsley Renewable Energy Offshore Fund, Ltd. (13)	368,318	136,418	231,900
Marion Lynton (14)	12,660	3,760	8,900
HFR HE (15)	50,930	18,330	32,600
Hudson Bay Fund LP (16)	392,920	392,920	-
Hudson Bay Overseas Fund, Ltd. (17)	641,080	641,080	-
Portside Growth and Opportunity Fund (18)	564,000	564,000	-
Empire Capital Partners, LTD (19)	728,978	169,905	559,073
Empire Capital Partners, LP (20)	773,768	182,595	591,173

Capital Ventures International (21)	352,500	352,500	-
Iroquois Master Fund Ltd. (22)	352,500	352,500	-
Kingdon Associates (23)	938,204	85,305	852,899
M. Kingdon Offshore Ltd. (24)	2,809,321	255,386	2,553,935
Kingdon Family Partnership, L.P. (25)	129,975	11,809	118,166
Investcorp Interlachen Multi-Strategy Master Fund Limited (26)	235,000	235,000	-
CD Investment Partners, Ltd. (27)	188,000	188,000	-
Lagunitas Partners LP (28)	164,650	113,975	50,675
Gruber & McBaine International (29)	22,200	8,225	13,975
Jon D & Linda W Gruber Trust (30)	79,775	65,800	13,975
Cara Castle Partners (31)	103,400	103,400	-
MMCAP International Inc SPC (32)	176,250	176,250	-
Cranshire Capital, L.P. (33)	141,000	141,000	-
Enable Growth Partners LP (34)	117,500	117,500	-
Crestview Capital Master, LLC (35)	117,500	117,500	-
RHP Master Fund, Ltd. (36)	117,500	117,500	-

Table of Contents

- (1) Includes warrants exercisable for 147,001 shares of common stock at an exercise price of \$15.06. Bill Peckford has voting and investment control over the securities held by Polar Securities Inc.
- (2) Includes warrants exercisable for 131,600 shares of common stock at an exercise price of \$15.06. David Gelbaum & Monica Chavez Gelbaum, Co-Trustees of The Quercus Trust, have voting and investment control over the securities owned by The Quercus Trust.
- (3) Includes warrants exercisable for 105,000 shares of common stock at an exercise price of \$15.06. Marathon Asset Management, LLC (“Marathon”) is Investment Advisor to Marathon Global Equity Master Fund, Ltd. (“MGEMF”). Marathon exercises investment discretion over any securities held by MGEMF.
- (4) Includes warrants exercisable for 58,800 shares of common stock at an exercise price of \$15.06. This selling stockholder is a fund which cedes investment control to UBS O’Connor LLC (the “Investment Manager”). The Investment Manager makes all the investment/voting decisions. UBS O’Connor LLC is a wholly owned subsidiary of UBS AG which is listed and traded on the New York Stock Exchange.
- (5) Includes warrants exercisable for 36,848 shares of common stock at an exercise price of \$15.06. This selling stockholder is a fund which cedes investment control to UBS O’Connor LLC (the “Investment Manager”). The Investment Manager makes all the investment/voting decisions. UBS O’Connor LLC is a wholly owned subsidiary of UBS AG which is listed and traded on the New York Stock Exchange.
- (6) Includes warrants exercisable for 2,352 shares of common stock at an exercise price of \$15.06. This selling stockholder is a fund which cedes investment control to UBS O’Connor LLC (the “Investment Manager”). The Investment Manager makes all the investment/voting decisions. UBS O’Connor LLC is a wholly owned subsidiary of UBS AG which is listed and traded on the New York Stock Exchange.
- (7) Includes warrants exercisable for 89,250 shares of common stock at an exercise price of \$15.06. Tocqueville Asset Management L.P. is the investment advisor to The Tocqueville Fund.
- (8) Includes warrants exercisable for 87,500 shares of common stock at an exercise price of \$15.06. Highbridge Capital Management, LLC is the trading manager of Highbridge International LLC and has voting control and investment discretion over the securities held by Highbridge International LLC. Glenn Dubin and Henry Swieca control Highbridge Capital Management, LLC and have voting control and investment discretion over the securities held by Highbridge International LLC. Each of Highbridge Capital Management, LLC, Glenn Dubin and Henry Swieca disclaims beneficial ownership of the securities held by Highbridge International LLC.
- (9) Includes warrants exercisable for 22,138 shares of common stock at an exercise price of \$15.06. Philip J. Hempleman has voting and investment control over the securities held by Ardsley Partners Fund II, L.P.
- (10) Includes warrants exercisable for 14,315 shares of common stock at an exercise price of \$15.06. Philip J. Hempleman has voting and investment control over the securities held by Ardsley Partners Institutional Fund, L.P.
- (11) Includes warrants exercisable for 11,953 shares of common stock at an exercise price of \$15.06. Philip J. Hempleman has voting and investment control over the securities held by Ardsley Partners Renewable Energy Fund, L.P.
- (12) Includes warrants exercisable for 15,488 shares of common stock at an exercise price of \$15.06. Philip J. Hempleman has voting and investment control over the securities held by Ardsley Offshore Fund, Ltd.
- (13) Includes warrants exercisable for 20,318 shares of common stock at an exercise price of \$15.06. Philip J. Hempleman has voting and investment control over the securities held by Ardsley Renewable Energy Offshore Fund, Ltd.
- (14) Includes warrants exercisable for 560 shares of common stock at an exercise price of \$15.06. Philip J. Hempleman has voting and investment control over the securities held by Marion Lynton.
- (15) Includes warrants exercisable for 2,730 shares of common stock at an exercise price of \$15.06. Philip J. Hempleman has voting and investment control over the securities held by HFR HE.
- (16) Includes warrants exercisable for 58,520 shares of common stock at an exercise price of \$15.06. Sander Gerber, Yoav Roth and John Doscas share voting and investment power over these securities. Each of Sander Gerber, Yoav Roth and John Doscas disclaim beneficial ownership over the securities held by Hudson Bay Fund LP. The selling stockholder acquired the securities offered for its own account in the ordinary course of business, and at the time it

acquired the securities, it had no agreements, plans or understandings, directly or indirectly to distribute the securities. (17) Includes warrants exercisable for 95,480 shares of common stock at an exercise price of \$15.06. Sander Gerber, Yoav Roth and John Doscas share voting and investment power over these securities. Each of Sander Gerber, Yoav Roth and John Doscas disclaim beneficial ownership over the securities held by Hudson Bay Overseas Fund LTD. The selling stockholder acquired the securities offered for its own account in the ordinary course of business, and at the time it acquired the securities, it had no agreements, plans or understandings, directly or indirectly to distribute the securities.

(18) Includes warrants exercisable for 84,000 shares of common stock at an exercise price of \$15.06. Ramius LLC (“Ramius”) is the investment adviser of Portside Growth and Opportunity Fund (“Portside”) and consequently has voting control and investment discretion over securities held by Portside. Ramius disclaims beneficial ownership of these securities. C4S & Co., L.L.C. (“C4S”) is the managing member of Ramius and may be considered the beneficial owner of any securities deemed to be beneficially owned by Ramius. C4S disclaims beneficial ownership of these securities. Peter A. Cohen, Morgan B. Stark, Thomas W. Strauss and Jeffrey M. Solomon are the sole managing members of C4S and may be considered beneficial owners of any securities deemed to be beneficially owned by C4S. Messrs. Cohen, Stark, Strauss and Solomon disclaim beneficial ownership of these securities.

(19) Includes warrants exercisable for 25,305 shares of common stock at an exercise price of \$15.06. Peter J. Richards and Scott A. Fine, Managing Members of Empire Capital Management, LLC (investment manager to Empire Capital Partners, LTD), exercise voting and investment control over securities held by Empire Campital Partners, LTD.

(20) Includes warrants exercisable for 27,195 shares of common stock at an exercise price of \$15.06. Peter J. Richards and Scott A. Fine, Managing Members of Empire Capital Management, LLC (investment manager to Empire Capital Partners, LP), exercise voting and investment control over securities held by Empire Campital Partners, LP.

(21) Includes warrants exercisable for 52,500 shares of common stock at an exercise price of \$15.06. Heights Capital Management, Inc., the authorized agent of Capital Ventures International (“CVI”), has discretionary authority to vote and dispose of the shares held by CVI and may be deemed to be the beneficial owner of these shares. Martin Kobinger, in his capacity as Investment Manager of Heights Capital Management, Inc., may also be deemed to have investment discretion and voting power over the shares held by CVI. Mr. Kobinger disclaims any such beneficial ownership of the shares.

(22) Includes warrants exercisable for 52,500 shares of common stock at an exercise price of \$15.06. Joshua Silverman has voting and investment control over the shares held by Iroquois Master Fund Ltd. Mr. Silverman disclaims beneficial ownership of these shares.

(23) Includes warrants exercisable for 12,705 shares of common stock at an exercise price of \$15.06. Mark Kingdon, as Managing Member of Kingdon Capital Management, LLC (investment manager to Kingdon Associates), exercises voting and investment control over securities held by Kingdon Associates.

(24) Includes warrants exercisable for 38,036 shares of common stock at an exercise price of \$15.06. Mark Kingdon, as Managing Member of Kingdon Capital Management, LLC (investment manager to M. Kingdon Offshore Ltd.), exercises voting and investment control over securities held by M. Kingdon Offshore Ltd.

(25) Includes warrants exercisable for 1,759 shares of common stock at an exercise price of \$15.06. Mark Kingdon, as Managing Member of Kingdon Capital Management, LLC (investment manager to Kingdon Family Partnership, L.P.), exercises voting and investment control over securities held by Kingdon Family Partnership, L.P.

(26) Includes warrants exercisable for 35,000 shares of common stock at an exercise price of \$15.06. Interlachen Capital Group LP is the trading manager of Investcorp Interlachen Multi-Strategy Master Fund Limited and has voting and investment discretion over securities held by Investcorp Interlachen Multi-Strategy Master Fund Limited. Andrew Fraley, in his role as Chief Investment Officer of Interlachen Capital Group LP, has voting control and investment discretion over securities held by Investcorp Interlachen Multi-Strategy Master Fund Limited. Andrew Fraley disclaims beneficial ownership of the securities held by Investcorp Interlachen Multi-Strategy Mater Fund Limited.

(27) Includes warrants exercisable for 28,000 shares of common stock at an exercise price of \$15.06. Carpe Diem Capital Management LLC (“Carpe Diem Capital”), as investment manager for CD Investment Partners, Ltd. (“CDIP”), ZPII, L.P. (“ZP II”), as the manager and sole member of Carpe Diem Capital, C3 Management Inc. (“C3”), as the general partner of ZP II, and John D. Ziegelman, as the Chairman of the Board, President and Treasurer and the beneficial owner of 100% of the outstanding shares of common stock of C3, each may be deemed to have beneficial ownership of the shares owned by CDIP which are being registered hereunder.

(28) Includes warrants exercisable for 16,975 shares of common stock at an exercise price of \$15.06. Gruber & McBaine Capital Management is the general partner of Lagunitas Partners LP. The natural persons with voting and investment control for this stockholder are Jon D. Gruber and J. Patterson McBaine.

- (29) Includes warrants exercisable for 1,225 shares of common stock at an exercise price of \$15.06. Gruber & McBaine Capital Management is the general partner of Gruber & McBaine International. The natural persons with voting and investment control for this stockholder are Jon D. Gruber and J. Patterson McBaine.
- (30) Includes warrants exercisable for 9,800 shares of common stock at an exercise price of \$15.06. Jon D. Gruber has voting and investment control over the securities held by the Jon D & Linda W Gruber Trust.
- (31) Includes warrants exercisable for 15,400 shares of common stock at an exercise price of \$15.06. Damien Quinn holds voting and investment control over the securities held by Cara Castle Partners.
- (32) Includes warrants exercisable for 26,250 shares of common stock at an exercise price of \$15.06. The natural person with voting and investment control for this stockholder is Matthew MacIsaac.
- (33) Includes warrants exercisable for 21,000 shares of common stock at an exercise price of \$15.06. Mitchell P. Kopin, President of Downsvie Capital, Inc., the General Partner of Cranshire Capital, L.P., has sole voting and investment control over the shares.
- (34) Includes warrants exercisable for 17,500 shares of common stock at an exercise price of \$15.06. Mitch Levine holds voting and investment control over the securities held by Enable Growth Partners LP.
- (35) Includes warrants exercisable for 17,500 shares of common stock at an exercise price of \$15.06. Crestview Capital Partners, LLC (“Crestview Partners”) is the sole manager of Crestview, and as such has the power to direct the vote and to direct the disposition of investments owned by Crestview and thus may also be deemed to beneficially own the securities owned by Crestview. Stewart Flink, Robert Hoyt and Daniel Warsh are the managers of Crestview Partners, and as such may be deemed to share the power to vote and to dispose of investments beneficially owned by Crestview Partners, including the Company’s common stock. As a result, each of Messrs. Flink, Hoyt and Warsh may also be deemed to beneficially own the above-described shares of the Company’s common stock held by Crestview and Crestview Partners; however each disclaims beneficial ownership of such shares.
- (36) Includes warrants exercisable for 17,500 shares of common stock at an exercise price of \$15.06. RHP Master Fund, Ltd. is a party to an investment management agreement with Rock Hill Investment Management, L.P., a limited partnership of which the general partner is RHP General Partner, LLC. Pursuant to such agreement, Rock Hill Investment Management directs the voting and disposition of shares owned by RHP Master Fund. Messrs. Wayne Bloch and Peter Lockhart own all of the interests in RHP General Partner. The aforementioned entities and individuals disclaim beneficial ownership of the Company’s securities owned by the RHP Master Fund.



Table of Contents

## Principal Stockholders

The following table sets forth certain information, as of February 29, 2008, with respect to the beneficial ownership of our common stock by:

- each person or group that we know to be the beneficial owner of more than 5% of the outstanding shares of any class of our voting securities;
- each of our executive officers and directors; and
- our executive officers and directors as a group.

As of February 29, 2008, a total of 73,492,906 shares of common stock were outstanding. In the following table, (a) shares under “Outstanding shares” include shares subject to options that were vested as of February 29, 2008 or will vest within 60 days of February 29, 2008 and (b) unless otherwise noted, each person identified possesses, to our knowledge, sole voting and investment power with respect to the shares listed, subject to community property laws where applicable. Shares not outstanding but deemed beneficially owned by virtue of the right of a person to acquire those shares are treated as outstanding only for purposes of determining the number and percent of shares of common stock owned by such person or group. Unless otherwise indicated, the address of each of the beneficial owners is c/o EMCORE Corporation, 10420 Research Road, SE, Albuquerque, New Mexico 87123.

Name of Stockholder	Prior to Offering		After Offering	
	Shares Beneficially Owned		Shares Beneficially Owned	
	Outstanding Shares	%	Outstanding Shares	%
<b>Executive Officers and Directors</b>				
Robert Bogomolny	89,972	*	89,972	*
Howard W. Brodie	-	*	-	*
John Gillen	29,242	*	29,242	*
Adam Gushard(1)	184,746	*	184,746	*
Hong Q. Hou (2)	387,500	*	387,500	*
John Iannelli(3)	80,452	*	80,452	*
Keith J. Kosco, Esq.(4)	6,000	*	6,000	*
Reuben F. Richards, Jr. (5)	977,054	1.3	977,054	1.3
Thomas J. Russell (6)	5,023,791	6.8	5,023,791	6.8
Charles Scott (7)	42,409	*	42,409	*
Richard A. Stall(8)	62,280	*	62,280	*
Thomas G. Werthan	16,266	*	16,266	*
<b>All directors and executive officers as a group (10 persons) (9)</b>				
	6,809,432	9.3	6,809,432	9.3
<b>5% Stockholders</b>				
AMVESCAP PLC (10)	4,000,005	5.4	4,000,005	5.4
Kingdon Capital Management (11)	3,877,500(12)	5.3	3,525,000†	4.7†

Edgar Filing: EMCORE CORP - Form S-1

Kopp Investment Advisors, LLC (13)	4,048,740	5.5	4,048,740	5.5
The Quercus Trust (14)	6,266,727(15)	8.5	5,383,127†	7.2†
Wachovia Corporation (16)	5,162,966	7.0	5,162,966	7.0
Invesco, LTD (17)	4,817,145	6.6	4,817,145	6.6

30

---

Table of Contents

- \* Less than 1.0%
- † This assumes that all shares registered pursuant to the registration statement are sold, including shares issuable upon the exercise of the warrants.
- (1) Includes options to purchase 166,098 shares.
- (2) Includes options to purchase 283,125 shares.
- (3) Includes options to purchase 72,131 shares and 2,989 shares held in a 401(k) Plan.
- (4) Includes options to purchase 6,000 shares.
- (5) Includes options to purchase 297,500 shares and 175,000 shares held by spouse.
- (6) Includes 2,280,035 shares held by The AER Trust.
- (7) Includes 30,409 shares owned by Kircal, Ltd.
- (8) Includes 548 shares held in a 401(k) Plan.
- (9) Includes options to purchase 818,854 shares beneficially owned by Reuben Richards, Jr., Chief Executive Officer; Hong Hou, President and Chief Operating Officer; Adam Gushard, Interim Chief Financial Officer; and John Iannelli, Chief Technology Officer. No options to purchase shares were beneficially owned by the five non-employee directors (including Thomas Werthan). Richard Stall and Howard Brodie resigned from the Company prior to January 15, 2008 and are not included in this total.
- (10) This information is based solely on information contained in a Schedule 13G filed with the SEC on February 14, 2007, by AMVESCAP PLC, a U.K. entity, on behalf of itself and PowerShares Capital Management LLC, a U.S. entity (“PowerShares”). The shares reported for AMVESCAP PLC represent the total shares held by AMVESCAP PLC through PowerShares. The address of AMVESCAP PLC is 30 Finsbury Square, London EC2A 1AG, England. The address of AMVESCAP PLC is 30 Finsbury Square, London EC2A 1AG, England.
- (11) This information is based solely on information provided by representatives of Kingdon Capital Management, LLC (“Kingdon Capital”) and Mark Kingdon (“Kingdon”) in connection with the private placement transaction described herein. Kingdon Capital and Kingdon report beneficially owning a total of 3,877,500 shares and sharing voting and dispositive power with respect to such shares. The address of Kingdon Capital and Kingdon is 152 West 57th Street, 50th Floor, New York, New York 10019.
- (12) Includes warrants to purchase 52,500 shares.
- (13) This information is based solely on information contained in a Schedule 13D filed with the SEC on January 4, 2008, by Kopp Investment Advisors, LLC (“KIA”), a wholly-owned subsidiary of Kopp Holding Company, LLC (“KHC”), which is controlled by Mr. LeRoy C. Kopp (“Kopp”) (collectively, the “Kopp Parties”). KIA reports beneficially owning a total of 4,048,740 shares including having sole voting power over 4,048,740 shares and shared dispositive power over 2,469,665 shares. KHC reports beneficially owning a total of 4,048,740 shares. Kopp reports beneficially owning a total of 4,219,665 shares, including having sole dispositive power over 1,750,000 shares. The address of the Kopp Parties is 7701 France Avenue South, Suite 500, Edina, Minnesota 55435. The address of Kopp Investment Advisors, LLC is 7701 France Avenue South, Suite 500, Edina, Minnesota 55435.
- (14) This information is based solely on information contained in a Schedule 13D filed with the SEC on March 6, 2008, by The Quercus Trust, David Gelbaum and Monica Chavez Gelbaum. The Quercus Trust reports beneficially owning a total of 6,266,727 shares and sharing voting and dispositive power with respect to such shares. David Gelbaum, Trustee, The Quercus Trust, reports beneficially owning a total of 6,266,727 shares and sharing voting and dispositive power with respect to such shares. Monica Chavez Gelbaum, Trustee, The Quercus Trust, reports beneficially owning a total of 6,266,727 shares and sharing voting and dispositive power with respect to such shares. The address of David Gelbaum, an individual, as co-trustee of the Quercus Trust and Monica Chavez Gelbaum, an individual, as co-trustee of the Quercus Trust is 2309 Santiago Drive, Newport Beach, California 92660.
- (15) Includes warrants to purchase 131,600 shares.
- (16) This information is based solely on information contained in a Schedule 13G filed with the SEC on February 1, 2008, by Wachovia Corporation. Wachovia Corporation reports beneficially owning a total of 5,158,132 shares

including having sole voting power over 139,917 shares and sole dispositive power over 2,878,097 shares. Wachovia reports having shared voting power of 2,280,035 shares. Wachovia Corporation is a parent holding company and the relevant subsidiaries are Wachovia Securities, LLC (IA) and Wachovia Bank, N.A. (B.K.). Wachovia Securities, LLC is an investment advisor for clients; the securities reported by this subsidiary are beneficially owned by such clients. Wachovia Bank, N.A. (B.K.) holds the securities reported in a fiduciary capacity for its respective customers. The address of Wachovia Corporation is One Wachovia Center, Charlotte, North Carolina 28288.

- (17) This information is based solely on information contained in a Schedule 13D filed with the SEC on February 14, 2008 by Invesco Ltd. Invesco Ltd. reports beneficially owning a total of 4,817,145 shares including having sole voting power and sole dispositive power with respect to such shares. Invesco Ltd. is a parent holding company and the relevant subsidiaries are Invesco Institutional (N.A.), Inc. and Powershares Capital Management LLC. Invesco through such subsidiaries provides investment management services to institutional and individual investors worldwide. The address of Invesco is 1360 Peachtree Street NE, Atlanta, GA 30309.

Table of Contents

PLAN OF DISTRIBUTION

We are registering the shares of common stock previously issued and the shares of common stock issuable upon exercise of the warrants to permit the resale of these shares of common stock by the holders of the common stock from time to time after the date of this prospectus. We will not receive any of the proceeds from the sale by the selling stockholders of the shares of common stock. However, upon any exercise of the warrants by payment of cash, we will receive the exercise price of the warrants. We will bear all fees and expenses incident to our obligation to register the shares of common stock.

The selling stockholders may sell all or a portion of the shares of common stock beneficially owned by them and offered hereby from time to time directly or through one or more underwriters, broker-dealers or agents. If the shares of common stock are sold through underwriters or broker-dealers, the selling stockholders will be responsible for underwriting discounts or commissions or agent's commissions. The shares of common stock may be sold in one or more transactions at fixed prices, at prevailing market prices at the time of the sale, at varying prices determined at the time of sale, or at negotiated prices. These sales may be effected in transactions, which may involve crosses or block transactions,

• on any national securities exchange or quotation service on which the securities may be listed or quoted at the time of sale;

• in the over-the-counter market;

- in transactions otherwise than on these exchanges or systems or in the over-the-counter market;
- through the writing of options, whether such options are listed on an options exchange or otherwise;
- involving ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;

• involving block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;

- involving purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- involving an exchange distribution in accordance with the rules of the applicable exchange;

• involving privately negotiated transactions;

• involving short sales;

• involving sales pursuant to Rule 144;

• in connection with which broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share;

- involving a combination of any such methods of sale; and
- involving any other method permitted pursuant to applicable law.

If the selling stockholders effect such transactions by selling shares of common stock to or through underwriters, broker-dealers or agents, such underwriters, broker-dealers or agents may receive commissions in the form of discounts, concessions or commissions from the selling stockholders or commissions from purchasers of the shares of common stock for whom they may act as agent or to whom they may sell as principal (which discounts, concessions or commissions as to particular underwriters, broker-dealers or agents may be in excess of those customary in the types of transactions involved). In connection with sales of the shares of common stock or otherwise, the selling stockholders may enter into hedging transactions with broker-dealers, which may in turn engage in short sales of the shares of common stock in the course of hedging in positions they assume. The selling stockholders may also sell shares of common stock short and deliver shares of common stock covered by this prospectus to close out short positions and to return borrowed shares in connection with such short sales. The selling stockholders may also loan or pledge shares of common stock to broker-dealers that in turn may sell such shares.

Table of Contents

The selling stockholders may pledge or grant a security interest in some or all of the shares of common stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of common stock from time to time pursuant to this prospectus or any amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act of 1933, as amended, amending, if necessary, the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus. The selling stockholders also may transfer and donate the shares of common stock in other circumstances in which case the transferees, donees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

The selling stockholders and any broker-dealer participating in the distribution of the shares of common stock may be deemed to be “underwriters” within the meaning of the Securities Act, and any commission paid, or any discounts or concessions allowed to, any such broker-dealer may be deemed to be underwriting commissions or discounts under the Securities Act. At the time a particular offering of the shares of common stock is made, a prospectus supplement or amendment, if required, will be distributed which will set forth the aggregate amount of shares of common stock being offered and the terms of the offering, including the name or names of any broker-dealers or agents, any discounts, commissions and other terms constituting compensation from the selling stockholders and any discounts, commissions or concessions allowed or reallocated or paid to broker-dealers.

Under the securities laws of some states, the shares of common stock may be sold in such states only through registered or licensed brokers or dealers. In addition, in some states the shares of common stock may not be sold unless such shares have been registered or qualified for sale in such state or an exemption from registration or qualification is available and is complied with.

There can be no assurance that any selling stockholder will sell any or all of the shares of common stock registered pursuant to the registration statement, of which this prospectus forms a part.

The selling stockholders and any other person participating in such distribution will be subject to applicable provisions of the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder, including, without limitation, Regulation M of the Exchange Act, which may limit the timing of purchases and sales of any of the shares of common stock by the selling stockholders and any other participating person. Regulation M may also restrict the ability of any person engaged in the distribution of the shares of common stock to engage in market-making activities with respect to the shares of common stock. All of the foregoing may affect the marketability of the shares of common stock and the ability of any person or entity to engage in market-making activities with respect to the shares of common stock.

We will pay all expenses of the registration of the shares of common stock pursuant to the registration rights agreement, estimated to be \$6.1 million in total, including, without limitation, Securities and Exchange Commission filing fees and expenses of compliance with state securities or “Blue Sky” laws; provided, however, that a selling stockholder will pay all underwriting discounts and selling commissions, if any. We will indemnify the selling stockholders against liabilities, including some liabilities under the Securities Act, in accordance with the registration rights agreements, or the selling stockholders will be entitled to contribution. We may be indemnified by the selling stockholders against civil liabilities, including liabilities under the Securities Act, that may arise from any written information furnished to us by the selling stockholder specifically for use in this prospectus, in accordance with the related registration rights agreement, or we may be entitled to contribution.

Once sold under the registration statement, of which this prospectus forms a part, the shares of common stock will be freely tradable in the hands of persons other than our affiliates.





Table of Contents

DESCRIPTION OF COMMON STOCK TO BE REGISTERED

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 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.

General Matters

Our authorized capital stock consists of 100,000,000 shares of common stock and 5,882,352 shares of preferred stock, no par value. Our board of directors has approved, subject to shareholder approval, an increase in our authorized shares of common stock from 100,000,000 to 200,000,000. The increase in our authorized shares of our common stock will be presented to our shareholders for approval at our next annual meeting of shareholders. Immediately prior to this offering, we had 73,492,906 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.

Preferred Stock

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

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

No shares of preferred stock are outstanding, and we have no present plans to issue any shares of preferred stock.

#### Stock Options, Warrants and Other Obligations to Issue Capital Stock

As of February 29, 2008, we had outstanding warrants to purchase an aggregate of 1,400,003 shares of our common stock. In addition, we had 4,868,159 shares of our common stock issuable upon the exercise of stock options outstanding with a weighted average exercise price of \$5.78 per share and 1,012,717 shares of our common stock reserved for future grant under our 2000 Stock Option Plan.

## Table of Contents

The warrants were issued in connection with the private placement to the selling stockholders that closed on February 20, 2008. In the private placement, we sold 8,000,000 shares of our common stock, at a price of \$12.50 per share, and, for no additional consideration, warrants to purchase up to 1,400,003 shares of common stock, at an exercise price of \$15.06 per share. The warrants are immediately exercisable and remain exercisable until February 15, 2013.

The warrants may be exercised in whole or in part. If a holder desires to exercise its warrants, it must deliver an exercise notice to us at our principal office that specifies the number of shares of common stock to be purchased upon exercise. Unless the holder has elected a cashless exercise of the warrant, the notice must also be accompanied by payment of an amount equal to the per share exercise price multiplied by the number of shares for which the warrant is being exercised. Pursuant to the terms of the warrants, the holder will not have the right to exercise any portion of the warrants to the extent that after giving effect to such exercise, the holder (together with the holder's affiliates), would beneficially own in excess of 4.99% (the "maximum percentage") of the number of shares of our common stock outstanding immediately after giving effect to such exercise. By written notice to the Company, the Holder may from time to time increase or decrease the maximum percentage to any other percentage not in excess of 9.99% specified in such notice; provided that (i) any such increase will not be effective until the sixty-first (61st) day after such notice is delivered to the Company, and (ii) any such increase or decrease will apply only to the holder delivering such notice and not to any other holder of warrants.

The exercise price of the warrants may be adjusted upon certain events, including stock dividends, stock splits, recapitalizations and similar adjustments to the number of shares of our common stock outstanding and dividends paid in cash, in shares of our common stock or securities convertible into our common stock or in kind.

## Registration Rights

Under a registration rights agreement that we entered into on February 15, 2008, we granted the selling stockholders registration rights with respect to the common stock. We are obligated under the registration rights agreement to use our commercially reasonable best efforts to cause the registration statement of which this prospectus is a part to be declared effective by May 20, 2008, or, in the event the registration statement is reviewed by the SEC, by June 19, 2008. We are also obligated under the registration rights agreement to keep this registration statement effective for a period ending on the earlier of (i) the date on which all shares of common stock registered pursuant to this registration statement have been sold and (ii) the first date as of which all shares of common stock registered pursuant to this registration statement may be sold without restriction pursuant to Rule 144 (or any successor thereto) promulgated under the Securities Act of 1933.

We will be obligated under the registration rights agreement to pay liquidated damages to the selling stockholders if any of the following default events occurs:

- on or prior to thirty (30) days following the date the private placement transaction closed, a registration statement has not been filed with the SEC (a "filing failure");
- we fail to use our commercially reasonable best efforts to cause such registration statement to be declared effective by the SEC on or prior to (1) ninety (90) days after the closing date of the private placement transaction if there is no review of the registration statement by the SEC or (2) one hundred twenty (120) days after the closing date of the transaction if there is a review of the registration statement by the SEC (an "effectiveness failure"); or
- on any day after the effective date of the registration statement sales of all the common stock required to be included on such registration statement cannot be made (other than as permitted during a grace period as set forth in the

registration rights agreement) pursuant to such registration statement, including because of a failure to keep such registration statement effective, to disclose such information as is necessary for sales to be made pursuant to such registration statement or to register sufficient a sufficient amount of common stock (a “maintenance failure”); or

## Table of Contents

after the date six months following the closing of the private placement, we fail to file any required reports under Section 12 or 15(d) of the 1934 Act such that we are not in compliance with Rule 144(c)(1) or a result of which the purchasers in the private placement are unable to sell their registrable securities without restriction under Rule 144 (or any successor thereto) (a “current public information default”).

In these events, the registration rights agreement requires us to pay as liquidated damages for such failure to each holder of securities that are registrable securities under the registration rights agreement an amount equal to 1.0% of the aggregate purchase price of such registrable securities included in the registration statement of which this prospectus is a part on each of the following dates:

- the day that a filing failure occurs and on every thirtieth day (pro rated for shorter periods) thereafter until such filing failure is cured;
- the day that an effectiveness failure occurs and on every thirtieth day (pro rated for shorter periods) thereafter until such effectiveness failure is cured;
- the initial day of a maintenance failure and on every thirtieth day (pro rated for shorter periods) thereafter until such maintenance failure is cured; and
- the day that a current public information default occurs and on every thirtieth day (pro rated for shorter periods) thereafter until such current public information default is cured.

This description of the registration rights agreement is intended to be a summary of the terms of the agreement that are material to a purchaser of our common stock. It does not purport to be complete and is subject to, and qualified in its entirety by reference to, all of the registration rights provisions of the agreement.

## Antitakeover Effects of Provisions of our Articles of Incorporation and Bylaws

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

These and other provisions also may have the effect of deterring, preventing or delaying changes in control or management. These provisions are intended to enhance the likelihood of continued stability in the composition of the board of directors and in the policies furnished by the board of directors and to discourage types of transactions that may involve an actual or threatened change of control. These provisions are designed to reduce our vulnerability to an unsolicited acquisition proposal. The provisions also are intended to discourage tactics that may be used in proxy

fighters. However, such provisions could have the effect of discouraging others from making tender offers for our shares and, as a consequence, they also may inhibit fluctuations in the market price of our shares that could result from actual or rumored takeover attempts. These provisions also may have the effect of preventing changes in our management.

## Table of Contents

### New Jersey Shareholders Protection Act

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

The New Jersey Act defines “business combination” to include the following transactions between a corporation or a subsidiary and an interested shareholder or such interested shareholder’s affiliates: (1) the merger or consolidation of the corporation with the interested shareholder or any corporation that after the merger or consolidation would be an affiliate or associate of the interested shareholder; (2) any sale, lease, exchange, mortgage, pledge, transfer or other disposition to or with the interested shareholder, which has an aggregate market value equal to 10% or more of the aggregate market value of all of the assets or of the outstanding stock, or 10% or more of the income of the corporation or its subsidiaries; (3) the issuance or transfer to the interested shareholder of any stock of the corporation having an aggregate market value equal to or greater than 5% of the corporation’s outstanding stock; (4) the adoption of a plan or proposal for the liquidation or dissolution of the corporation proposed by the interested shareholder; (5) any reclassification of securities proposed by the interested shareholder that has the effect, directly or indirectly, of increasing any class or series of stock that is owned by the interested shareholder; and (6) the receipt by the interested shareholder of any loans or other financial assistance from the corporation.

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

### 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 National Market under the symbol “EMKR.”

## LEGAL MATTERS

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

## EXPERTS

The consolidated financial statements and management's report on the effectiveness of internal control over financial reporting incorporated in this registration statement by reference from the Company's Annual Report on Form 10-K for the fiscal year ended September 30, 2007 have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their reports incorporated by reference in the Registration Statement (which reports (1) express an unqualified opinion on the consolidated financial statements and includes an explanatory paragraph relating to the adoption of Statement of Financial Accounting Standards No. 123(R), Share-Based Payment, effective October 1, 2005 and (2) express an unqualified opinion on management's assessment regarding the effectiveness of internal control over financial reporting, and on the effectiveness of internal control over financial reporting), and have been so incorporated in reliance upon the reports of such firm given upon their authority as experts in accounting and auditing.



Table of Contents

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly, and current reports and other information with the Securities and Exchange Commission. You may read and copy any document that we file at the Public Reference Room of the SEC located at 100 F Street, N.E., Washington, D.C. 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. In addition, the SEC maintains an Internet site at [www.sec.gov](http://www.sec.gov) that contains reports, proxy and information statements and other information regarding registrants that file electronically, including EMCORE. We are not incorporating the contents of the SEC website into this prospectus. Certain of our filings may also be found on our website, [www.emcore.com](http://www.emcore.com), under the heading “Investor.” The information contained in or connected to our website is not part of this prospectus.

We have filed with the SEC a registration statement on Form S-1 (together with all amendments and exhibits, the “registration statement”) under the Securities Act of 1933, as amended with respect to the offering of common stock. This prospectus, which constitutes part of the registration statement, does not contain all of the information set forth in the registration statement. Certain parts of the registration statement are omitted from the prospectus in accordance with the rules and regulations of the SEC.

Our common stock is listed on The NASDAQ Global Market and similar information can be inspected and copied at the offices of the National Association of Securities Dealers, Inc., 1735 K Street, N.W., Washington, D.C. 20006.

Table of Contents

INFORMATION INCORPORATED BY REFERENCE

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

The following documents filed with the SEC are hereby incorporated by reference in this prospectus:

- Annual report on Form 10-K for the fiscal year ended September 30, 2007, filed with the SEC on December 31, 2007, as amended by our Form 10-K/A filed with the SEC on January 28, 2008.

• Our Definitive Proxy Statement pursuant to Section 14(a) of the Exchange Act, filed with the SEC on March 4, 2008.

• Quarterly report on Form 10-Q for the quarter ended December 31, 2007, filed with the SEC on February 11, 2008.

• Current Reports on Form 8-K dated January 11, 2008, February 4, 2008, February 11, 2008, February 20, 2008, February 25, 2008 and March 4, 2008.

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

EMCORE Corporation  
14020 Research Road, SE  
Albuquerque, New Mexico 87123

Table of Contents

EMCORE CORPORATION

9,400,003 Shares  
Common Stock

, 2008

40

---

## PART II

## INFORMATION NOT REQUIRED IN PROSPECTUS

## Item 13. Other Expenses of Issuance and Distribution

The following table sets forth the estimated costs and expenses of the sale and distribution of the securities being registered, all of which are being borne by the Registrant.

SEC registration fee	\$ 2,335
Printing and engraving fees	10,000
Legal fees and expenses	175,000
Accounting fees and expenses	75,000
Total	\$ 262,335

## Item 14. Indemnification of Directors and Officers

The Company's Restated Certificate of Incorporation and By-Laws include provisions (i) to reduce the personal liability of the Company's directors for monetary damage resulting from breaches of their fiduciary duty, and (ii) to permit the Company to indemnify its directors and officers to the fullest extent permitted by New Jersey law. The Company has obtained directors' and officers' liability insurance that insures such persons against the costs of defense, settlement, or payment of a judgment under certain circumstances.

Subject to certain limitations, we are obligated to indemnify our current and former directors, officers and employees in connection with the investigation of our historical stock option granting practices, related government investigation and shareholder litigation. These obligations arise under the terms of our certificate of incorporation, our bylaws, applicable contracts, and New Jersey law. The obligation to indemnify generally means that we are required to pay or reimburse the individuals' reasonable legal expenses and possibly damages and other liabilities incurred in connection with these matters. We are currently paying or reimbursing legal expenses being incurred in connection with these matters by a number of our current and former directors, officers and employees. The maximum potential amount of future payments the Company could be required to make under these indemnification agreements is unlimited; however, the Company has a director and officer liability insurance policies that limits its exposure and enables it to recover a portion of any future amounts paid.

## Item 15. Recent Sales of Unregistered Securities

1. On November 10, 2005, EMCORE entered into an exchange agreement with Alexandra Global Master Fund Ltd. to exchange \$14,425,000 aggregate principal amount of EMCORE's outstanding convertible subordinated notes due May 15, 2006 for \$16,580,460 aggregate principal amount of newly issued convertible senior subordinated notes due May 15, 2011. The notes were converted into shares of our common stock on January 29, 2008 in connection with the transaction on this date described below.

2. On November 8, 2005, EMCORE entered into an asset purchase agreement with Phasebridge, Inc., a privately held company located in Pasadena, California. In connection with the asset purchase, based on a 10-trading day weighted average price, EMCORE issued 128,205 shares of EMCORE common stock, no par value, that were valued in the transaction at \$0.7 million. The offer and sale was made pursuant to Rule 506 of Regulation D under the Securities Act of 1933, as amended (Securities Act), and without registration under the Securities Act, in reliance on the

exemption provided thereby. EMCORE relied upon the representations, warranties, and agreements of Phasebridge, including its agreement with respect to restrictions on resale, in support of the satisfaction of the conditions of such exemption.

3. On December 18, 2005, EMCORE entered into an asset purchase agreement with Force, Inc., a privately held company located in Christiansburg, Virginia. In connection with the asset purchase, EMCORE issued 240,000 shares of EMCORE common stock, no par value, with a market value of \$1.6 million at the measurement date and \$0.5 million in cash. The offer and sale was made pursuant to Rule 506 of Regulation D under the Securities Act, and without registration under the Securities Act, in reliance on the exemption provided thereby. EMCORE relied upon the representations, warranties, and agreements of Force, including its agreement with respect to restrictions on resale, in support of the satisfaction of the conditions of such exemption.

Table of Contents

4. On January 12, 2006, EMCORE entered into an Agreement and Plan of Merger with K2 Optronics, Inc., a privately held company located in Sunnyvale, California (K2) and EMCORE Optoelectronics Acquisition Corporation, a wholly owned subsidiary of EMCORE. In connection with the merger, EMCORE issued 548,688 shares of EMCORE common stock, no par value, to K2's shareholders.

5. On January 29, 2008, EMCORE, in privately negotiated transactions, entered into separate agreements with holders of approximately 97.5%, or approximately \$83.3 million aggregate principal amount, of its outstanding 5.50% convertible senior subordinated notes due 2011 (the "Notes") pursuant to which this small number of holders converted their Notes into the Company's common stock. In connection with the conversion of the Notes, the Company issued 11,884,937 shares of its common stock, based on a conversion price of \$7.01, in accordance with the terms of the Notes. The issuance of the Company's common stock upon conversion of the Notes is made in reliance on the exemption from the registration requirements provided under Section 3(a)(9) of the Securities Act of 1933. To incentivize the holders to convert their Notes, the Company made cash payments to such holders equal to 4% of the principal amount of the Notes converted, or \$3.3 million, plus accrued interest of approximately \$1.0 million on the Notes converted. Subsequently, the remaining \$2.2 million in outstanding Notes were converted for 302,019 shares at \$7.01, in accordance with the terms of the Notes for a total of 12,186,656 shares.

6. On February 20, 2008, we completed a private placement to accredited investors of 8,000,000 shares of our common stock, no par value, and warrants to purchase an additional 1,400,003 shares of our common stock. The purchase price was \$12.50 per share, priced at the 20 day volume-weighted average price. The warrants grant the holder the right to purchase one share of our common stock at a price of \$15.06 per share. The warrants are immediately exercisable and remain exercisable for a period of 5 years from the closing date.

7. On February 22, 2008, EMCORE completed its previously announced acquisition of the telecom portion of Intel Corporation's Optical Platform Division. The telecom assets acquired include intellectual property, assets and technology comprised of tunable lasers, tunable transponders, 300-pin transponders, and integrated tunable laser assemblies (ITLA). The purchase price was \$75 million in cash and \$10 million in the Company's common stock, priced at a volume-weighted average price of \$13.84 per share. Under the terms of the Agreement, the purchase price of \$85 million could be adjusted based on an inventory true-up, plus specifically assumed liabilities.

## Item 16. Exhibits and Financial Statement Schedules

## (a) Exhibits.

Exhibit Number	Description
2.1	Asset Purchase Agreement, dated as of November 3, 2003, by and among Veeco St. Paul Inc., Veeco Instruments Inc., and Registrant (incorporated by reference to Exhibit 2.1 to Registrant's Current Report on Form 8-K filed on November 18, 2003).
2.2	Purchase Agreement, dated as of May 27, 2005, between JDS Uniphase Corporation and Registrant (incorporated by reference to Exhibit 2.1 to Registrant's Current Report on Form 8-K filed on June 3, 2005).
2.3	Merger Agreement, dated January 12, 2006, by and among K2 Optronics, Inc., EMCORE Corporation, and EMCORE Optoelectronics Acquisition Corp. (incorporated by reference to Exhibit 2.1 to Registrant's

Current Report on Form 8-K filed on January 19, 2006).

- 2.4 Asset Purchase Agreement between IQE RF, LLC, IQE plc, and EMCORE Corporation, dated July 19, 2006. (incorporated by reference to Exhibit 2.1 to Registrant's Current Report on Form 8-K filed on July 24, 2006).
- 2.5 Membership Interest Purchase Agreement, dated as of August 31, 2006, by and between General Electric Company, acting through the GE Lighting operations of its Consumer and Industrial division, and EMCORE Corporation (incorporated by reference to Exhibit 2.1 to Registrant's Current Report on Form 8-K filed on September 7, 2006).
- 2.6 Stock Purchase Agreement, dated as of April 13, 2007, by and among Registrant, Opticomm Corporation and the persons named on Exhibit 1 thereto (incorporated by reference to Exhibit 2.1 to Registrant's Current Report on Form 8-K filed April 19, 2007).

Table of Contents

2.7	Asset Purchase Agreement, dated December 17, 2007, between Registrant and Intel Corporation (incorporated by reference to Exhibit 2.1 to Registrant's Quarterly Report on Form 10-Q for the quarter ended December 31, 2007).
3.1	Restated Certificate of Incorporation, dated December 21, 2000 (incorporated by reference to Exhibit 3.1 to Registrant's Annual Report on Form 10-K for the fiscal year ended September 30, 2000).
3.2	Amended By-Laws, as amended through December 14, 2006 (incorporated by reference to Exhibit 3.1 to Registrant's Current Report on Form 8-K filed on December 20, 2006).
4.1	Indenture, dated as of February 24, 2004, between Registrant and Deutsche Bank Trust Company Americas, as Trustee (incorporated by reference to Exhibit 4.3 to Registrant's Annual Report on Form 10-K for the fiscal year ended September 30, 2004).
4.2	Note dated as of February 24, 2004, in the amount of \$80,276,000 (incorporated by reference to Exhibit 4.4 to Registrant's Annual Report on Form 10-K for the fiscal year ended September 30, 2004).
4.3	Note, dated as of November 16, 2005, in the amount of \$16,580,460 (incorporated by reference to Exhibit 4.5 to Registrant's Annual Report on Form 10-K for the fiscal year ended September 30, 2005).
4.4	Indenture, dated as of November 16, 2005, between Registrant and Deutsche Bank Trust Company Americas, as Trustee (incorporated by reference to Exhibit 4.6 to Registrant's Annual Report on Form 10-K for the fiscal year ended September 30, 2005).
4.5	Specimen certificate for shares of common stock (incorporated by reference to Exhibit 4.1 to Amendment No. 3 to the Registration Statement on Form S-1 (File No. 333-18565) filed with the Commission on February 24, 1997).
4.6	First Supplemental Indenture, dated as of April 9, 2007, by and between EMCORE Corporation and Deutsche Bank Trust Company Americas, as trustee, amending the Indenture, dated as of February 24, 2004, by and between Registrant and Deutsche Bank Trust Company Americas, as trustee (incorporated by reference to Exhibit 4.1 to Registrant's Current Report on Form 8-K filed on April 10, 2007).
4.7	First Supplemental Indenture, dated as of April 9, 2007, by and between EMCORE Corporation and Deutsche Bank Trust Company Americas, as trustee, amending the Indenture, dated as of November 16, 2005, by and between Registrant and Deutsche Bank Trust Company Americas, as trustee (incorporated by reference to Exhibit 4.2 to Registrant's Current Report on Form 8-K filed on April 10, 2007).
5.1**	Opinion of Jenner & Block LLP
5.2**	Opinion of Dillon, Bitar & Luther, L.L.C.
10.1†	1995 Incentive and Non-Statutory Stock Option Plan (incorporated by reference to Exhibit 10.1 to the Amendment No. 1 to the Registration Statement on Form S-1 filed on February 6, 1997).
10.2†	1996 Amendment to Option Plan (incorporated by reference to Exhibit 10.2 to Amendment No. 1 to the Registration Statement on Form S-1 filed on February 6, 1997).



- 10.3† MicroOptical Devices 1996 Stock Option Plan (incorporated by reference to Exhibit 99.1 to the Registration Statement on Form S-8 filed on February 6, 1998).
- 10.4† 2000 Stock Option Plan, as amended and restated on February 13, 2006 (incorporated by reference to Exhibit 10.1 to Registrant's Current Report on Form 8-K filed on February 17, 2006).
- 10.5† Amended and Restated Section 2(n) of Amended and Restated EMCORE Corporation 2000 Stock Option Plan (incorporated by reference to Exhibit 99.1 to Registrant's Current Report on Form 8-K filed on April 19, 2007).
- 10.6† 2000 Employee Stock Purchase Plan, as amended and restated on February 13, 2006 (incorporated by reference to Exhibit 10.2 to Registrant's Current Report on Form 8-K filed on February 17, 2006).
- 10.7† Directors' Stock Award Plan (incorporated herein by reference to Exhibit 99.1 to Registrant's Original Registration Statement of Form S-8 filed on November 5, 1997), as amended by the Registration Statement on Form S-8 filed on August 10, 2004.
- 10.8 Memorandum of Understanding, dated as of September 26, 2007 between Lewis Edelstein and Registrant regarding shareholder derivative litigation (incorporated by reference to Exhibit 10.10 to Registrant's Annual Report on Form 10-K for the fiscal year ended September 20, 2006).
- 10.9† Fiscal 2007 Executive Bonus Plan (incorporated by reference to Registrant's Current Report on Form 8-K filed on September 4, 2007).
- 10.10† Executive Severance Policy (incorporated by reference to Exhibit 10.2 to Registrant's Current Report on Form 8-K filed on April 19, 2007).
- 10.11† Outside Directors Cash Compensation Plan, as amended and restated on February 13, 2006 (incorporated by reference to Exhibit 10.3 to Registrant's Current Report on Form 8-K filed on February 17, 2006).

- 10.12 Exchange Agreement, dated as of November 10, 2005, by and between Alexandra Global Master Fund Ltd. and Registrant (incorporated by reference to Exhibit 10.15 to Registrant's Annual Report on Form 10-K for the fiscal year ended September 30, 2005).
- 10.13 Consent to Amendment and Waiver, dated as of April 9, 2007, by and among EMCORE Corporation and certain holders of the 2004 Notes party thereto (incorporated by reference to Exhibit 10.1 to Registrant's Current Report on Form 8-K filed on April 10, 2007).
- 10.14 Consent to Amendment and Waiver, dated as of April 9, 2007, by and between EMCORE Corporation and the holder of the 2005 Notes (incorporated by reference to Exhibit 10.2 to Registrant's Current Report on Form 8-K filed on April 10, 2007).
- 10.15 Investment Agreement between WorldWater and Power Corp. and Registrant, dated November 29, 2006 (incorporated by reference to Exhibit 10.1 to Registrant's Current Report on Form 8-K filed on December 5, 2006).
- 10.16 Registration Rights Agreement between WorldWater and Power Corp. and Registrant, dated November 29, 2006 (incorporated by reference to Exhibit 10.1 to Registrant's Current Report on Form 8-K filed on December 5, 2006).
- 10.17 Letter Agreement between WorldWater and Power Corp. and Registrant, dated November 29, 2006 (incorporated by reference to Exhibit 10.3 to Registrant's Current Report on Form 8-K filed on December 5, 2006). Confidential Treatment has been requested by the Company with respect to portions of this document. Such portions are indicated by "\*\*\*\*\*".
- 10.18† Dr. Hong Hou Offer Letter dated December 14, 2006 (incorporated by reference to Exhibit 10.1 to Registrant's Current Report filed on December 20, 2006).
- 10.19 Stipulation of Compromise and Settlement, dated as of November 28, 2007 executed by the Company and the other defendants and the plaintiffs in the Federal Court Action and the State Court Actions. (incorporated by reference to Exhibit 10.19 to Registrant's Annual Report on Form 10-K for the fiscal year ended September 30, 2007).
- 10.20† 2007 Director's Stock Award Plan (incorporated by reference to Exhibit 10.1 to Registrant's Quarterly Report on Form 10-Q for the quarter ended December 31, 2007).
- 10.21 Securities Purchase Agreement dated February 15, 2008 by and among the Registrant and the purchasers listed therein (incorporated by reference to Exhibit 10.1 to Registrant's Current Report on Form 8-K filed on February 20, 2008).
- 10.22 Registration Rights Agreement dated February 15, 2008 by and among the Registrant and the purchasers listed therein (incorporated by reference to Exhibit 10.2 to Registrant's Current Report on Form 8-K filed on February 20, 2008).
- 10.23 Form of Warrant (incorporated by reference to Exhibit 10.3 to Registrant's Current Report on Form 8-K filed on February 20, 2008).
- 14.1 Code of Ethics for Financial Professionals (incorporated by reference to Exhibit 14.1 to Registrant's Annual Report on Form 10-K for the fiscal year ended September 30, 2003).

21.1\* Subsidiaries of the Registrant

23.1\*\* Consent of Deloitte & Touche LLP

23.2\*\* Consent of Jenner & Block LLP (contained in Exhibit 5.1)

23.3\*\* Consent of Dillon, Bitar & Luther, L.L.C. (contained in Exhibit 5.2)

---

\* Filed herewith

\*\* To be filed by amendment

† Management contract or compensatory plan

(b) Financial Statement Schedules. Not applicable.

#### Item 17. Undertakings

The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of this registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;

Table of Contents

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at the time shall be deemed to be the initial bona fide offering thereof.

(3) The undersigned registrant hereby undertakes to remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for purposes of determining liability under the Securities Act to any purchaser:

(i) Each prospectus filed by the Registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(ii) Each prospectus required to be filed pursuant to Rule 424(b) as part of a registration statement relating to an offering shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness.

Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

(5) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

Table of Contents

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant, EMCORE Corporation, has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Albuquerque, State of New Mexico, on the 21st day of March, 2008.

EMCORE CORPORATION

Date: March 21, 2008

By: /s/ Reuben F. Richards, Jr.  
Reuben F. Richards, Jr.  
Chief Executive Officer  
(Principal Executive Officer)

POWER OF ATTORNEY

Each person whose signature appears below constitutes and appoints and hereby authorizes Reuben F. Richards, Jr. and, severally, such person's true and lawful attorneys-in-fact, with full power of substitution or resubstitution, for such person and in his name, place and stead, in any and all capacities, to sign on such person's behalf, individually and in each capacity stated below, any and all amendments, including post-effective amendments to this Form S-1, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Commission granting unto said attorneys-in-fact, full power and authority to do and perform each and every act and thing requisite or necessary to be done in and about the premises, as fully to all intents and purposes as such person might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact, or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1933, this registration statement has been signed by the following persons on behalf of the registrant in the capacities indicated, on March 21, 2008.

Signature	Title
/s/ Thomas J. Russell Thomas J. Russell, Ph.D.	Chairman of the Board and Director
/s/ Reuben F. Richards, Jr. Reuben F. Richards, Jr.	Chief Executive Officer and Director (Principal Executive Officer)
/s/ Adam Gushard Adam Gushard	Interim Chief Financial Officer (Principal Financial and Accounting Officer)
/s/ Hong Q. Hou Hong Q. Hou, Ph.D.	President, Chief Operating Officer, and Director
/s/ Charles T. Scott Charles T. Scott	Director

/s/ John Gillen  
John Gillen

Director

/s/ Robert Bogomolny  
Robert Bogomolny

Director

/s/ Thomas G. Werthan  
Thomas G. Werthan

Director