

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM S-1
REGISTRATION STATEMENT

UNDER THE SECURITIES ACT OF 1933

EMCORE CORPORATION
(Exact name of Registrant as specified in its charter)

New Jersey	3670	22-2746503
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification No.)

394 Elizabeth Avenue, Somerset, New Jersey 08873
(908) 271-9090
(Address, including zip code, and telephone number,
including area code, of registrant's principal executive offices)

Thomas G. Werthan
EMCORE Corporation
394 Elizabeth Avenue
Somerset, New Jersey 08873
(908) 271-9090
(Name, address, including zip code, and telephone number,
including area code, of agent for service)

Copies to:

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New York, New York 10036	New York, New York 10019
(212) 819-8200	(212) 581-1600

Approximate date of commencement of proposed sale to the public: as soon
as practicable after the effective date of this Registration Statement.

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 of 1933, please check the
following box and list the Securities Act of 1933 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 of 1933, check the following box and list the
Securities Act of 1933 registration statement number of the earlier
effective registration statement for the same offering. ☐

If delivery of the prospectus is expected to be made pursuant to Rule 434,
please check the following box. ☐

CALCULATION OF REGISTRATION FEE

TITLE OF EACH CLASS OF SECURITIES TO BE REGISTERED	PROPOSED MAXIMUM AGGREGATE OFFERING PRICE (1)	AMOUNT OF REGISTRATION FEE
Common Stock, no par value	\$ 30,000,000	\$ 9,090.91

(1) Estimated solely for the purpose of computing the registration fee
pursuant to Rule 457(o) under the Securities Act of 1933.

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 COMMISSION, ACTING
PURSUANT TO SAID SECTION 8(A), MAY DETERMINE.

[ART]

IN CONNECTION WITH THIS OFFERING, THE UNDERWRITERS MAY OVER-ALLOT OR EFFECT TRANSACTIONS WHICH STABILIZE OR MAINTAIN THE MARKET PRICE OF THE COMMON STOCK AT A LEVEL ABOVE THAT WHICH MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET. SUCH TRANSACTIONS MAY BE EFFECTED ON THE NASDAQ NATIONAL MARKET, IN THE OVER-THE-COUNTER MARKET OR OTHERWISE. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME.

This Prospectus contains certain statements of a forward-looking nature relating to future events, such as developments of processes and commencement of production, or the future financial performance of the Company. Prospective investors are cautioned that such statements are only projections and that actual events or results may differ materially. In evaluating such statements, prospective investors should specifically consider the various factors identified in this Prospectus, including the matters set forth under the heading "Risk Factors" which could cause actual results to differ materially from those indicated by such forward-looking statements.

Information contained herein is subject to completion or amendment. A registration statement relating to these securities has been filed with the Securities and Exchange Commission. These securities may not be sold nor may offers to buy be accepted prior to the time the registration statement becomes effective. This prospectus shall not constitute an offer to sell or the solicitation of an offer to buy nor shall there be any sale of these securities in any State in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any state.

Prospectus _____, 1997 SUBJECT TO COMPLETION, DATED _____ __, 1997

SHARES
[EMCORE LOGO]
EMCORE CORPORATION
COMMON STOCK

All the _____ shares of Common Stock offered hereby (the "Offering") are being issued and sold by EMCORE Corporation ("EMCORE" or the "Company").

Prior to the Offering, there has been no public market for the Common Stock of the Company. It is currently anticipated that the initial public offering price will be between \$____ and \$____ per share. See "Underwriting" for a discussion of the factors considered in determining the initial public offering price.

The Company has applied for quotation of the Common Stock on the Nasdaq National Market under the symbol "EMKR."

SEE "RISK FACTORS" BEGINNING ON PAGE 4 FOR INFORMATION THAT SHOULD BE CONSIDERED BY PROSPECTIVE INVESTORS.

THESE SECURITIES HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION NOR HAS THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION PASSED UPON THE ACCURACY OR ADEQUACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

		Price to the Public	Underwriting Discounts and Commissions(1)	Proceeds to the Company(2)
Per Share	\$_____	\$_____	\$_____
Total (3)	\$_____	\$_____	\$_____

(1) The Company has agreed to indemnify the Underwriters against certain liabilities, including liabilities under the Securities Act of 1933, as amended (the "Securities Act"). See "Underwriting."

(2) Before deducting expenses estimated at _____ which will be paid by the Company.

(3) The Company has granted the several Underwriters an option, exercisable within 30 days of the date hereof, to purchase up to _____ additional shares of Common Stock solely to cover over-allotments, if any. If such option is exercised in full, the total Price to Public, Underwriting Discounts and Commissions and Proceeds to the Company will be _____, _____ and _____. See "Underwriting."

The shares of Common Stock are being offered by the several Underwriters when, as and if delivered to and accepted by the Underwriters and subject to various prior conditions, including their right to reject orders in whole or in part. It is expected that delivery of the share certificates will be made in New York, New York on or about _____, 1997.

DONALDSON, LUFKIN & JENRETTE
SECURITIES CORPORATION

NEEDHAM & COMPANY, INC.

PROSPECTUS SUMMARY

The following summary is qualified in its entirety by the more detailed information, including "Risk Factors" and the Financial Statements and Notes thereto, appearing elsewhere in this Prospectus. Except as otherwise indicated, (a) all references to fiscal years of the Company in this Prospectus refer to fiscal years ended on September 30 and (b) all information in this Prospectus assumes no exercise of the Underwriters' over-allotment option.

THE COMPANY

EMCORE, founded in 1984, is a leading designer and developer of compound semiconductor materials, such as gallium arsenide, and process technology and a leading manufacturer of production systems used to fabricate compound semiconductor wafers. The Company provides its customers, both in the U.S. and internationally, with materials science expertise, process technology and compound semiconductor production systems that enable the manufacture of commercial volumes of high performance electronic and optoelectronic devices. In 1996, in response to the growing need of its customers to cost effectively get to market faster with high volumes of new and improved high-performance products, the Company expanded its product offerings to include the design and production of wafers and package-ready devices. The Company believes that it is the only company that offers such a broad range of products and services to the compound semiconductor industry.

Recent advances in information technologies have created a growing need for power-efficient, high-performance electronic systems that operate at very high frequencies, have increased storage, computational and display capabilities, and can be produced cost-effectively in commercial volumes. In the past, electronic systems manufacturers relied on advances in silicon semiconductor technology to meet many of these demands. However, the newest generation of high-performance electronic and optoelectronic applications require certain performance and functions which are generally not achievable using silicon-based components.

Compound semiconductors have emerged as an enabling technology to meet the complex requirements of today's advanced information systems. Compound semiconductor devices operate at much higher speeds than silicon devices with lower power consumption and less noise and distortion. In addition, unlike silicon-based devices, compound semiconductor devices have optoelectronic capabilities that enable them to emit and detect light. As a result, electronics manufacturers are increasingly integrating compound semiconductor devices into their products in order to achieve higher performance in a wide variety of applications, including wireless communications, telecommunications, computers, and consumer and automotive electronics.

Historically, developers of compound semiconductor devices have met capacity needs with in-house systems and technologies. However, the requirements for the production of commercial volumes of high-performance compound semiconductor devices have often exceeded the capabilities of such in-house solutions. The Company believes that wafers fabricated using metal organic chemical vapor deposition ("MOCVD") possess better uniformity, as well as better optical and electronic properties, than wafers fabricated by traditional methods. The Company believes that its proprietary TurboDisc(TM) MOCVD system provides a low cost of ownership and is the critical enabling process step in the volume manufacture of high-performance electronic and optoelectronic devices.

The Company's objective is to capitalize on its position as a leading developer of MOCVD process technology and production systems to

become a leading supplier of wafers and package-ready devices. In addition, the Company seeks to form strategic alliances with customers in order to obtain long-term development and high volume production contracts. The Company currently has a strategic relationship with General Motors Corporation ("General Motors") to develop and enhance the device structure and production process and to manufacture magneto-resistive ("MR") sensor products for use in automotive applications. In addition, the Company has been integrally involved in the development of solar cell technologies for telecommunications satellites and transmitter and display technologies for wireless communications applications.

The Company works closely with its customers in designing and developing materials processes to be used in production systems for its customers' end-use applications. The Company has sold more than 160 systems worldwide to many leading electronics manufacturers, including: Spectrolab Inc. (a subsidiary of Hughes Electronics Company, "Hughes-Spectrolab"), General Motors, Hewlett Packard Co., Lucent Technologies, Inc., Motorola, Inc., Rockwell International Corp., Samsung Co., Siemens AG, L.M. Ericsson AB, Texas Instruments Incorporated and thirteen of the largest electronics manufacturers in Japan. The Company's products are used by these customers to manufacture a variety of end-use products, including: cellular telephones, pagers, personal communication service ("PCS") handsets, direct broadcast satellite ("DBS") systems, CD-ROMs, digital versatile disks ("DVDs"), flat-panel displays and electronic automotive components.

THE OFFERING

Common Stock offered
by the Company _____
Common Stock to be outstanding
after the Offering _____ (1)
Use of Proceeds To repay outstanding debt, expand
manufacturing facilities and for other
general corporate purposes. See "Use
of Proceeds."

Proposed Nasdaq National
Market symbol EMKR

SUMMARY FINANCIAL DATA

YEARS ENDED SEPTEMBER 30,

1992 1993 1994 1995 1996
(IN THOUSANDS, EXCEPT PER SHARE AMOUNTS)

STATEMENT OF INCOME DATA:

Total revenues	\$10,022	\$8,180	\$9,038	\$18,137	\$27,779
Gross profit	7,043	4,772	3,825	8,210	9,172
Operating (loss) income	(907)	(465)	116	1,906	(2,753)
Net (loss) income	(958)	(607)	(170)	1,516	(3,176)
Net (loss) income per share	\$	\$	\$	\$	\$
Shares used in computing net (loss) income per share					

AS OF SEPTEMBER 30, 1996

ACTUAL AS ADJUSTED(2)(3)
(IN THOUSANDS)

BALANCE SHEET DATA:

Working capital	\$1,151	\$ _____
Total assets	20,434	_____
Long-term debt, net	8,365	_____
Shareholders' equity	1,103	_____

(1) Excludes: (i) 2,200,000 shares of Common Stock reserved for issuance under the Company's 1995 Incentive and Non-Statutory Stock Option Plan, as amended, of which _____ shares were subject to

outstanding options at exercise prices varying from \$0.89 per share to \$3.00 per share, (ii) warrants to purchase 30,949 shares of Common Stock at an exercise price of \$5.00 per share exercisable until July 24, 1997, (iii) warrants to purchase 7,924,667 shares of Common Stock at an exercise price of \$1.20 per share, exercisable until May 1, 2001 and (iv) warrants to purchase 4,166,666 shares of Common Stock at an exercise price of \$3.00 per share, exercisable until September 1, 2001. See "Management - Stock Option Plan," "Description of Capital Stock - Warrants" and Note 12 of the Notes to Financial Statements.

- (2) Subsequent to September 30, 1996, the Company established a \$10.0 million demand note facility. As of December 20, 1996, the Company had drawn down approximately \$2 million from this facility. The Company intends to use part of the net proceeds of the Offering to pay down the balance outstanding under this facility. See "Use of Proceeds".
- (3) The unaudited as adjusted amounts reflect the sale by the Company of _____ shares of Common Stock offered hereby after deducting underwriting discounts and commissions and estimated offering expenses payable by the Company and the application of the estimated net proceeds thereof. See "Use of Proceeds."

RISK FACTORS

An investment in the shares of Common Stock offered by this Prospectus involves a high degree of risk. In addition to the other matters described in this Prospectus, prospective investors should carefully consider the following factors before making a decision to purchase the Common Stock offered hereby. This Prospectus contains certain statements of a forward-looking nature relating to future events or the future financial performance of the Company. Prospective investors are cautioned that such statements are only predictions and that actual events or results may differ materially. In evaluating such statements, prospective investors should specifically consider the various factors identified in this Prospectus, including the matters set forth hereunder, which could cause actual results to differ materially from those indicated by such forward-looking statements.

Expansion of Business. The Company has recently experienced a significant increase in the demand for its compound semiconductor production systems. There can be no assurance that the market for compound semiconductor production systems will continue to grow or that the Company will be able to continue to develop compound semiconductor systems for the market or that it will be able to meet market demands or maintain and expand its customer base for such products. A failure to do so would have a material adverse effect on the Company's business, financial condition and results of operations. The Company has also recently expanded its operations to include the production of compound semiconductor wafers and package-ready devices. The Company's expansion into the production of such new products involves substantial capital expenditures and a significant risk that management will be unsuccessful. The Company presently anticipates utilizing a significant portion of the net proceeds of the Offering for such expenditures. The development, production and sale of compound semiconductor wafers and package-ready devices entail yield, process and capacity-related risks that differ from those associated with the development, production and sale of the Company's compound semiconductor production systems. The markets for compound semiconductor wafers and package-ready devices are in a relatively early stage of development. There can be no assurance that these markets will continue to grow or that the Company will be successful in developing or marketing such products. The Company's failure to successfully develop or market such products could have a material adverse effect on the Company's business, financial condition and results of operations. See "Use of Proceeds," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Business - Products."

Management of Growth. The Company has recently experienced a period of rapid growth, has added new personnel and intends to continue to expand. For example, the number of the Company's employees has increased from 95 as of September 30, 1995 to 185 as of September 30, 1996. Because of the level of scientific and management expertise necessary to support such growth, the Company must recruit and retain highly qualified and well-trained technical and management personnel. There may be only a limited number of persons with the requisite skills to serve in these positions, and it may become increasingly difficult for the Company to hire such personnel over time. The Company's expansion may also significantly strain management, financial, sales and marketing and other personnel and systems. In order to effectively manage its growth, the Company must continue to enhance its systems and controls and successfully expand, train and manage its employee base. There can be no assurance that the Company will be able to manage this expansion effectively or will be able to recruit, train and retain sufficient technical and managerial personnel. Any failure to manage the Company's growth properly could have a material adverse effect on the Company's business, financial condition and results of operations.

See "Management's Discussion and Analysis of Financial Condition and Results of Operations."

Need to Increase Manufacturing Capacity. The Company currently anticipates increasing its manufacturing capacity to meet the demand for its compound semiconductor production systems and wafers and package-ready devices by expanding its existing production facilities for its new product offerings and instituting a third shift at its facilities. This increase will require substantial capital expenditures. The Company presently anticipates utilizing a significant portion of the net proceeds of the Offering for such expenditures. There can be no assurance that the Company will be successful in increasing its manufacturing capacity in time to meet the demand for its production systems or wafers and package-ready devices. In addition, the Company's success is in large part dependent on its ability to manufacture its products, particularly its wafers and package-ready devices, in high volumes and on a timely basis. In addition, commercial production of the Company's wafers and package-ready devices requires the achievement of adequate competitive yield levels. The failure of the Company to increase its manufacturing capacity, or to manufacture its products in high volumes, in a timely manner, or at sufficient yield levels, would have a material adverse effect on the Company's business, financial condition and results of operations. See "Use of Proceeds" and "Business - Manufacturing."

History of Operating Losses; Uncertainty of Profitability. Although the Company has been in operation since 1984, it has recently been profitable only in the six quarters ended September 30, 1995 and had accumulated deficit of \$18.1 million at September 30, 1996. In fiscal 1996, the Company incurred a consolidated net loss of \$3.2 million, which primarily resulted from significant initial operating expenses related to the Company's expansion to include the production of compound semiconductor wafers and package-ready devices. The Company has increased its expense levels to support anticipated growth in demand for each of its compound semiconductor production systems, wafer and package-ready device product offerings, including the hiring of additional manufacturing, research, engineering, sales, and administrative personnel and has also increased its investments in inventory and capital equipment. As a result, the Company is dependent upon increasing revenues and profit margins to achieve profitability. If the Company's sales and profit margins do not increase to support the higher levels of operating expenses, the Company's business, financial condition and results of operations would be materially adversely affected. There can be no assurance that the Company will ever again achieve profitability. See "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the Financial Statements and the Notes thereto.

Fluctuations in Operating Results. Historically, the Company has derived substantially all of its revenues from the sale of compound semiconductor production systems which typically have list prices ranging from approximately \$350,000 to \$2.5 million per system. At the Company's current revenue level, each shipment of a compound semiconductor production system or failure to make a shipment can have a material effect on the Company's quarterly or annual results of operations. A cancellation, rescheduling or delay in a system shipment near the end of a particular quarter could cause net revenues in that quarter to fall significantly below the Company's expectations and could materially adversely affect the Company's operating results for such quarter. While to date the Company has not experienced significant warranty claims relating to its production systems, the Company's policy is to maintain positive relationships with its customers by responding promptly and effectively to such claims. Since the occurrence of warranty claims is unpredictable, the Company's prompt action in response to such claims could cause the Company's operating results to fluctuate unexpectedly. While the Company maintains reserves

against warranty claims, an unexpectedly high level of warranty claims in a particular quarter could have a material adverse effect on the Company's business, financial condition and results of operation for that quarter. Although, to date, the Company has not derived significant revenues from its wafer and package-ready device products, the Company anticipates that in the future any revenues derived from these activities will be subject to similar risks. Other factors which may lead to fluctuations in the Company's quarterly and annual operating results include: market acceptance of the Company's and its customers' products; the number of compound semiconductor production systems, wafers or package-ready devices being manufactured during any particular period; the mix of sales by product and by distribution channel; the timing of announcement and introduction of new compound semiconductor production systems, wafers or package-ready devices by the Company and its competitors; a downturn in the market for products incorporating compound semiconductors; variations in the configuration of production systems; changes in the design or process conditions for the production of wafers or package-ready devices; product discounts and changes in pricing; delays in deliveries from suppliers; delays in orders due to customers' financial difficulties; and volatility in the compound semiconductor industries and the markets served by the Company's customers. In addition, customers may face competing capital budget considerations, thus making the timing of customer orders uneven and difficult to predict. Many of the factors listed above are beyond the control of the Company. There can be no assurance that the Company will be able to achieve a rate of growth or level of revenues in any future period commensurate with its level of expenses. The impact of these and other factors on the Company's operating results in any future period cannot be forecast with any degree of certainty. It is likely that, in some future quarter or quarters, the Company's operating results may be below the expectations of analysts and investors. In such event, the price of the Company's Common Stock would likely be materially adversely affected. See "Management's Discussion and Analysis of Financial Condition and Results of Operations."

Customer Concentration. A small number of customers have historically accounted for a substantial portion of the Company's revenues, and the Company expects a significant portion of its future sales to remain concentrated within a limited number of customers. Sales of the Company's production systems to Hughes-Spectrolab, accounted for approximately 28.9% and 23.6% of the Company's revenues in fiscal 1995 and 1996, respectively. Hughes-Spectrolab is currently the Company's largest purchaser of compound semiconductor production systems. General Motors is currently the Company's sole customer for package-ready devices. Currently, the Company is only deriving revenues from the fabrication of its wafers for use in connection with the package-ready devices being sold to General Motors. There can be no assurance that the Company will succeed in marketing its wafers and package-ready devices to any customer other than General Motors. Failure by the Company to provide wafers and package-ready devices for customers other than General Motors would have a material adverse effect on the Company's business, financial condition and results of operations. In addition, the loss of, or a significant reduction of orders from, Hughes-Spectrolab or General Motors would have a material adverse effect on the Company's business, financial condition and results of operations. There can be no assurance that the Company will be able to retain these or other major customers or that such customers will not cancel, delay or reschedule orders. Any reduction or delay in orders from any of the Company's significant customers, including reductions or delays due to market, economic, or competitive conditions in compound semiconductor-related industries, or the loss of any such customers, would have a material adverse effect upon the Company's business, financial condition and results of operations. See "Business - Customers."

Lengthy Sales and Qualification Cycles. Sales of the Company's

compound semiconductor production systems depend, in significant part, upon the decision of a prospective customer to increase its manufacturing capacity, which typically involves a significant capital commitment by the customer. The amount of time from the initial contact with the customer to the customer's placement of an order is typically two to nine months or longer. The Company often experiences delays in obtaining system sales orders while customers evaluate and receive approvals for the purchase of compound semiconductor production systems. Such delays may include the time necessary to plan, design or complete a new or expanded compound semiconductor fabrication facility. Due to these factors, the Company's compound semiconductor systems typically have a lengthy sales cycle during which the Company may expend substantial funds and sales, marketing and management effort. There can be no assurance that any of these expenditures or efforts on the part of the Company will result in sales. Although the Company has a limited operating history for wafer and package-ready device fabrication, the Company anticipates that such products will have similarly lengthy sales cycles and will therefore be subject to risks substantially similar to those inherent in the lengthy sales cycles for compound semiconductor systems. In addition, the sales cycle for wafers and package-ready devices also includes a period of two to six months during which the Company develops the formula of materials necessary to meet the customer's specifications and qualifies the materials which may also require the delivery of samples. There can be no assurance that the Company will successfully develop an appropriate product in accordance with customer specifications. See "Business - Products" and "Business - Competition."

Reliance on Trade Secrets; No Assurance of Continued Intellectual Property Protections. The Company's success and competitive position both for sales of production systems and for wafers and package-ready devices depend on its ability to maintain trade secrets, patents and other intellectual property protections. Trade secrets are routinely employed in the Company's manufacturing processes. A "trade secret" includes information that has value to the extent it is not generally known, not readily ascertainable by others through legitimate means, and protected in a way that maintains its secrecy. In order to protect its trade secrets, the Company takes certain measures to ensure their secrecy, such as executing non-disclosure agreements with its employees, customers and suppliers. Reliance on trade secrets is only an effective business practice insofar as (i) trade secrets remain undisclosed and (ii) proprietary product or process is not reverse engineered or independently developed. The Company's inability to maintain its trade secrets relating to the systems production technology and operation could have a material adverse effect on the ability of the Company to sell its production systems. There can be no assurance that these trade secrets will remain undisclosed, that the Company's non-disclosure agreements will not be breached, that there will be adequate remedies for any such breach, or that the Company's production systems, process and operations will not be reverse engineered or independently developed. There can be no assurance that the steps taken by the Company will prevent misappropriation of its technology. Sales of the Company's wafers and package-ready devices depends heavily on the Company's trade secrets related to its MOCVD technology and processes. Failure to maintain trade secrets in this area would have a material adverse effect on the sales of the Company's wafer and package-ready devices. Although the Company holds six U.S. patents, these patents do not claim any material aspect of the current or planned commercial versions of the Company's systems or devices. The Company is actively pursuing patents on its recent inventions, but there can be no assurance that patents will be issued from any pending applications, or that the claims in any existing or future patents issued or licensed to the Company will not be challenged, invalidated or circumvented, or that any of the Company's pending or future patent applications will result in an issued patent with the scope of the claims sought by the Company, if at all. The Company has been granted a

nonexclusive license (the "Rockwell License") under U.S. patent number 4,368,098 (the "Rockwell Patent") issued on January 11, 1983 to Rockwell International Corporation ("Rockwell") in connection with sales of its MOCVD production systems and recently had begun discussions with Rockwell in order to obtain further licenses under the Rockwell Patent in connection with the manufacture and sale of certain wafers and devices. On November 15, 1996, the Rockwell Patent was declared invalid by the U.S. Court of Federal Claims. The Company believes that Rockwell will appeal this decision. There can be no assurance that the decision of the U.S. Court of Federal Claims relating to the Rockwell Patent will be upheld. In the event that the foregoing decision is reversed, the Company may be liable to Rockwell for royalty payments, as well as other amounts which the Company may ultimately be deemed to owe Rockwell in connection with the sales of its systems and wafers and devices. Moreover, the Company may need to obtain a license from Rockwell under the Rockwell Patent in connection with the manufacture and sale of certain wafers and devices. There can be no assurance that the Rockwell License can be maintained or that licenses for wafers and devices made with the Company's MOCVD production systems can be obtained or maintained on commercially reasonable terms, if at all. Moreover, the defense and prosecution of infringement claims can be expensive and time consuming, regardless of outcome, and can result in the diversion of substantial resources of the Company. The Company has not been notified and is not aware of, any third parties that are infringing its intellectual property right, or that the Company is infringing intellectual property rights of third parties, but there can be no assurance that the Company will not face such claims or infringements in the future. There can be no assurance that the Company will be successful in any resulting litigation or obtain a license on commercially reasonable terms, if at all, or will not be prevented from engaging in certain activities. Defense and prosecution of infringement claims can be expensive and time consuming, regardless of outcome, and can result in the diversion of substantial financial, management and other resources of the Company. In addition, the laws of certain other countries may not protect the Company's intellectual property to the same extent as the laws of the United States. See "Business - Intellectual Property."

Dependence on Limited Product Offerings. To date, substantially all of the Company's revenues have resulted from sales of its TurboDisc(TM) systems. The Company anticipates that a significant portion of its revenues in fiscal 1997 will be derived from the sale of these systems. The Company has recently developed the capacity to produce compound semiconductor wafers and package-ready devices. The Company's future success depends on its ability to develop and introduce in a timely manner new products, including improvements to its existing products, which compete effectively on the basis of price and performance and which adequately address customer requirements. The success of new product introductions is dependent upon several factors, including timely completion of new product designs, achievement of acceptable yields and market acceptance. No assurance can be given that the Company's product and process development efforts will be successful or that its new products will achieve market acceptance. To the extent that such new product introductions do not occur in a timely manner or the Company's or its customers' products do not achieve market acceptance, the Company's business, financial condition and results of operations would be materially adversely affected. See "Business - Products."

Manufacturing Risks. The manufacture of systems, wafers and package-ready devices are each subject to significant risks. The manufacture of systems is a highly complex and precise process. The Company increasingly outsources the fabrication of certain components and sub-assemblies of the systems it manufactures. Any impairment in the supply of these components or sub-assemblies would have a material adverse effect on revenues derived from sales of the Company's systems. In addition, any reduction in the

precision of these components will result in sub-standard end products and would cause delays and interruptions in the production cycle. To the extent the Company experiences shipment delays for its systems or wafers or package-ready devices, the Company's operating results would be materially adversely affected. The Company relies exclusively on its own production capabilities for manufacturing wafers and package-ready devices, and such operations are subject to additional manufacturing risks. Minute impurities, difficulties in the production process, defects in the epitaxial growth of the package-ready devices' constituent compounds, wafer breakage or other factors can cause a substantial percentage of wafers and package-ready devices to be rejected or numerous package-ready devices on each wafer to be nonfunctional. Such factors may result in lower than expected production yields, which would delay product shipments and materially adversely affect the Company's operating results. There can be no assurance that the Company will be able to maintain acceptable production yields in the future. Because the majority of the Company's costs of manufacture are relatively fixed, the number of shippable package-ready devices per wafer for a given product is critical to the Company's operating results. Additionally, because the Company manufactures all of its products at its facility in Somerset, New Jersey, and such components, products and systems are not readily available from other sources, any interruption in manufacturing resulting from fire, natural disaster, equipment failures or otherwise would have a material adverse effect on the Company's business, financial condition and results of operations. See "Business - Manufacturing."

Reliance on International Sales; Reliance on Single Distributor. Sales to customers located outside the United States accounted for approximately 58.6%, 36.0% and 42.5% of the Company's revenues in fiscal 1994, 1995 and 1996, respectively. The Company believes that such international sales will continue to account for a significant percentage of the Company's revenues. In particular, to market and service its systems in seven Asian countries, the Company relies on a single marketing, distribution and service provider, Hakuto & Co., Ltd. ("Hakuto"). A substantial portion of the Company's sales of systems in Asia is to Hakuto. The Company's agreement with Hakuto has an initial term of seven years but allows for earlier termination upon 60 days notice. Furthermore, the agreement is presently under renegotiation. While the Company believes its relationship with Hakuto is currently good, there can be no assurance that Hakuto will continue to adequately and effectively market and service the Company's systems. Termination of the Company's relationship with Hakuto would result in significant delays or interruption in the Company's marketing and service programs in Asia and would have a material adverse effect on the Company's business, financial condition and results of operations. The Company competes with its competitors for relationships with reliable international distributors. There can be no assurance that international distributors, including Hakuto, will not market products in competition with the Company's in the future or will not otherwise reduce or discontinue their relationships with or support of the Company and its products, or that the Company will be able to attract and retain qualified international distributors in the future. The inability of the Company to obtain qualified new international distributors could have a material adverse effect on the Company's business, financial condition and results of operations. In general, the Company's international sales are subject to risks different from domestic U.S. sales, including U.S. and international regulatory requirements and policy changes, U.S. and international export controls, political and economic instability, increased installation costs, difficulties in accounts receivable collection, exchange rates affecting end-market purchasers, tariffs and other barriers, extended payment terms, difficulty in staffing and managing international operations, dependence on and difficulties in managing international distributors or representatives and potentially adverse tax consequences. In particular, exports of the Company's products to certain

destinations, such as the People's Republic of China, Malaysia and Taiwan, may require pre-shipment authorization from U.S. export control authorities including the U.S. Departments of Commerce and State. Authorization may be conditioned on end-use restrictions. While the Company has received authorizations via license for exports to such destinations, in certain circumstances, it has been denied authorization in other circumstances, particularly with respect to the People's Republic of China, and there is no assurance that such authorization will be granted in the future. Failure to receive such authorizations could have a material adverse effect on the Company's business, financial condition and results of operations. Furthermore, although the Company seeks to meet technical standards established by non-U.S. regulatory bodies, there can be no assurance that the Company will be able to comply with such standards in the future. In addition, the laws of certain countries may not protect the Company's trade secrets and intellectual property to the same extent as the laws of the United States. See "Business - Sales and Marketing."

Dependence on Key Suppliers. The Company does not maintain any long-term supply agreements with any of its suppliers, and the majority of the critical components and sub-assemblies included in the Company's production systems, as well as certain raw materials required for the fabrication of the Company's wafers and package-ready devices, are obtained from sole source suppliers or a limited number of suppliers. The manufacture of certain components and sub-assemblies and raw materials is very complex and requires long lead times. The Company's systems cannot be produced without certain sole-sourced, critical components. In addition, the production of the Company's wafers and package-ready devices is inherently dependent on an adequate source of raw materials. Alternative suppliers for many of these components and materials may not be readily available. In addition, the Company intends to rely to an increasing degree on outside suppliers because of their specialized expertise. The Company's reliance on a limited group of suppliers, and particularly on sole source suppliers, involves several risks, including the potential inability to obtain an adequate supply of components and materials, and reduced control over pricing and delivery time. To date, the Company has generally been able to obtain components and materials when needed or on a timely basis, although it has experienced occasional delays. There can be no assurance that delays or shortages caused by suppliers will not occur in the future. Any inability to obtain adequate, timely deliveries of sub-assemblies and components and materials could prevent the Company from meeting scheduled shipment dates, which could damage relationships with current and prospective customers and may materially adversely affect the Company's business, financial condition and results of operations. See "Business - Manufacturing."

Rapid Technological Change; Reliance Upon Continued Product Development. The markets in which the Company and its customers compete are characterized by rapid technological change, evolving industry standards and continuous improvements in products and services. Due to continual changes in these markets, the Company believes that its future success will depend upon its ability to continually improve its production systems and processes, wafers and package-ready devices and to develop new technologies that compete effectively on the basis of price and performance and adequately address customer requirements. There can be no assurance that the Company's research and development staff will develop new products in time or with sufficient performance characteristics to meet the demands of the market. The Company's production systems must remain competitive on the basis of cost of ownership, process performance and capital productivity. Because it is generally not possible to predict the time required and costs involved in reaching certain research, development and engineering objectives, actual development costs could exceed budgeted amounts and estimated product development schedules could require extension. Any delay or inability to overcome such difficulties would

materially adversely affect the Company's business, financial condition and results of operations. Additionally, if new products or enhancements experience reliability or quality problems, the Company could encounter a number of difficulties, including reduced orders, higher manufacturing costs, delays in collection of accounts receivable and additional service and warranty expenses, all of which could materially adversely affect the Company's business, financial condition and results of operations. See "Business - Products."

Acceptance by Customers of New Compound Semiconductor Technology. The Company's systems utilize MOCVD technologies for the production of compound semiconductor wafers and package-ready devices. These same technologies are used in the Company's manufacture of wafers and package-ready devices. MOCVD technology differs significantly from the technological approaches used by others for each of these products. The semiconductor industry is especially resistant to the introduction of changes in process or approach in a manufacturing cycle which is quite long, consists of many separate process events and suffers from limited control measurement points during the overall fabrication process. Accordingly, the Company's customers may resist changing systems or accepting any new technological approach. Additionally, while the Company believes that compound semiconductor wafers and package-ready devices substantially enhance the performance of silicon-based electronics, the use of compound semiconductor wafers and package-ready devices increases the cost of electronic end products and, therefore, limits the feasibility of commercial applications of such products. The Company is seeking to persuade certain potential customers to incorporate compound semiconductor-based package-ready devices for many of their high performance applications. Because a substantial investment is required by semiconductor manufacturers to install and integrate capital equipment into a production line, these manufacturers may tend to choose compound semiconductor equipment suppliers based on past relationships, product compatibility and proven operating performance. The Company's wafer and package-ready device customers may be reluctant to re-tool their equipment and production systems to accept these new technologies, may be reluctant to rely upon a smaller supplier such as the Company for package-ready devices, and may be reluctant to pay higher device costs. There can be no assurance that the Company's MOCVD-based products will achieve broad market acceptance. See "Business - Compound Semiconductor Process Technology," "Business - Products" and "Business - Customers."

Competition. The Company faces substantial competition from both established competitors and potential new entrants. The Company believes that the primary competitive factors in the markets in which the Company's products compete are yield, throughput, capital and direct costs, system performance, size of installed base, breadth of product line and customer satisfaction, as well as customer commitment to competing technologies. The Company's principal competitors in the market for MOCVD systems include Aixtron GmbH, Nippon Sanso K.K. and Thomas Swann Ltd. The Company's principal competitors of wafers and package-ready devices include Epitaxial Products International, Kopin Corp. and Q.E.D. The Company also faces competition from manufacturers that produce wafers and package-ready devices for their own use. The Company may experience competition from corporations that have been in business longer than the Company and have broader product lines, more experience with high volume manufacturing, broader name recognition, substantially larger installed bases, alternative technologies which may be better established than the Company's and significantly greater financial, technical and marketing resources than the Company. There can be no assurance that the Company will successfully compete with these competitors in the future or that the Company's competitors will not develop enhancements to or future generations of competitive products that will offer price and performance features that are superior to those of the Company. The Company believes that in order to remain competitive, it must invest significant financial resources in

developing new product features and enhancements and in maintaining customer satisfaction worldwide. In marketing its products, the Company may face competition from suppliers employing new technologies in order to extend the capabilities of competitive products beyond their current limits or increase their productivity. In addition, increased competitive pressure could lead to intensified price-based competition, resulting in lower prices and margins, which would materially adversely affect the Company's business, financial condition and results of operations. See "Business - Competition."

Continued Existence of and Benefits to Control Group. Upon completion of the Offering, Jesup & Lamont Merchant Partners, L.L.C. ("JLMP"), the Company's majority shareholder, will beneficially own approximately 71.5% of the Common Stock. JLMP, together with the Company's directors and officers, will beneficially own approximately 77.0% of the Common Stock. Accordingly, the Company's majority shareholder and management will continue to hold sufficient voting power to enable it to maintain control of the business and affairs of the Company for the foreseeable future. Such concentration of ownership may also have the effect of delaying, deferring or preventing a change in control of the Company. Reuben F. Richards, Jr., the Company's President, Chief Executive Officer and a director, Thomas J. Russell, the Chairman of the Company's Board of Directors, Howard R. Curd and Howard F. Curd, each a director of the Company, are four of the five members of JLMP. JLMP has guaranteed the Company's demand note facility. Thomas J. Russell has provided collateral for that guarantee. The Company expects to use up to \$10.0 million of the net proceeds from the Offering to repay the borrowings under the demand note facility. See "Use of Proceeds," "Principal Shareholders" and "Certain Transactions."

Dependence on Key Employees. The future success of the Company is dependent, in part, on its ability to attract and retain certain key personnel, including materials scientists and operations and finance personnel. The Company anticipates that it will need to hire additional skilled personnel to expand all areas of its business to continue to grow. The competition for such employees is extremely intense. There can be no assurance that the Company will be able to retain its existing personnel or attract additional qualified employees in the future, failure of which would have a material adverse effect on the Company's business, financial condition and results of operations.

Environmental Regulation. The Company is subject to federal, state and local laws and regulations concerning the use, storage, handling, generation, treatment, emission, release, discharge and disposal of certain materials used in its research and development and production operations, as well as laws and regulations concerning environmental remediation and employee health and safety. The Company has retained an environmental consultant to advise it in complying with applicable environmental and health and safety laws and regulations, and believes that it is currently, and in the past has been, in substantial compliance with all such laws and regulations. The Company also believes that the costs of complying with existing environmental and health and safety laws and regulations are not likely to have a material adverse effect on its business, financial position or results of operations. There can be no assurance, however, that future changes in such laws and regulations will not result in expenditures or liabilities, or in restrictions on the Company's operation, that could have such an effect. The production of wafers and package-ready devices involves the use of certain hazardous raw materials, including, but not limited to, ammonia, phosphine and arsenic. The Company's expansion to offer wafers and package-ready devices will require the increased usage and maintenance of these materials on the Company's premises. While the Company believes it currently has and will continue to have in place sufficient control systems for the safe use and maintenance of these raw

materials, there can be no assurance that the Company's control systems will be successful in preventing a release of these materials or other adverse environmental conditions, which could cause a substantial interruption in the Company's operations. Such an interruption could have a material adverse effect on the Company's business, financial condition and results of operation. See "Business - Environmental Regulations."

Absence of Public Market; Possible Volatility of Stock Price. There has been no prior public market for the Company's Common Stock. Consequently, the initial public offering price has been determined by negotiations between the Company and Donaldson, Lufkin & Jenrette Securities Corporation and Needham & Company, Inc., as representatives of the underwriters. See "Underwriting." There can be no assurance that an active public market for the Common Stock will develop or be sustained after the Offering or that the market price of the Common Stock will not decline below the initial public offering price. The Company believes that a variety of factors could cause the price of the Company's Common Stock to fluctuate, perhaps substantially, including: announcements of developments related to the Company's business; quarterly fluctuations in the Company's actual or anticipated operating results and order levels; general conditions in the compound semiconductor and related industries or the worldwide economy; announcements of technological innovations; new products or product enhancements by the Company or its competitors; developments in patents or other intellectual property rights and litigation; and developments in the Company's relationships with its customers, distributors and suppliers. In addition, in recent years the stock market in general, and the market for shares of small capitalization and semiconductor industry-related stocks in particular, have experienced extreme price fluctuations which have often been unrelated to the operating performance of affected companies. Any such fluctuations in the future could adversely affect the market price of the Company's Common Stock.

Future Capital Needs; Uncertainty of Additional Funding. The Company currently anticipates that its available cash resources combined with the net proceeds of the Offering will be adequate to fund the Company's operations through fiscal 1997. However, the Company believes that it may require substantial additional capital. As a result, the Company may need to raise additional funds through public or private financings. No assurance can be given that additional financing will be available or that, if available, it will be available on terms favorable to the Company or its shareholders. If additional funds are raised through the issuance of equity securities, the percentage ownership of then current shareholders of the Company will be reduced and such equity securities may have rights, preferences or privileges senior to those of the holders of the Company's Common Stock. If adequate funds are not available to satisfy either short or long-term capital requirements, the Company may be required to limit its operations significantly. The Company's capital requirements will depend on many factors, including, but not limited to, the rate at which the Company develops and introduces its products, the market acceptance and competitive position of such products, the levels of promotion and advertising required to launch and market such products and attain a competitive position in the marketplace, and the response of competitors to the products based on the Company's technologies. See "Management's Discussion and Analysis of Financial Condition and Results of Operations - Liquidity and Capital Resources."

Effect of Certain Anti-Takeover Provisions. The Company's Amended and Restated Certificate of Incorporation (the "Certificate of Incorporation") and the New Jersey Business Corporation Act contain certain provisions that could delay or impede the removal of incumbent directors and would make more difficult a merger, tender offer or proxy contest involving the Company, even if such a transaction were beneficial to the interests of the shareholders, or could discourage a third party from attempting to acquire

control of the Company. The Company has authorized 20,000,000 shares of Preferred Stock, which the Company could issue without further shareholder approval and upon such terms and conditions, and having such rights, privileges and preferences, as the Board of Directors may determine. The Company has no current plans to issue any Preferred Stock. The Company is also subject to the New Jersey Shareholders Protection Act (the "Protection Act"), which prohibits certain New Jersey corporations from engaging in business combinations (including mergers, consolidations, significant asset dispositions and certain stock issuances) with any Interested Shareholder (defined to include, among others, any person that becomes a beneficial owner of 10% or more of the affected corporation's voting power) for five years after such person becomes an Interested Shareholder, unless the business combination is approved by the Board of Directors prior to the date the shareholder became an Interested Shareholder. In addition, the Protection Act prohibits any business combination at any time with an Interested Shareholder other than a transaction that (i) is approved by the Board of Directors prior to the date the Interested Shareholder became an Interested Shareholder, or (ii) is approved by the affirmative vote of the holders of two-thirds of the voting stock not beneficially owned by the Interested Shareholder, or (iii) satisfies certain "fair price" and related criteria. These provisions could have the effect of delaying, deferring or preventing a change in control of the Company and adversely affect the voting and other rights of holders of Common Stock. Further, the Company's Certificate of Incorporation and Amended and Restated By-Laws include provisions to reduce the personal liability of the Company's directors for monetary damages resulting from breaches of their fiduciary duty and to permit the Company to indemnify its directors and officers to the fullest extent permitted by New Jersey law. See "Description of Capital Stock."

Dilution and Benefit to Existing Shareholders. Purchasers of the Common Stock will experience immediate and substantial dilution in net tangible book value per share of Common Stock from the initial public offering price per share of Common Stock. See "Dilution."

Shares Eligible for Future Sale. Sales of the Company's Common Stock in the public market after this Offering could adversely affect the market price of the Company's Common Stock. See "Shares Eligible for Future Sale."

USE OF PROCEEDS

The net proceeds to the Company from the sale of the _____ shares of Common Stock being offered hereby are estimated to be \$ _____ (\$ _____ if the Underwriters' over-allotment option is exercised in full), after deducting the underwriting discounts and commissions and estimated offering expenses.

Of the net proceeds, approximately \$ _____ will be used to repay the entire principal amount outstanding under the Company's demand note facility with First Union National Bank, which was used for capital expenditures in connection with the build-out of the Company's manufacturing facility. The demand note facility bears interest at a rate equal to the six month LIBOR plus 75 basis points. The approximately \$ _____ of remaining net proceeds are expected to be used for capital expenditures to expand the Company's manufacturing facility, and for general corporate purposes including working capital. The Company may also use a portion of the net proceeds to fund acquisitions of complementary businesses, products or technologies. Although the Company periodically reviews potential acquisition opportunities, there are no current agreements with respect to any such transactions. Pending such uses, the net proceeds of the Offering will be invested in short-term, investment-grade, income producing investments.

The Company believes that the remaining net proceeds from the Offering and the funds available under its demand note facility will be sufficient to fund the Company's anticipated facility expansion, and to provide the Company with adequate working capital at least through fiscal 1997. However, there can be no assurance that events in the future will not require the Company to seek additional capital sooner or, if so required, that adequate capital will be available on terms acceptable to the Company.

DIVIDEND POLICY

The Company has never declared or paid dividends on its Common Stock since its formation. The Company currently does not intend to pay dividends in the foreseeable future so that it may reinvest its earnings in the development of its business. The payment of dividends, if any, in the future will be at the discretion of the Board of Directors.

CAPITALIZATION

The following table sets forth the capitalization of the Company as of September 30, 1996, and the capitalization of the Company as adjusted to give effect to the sale by the Company of ___ shares of Common Stock being offered hereby and the application of the estimated net proceeds therefrom. This table should be read in conjunction with the Company's Financial Statements and Notes thereto and "Selected Financial Data" included elsewhere in this Prospectus.

AS OF SEPTEMBER 30, 1996
ACTUAL AS ADJUSTED
(IN THOUSANDS, EXCEPT FOR SHARE AMOUNTS)

Demand Notes(1)	\$ --	\$ --
Long-term debt, net	\$8,365	\$ --
Shareholders' equity		
Preferred Stock: 20,000,000 shares authorized; none issued or outstanding	--	--
Common Stock 80,000,000 shares authorized; 10,181,168 shares issued and outstanding; _____ shares issued and outstanding; as adjusted(2)	19,408	_____
Notes receivable from stock sales .	(146)	(_____)
Accumulated deficit	(18,158)	(_____)
Total shareholders' equity	1,103	_____
Total capitalization	\$9,468	\$_____

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- (1) Subsequent to September 30, 1996, the Company established a \$10.0 million demand note facility. As of December 20, 1996, the Company had drawn down approximately \$2 million from this facility. The Company intends to use part of the net proceeds of the Offering to pay down the balance outstanding under this facility.
- (2) Excludes: (i) 2,200,000 shares of Common Stock reserved for issuance under the Company's 1995 Incentive and Non-Statutory Stock Option Plan as amended, of which 1,154,000 shares were subject to outstanding options at exercise prices varying from \$0.89 per share to \$3.00 per share, (ii) warrants to purchase 30,949 shares of Common Stock at an exercise price of \$5.00 per share exercisable until July 24, 1997, (iii) warrants to purchase 7,924,667 shares of Common Stock at an exercise price of \$1.20 per share, exercisable until May 1, 2001 and (iv) warrants to purchase 833,333 shares of Common Stock at an exercise price of \$3.00 per share, exercisable until September 1, 2001.

DILUTION

The net tangible book value (deficiency) of the Company as of September 30, 1996 was \$_____ or approximately \$____ per share. Net tangible book value (deficiency) per share represents the amount of the Company's shareholders' equity (net capital deficiency), less intangible assets (_____ at September 30, 1996), divided by 10,181,168 shares of Common Stock outstanding. Net tangible book value dilution per share represents the difference between the amount per share paid by purchasers of shares of Common Stock in the Offering made hereby and the pro forma net tangible book value per share of Common Stock immediately after completion of the Offering. After giving effect to the sale by the Company of _____ shares of Common Stock offered hereby and the application of the estimated net proceeds therefrom, the pro forma net tangible book value of the Company as of September 30, 1996 would have been \$_____ or approximately \$____ per share. This represents an immediate increase in net tangible book value of \$____ per share to existing shareholders and an immediate dilution in net tangible book value of \$_____ per share to the purchasers of Common Stock in the Offering, as illustrated in the following table:

Initial public offering price per share	\$_____
Net tangible book value (deficiency)	
per share as of September 30, 1996	\$_____
Increase in net tangible book value per	
share attributable to new investors	_____
Net tangible book value per share after Offering	_____
Dilution per share to new investors	\$_____

The foregoing table assumes no exercise of any outstanding stock options or warrants.

The following table sets forth, on a pro forma basis as of September 30, 1996, the difference between the existing shareholders and the purchasers of shares in the Offering with respect to the number of shares purchased from the Company, the total consideration paid and the average price per share paid:

	SHARES PURCHASED NUMBER	PERCENT	TOTAL AMOUNT	CONSIDERATION PERCENT	AVERAGE PRICE PER SHARE
Existing shareholders . .	_____	_____%	\$_____	_____%	\$_____
New investors	_____	_____	_____	_____	_____
Total		100.0%	\$	100.0%	

At September 30, 1996, there were outstanding stock options to purchase 1,154,000 shares of Common Stock at a weighted average exercise price of \$_____ per share and, warrants to purchase 30,949 shares of Common Stock at \$5.00 per share, warrants to purchase 7,924,667 shares at \$1.20 per share and warrants to purchase 833,333 shares at \$3.00 per share. To the extent that these options or warrants are exercised, there will be

further dilution in the aggregate to new investors.

SELECTED FINANCIAL DATA

The following selected financial data of the Company is qualified by reference to and should be read in conjunction with the Financial Statements and the Notes thereto, and Management's Discussion and Analysis of Financial Condition and Results of Operations included elsewhere in this Prospectus. The financial data included in this table have been selected by the Company and have been derived from the Company's financial statements. The Statement of Income Data set forth below with respect to fiscal 1996, 1995 and 1994 and the Balance Sheet Data as of September 30, 1996 and 1995, are derived from the audited financial statements included elsewhere in this Prospectus which financial statements have been audited by Coopers & Lybrand L.L.P., whose report with respect thereto appears elsewhere in this Prospectus. The Statement of Income Data for fiscal 1993 and 1992 and the Balance Sheet Data as of September 30, 1994, 1993 and 1992 are derived from audited financial statements not included herein.

YEARS ENDED SEPTEMBER 30,
1992 1993 1994 1995 1996
(In thousands, except per share data)

STATEMENT OF INCOME DATA:

Revenues	\$10,022	\$8,180	\$9,038	\$18,137	\$27,779
Cost of sales	7,043	4,772	5,213	9,927	18,607
Gross profit	2,979	3,408	3,825	8,210	9,172
Operating expenses:					
Selling, general and administrative	2,977	2,849	2,645	4,452	6,524
Research and development	909	1,024	1,064	1,852	5,401
Total operating expenses	3,886	3,873	3,709	6,304	11,925
Operating (loss) income	(907)	(465)	116	1,906	(2,753)
Interest expenses, net	283	242	286	255	423
Other expense (income)	(226)	(100)	--	10	--
(Loss) income before income taxes	(964)	(607)	(170)	1,641	(3,176)
Provision for income taxes	(6)	--	--	125	--
Net (loss) income	(\$958)	(\$607)	(\$170)	\$1,516	(\$3,176)
Net (loss) income per share					
Shares used in computing net (loss) income per share					

AS OF SEPTEMBER 30,
1992 1993 1994 1995 1996
(In thousands)

BALANCE SHEET DATA:

Working capital	\$492	\$840	\$1,041	\$2,208	\$1,151
Total assets	4,233	3,171	5,415	10,143	20,434
Long-term debt	1,944	2,000	3,000	3,000	8,365
Shareholders' (deficit) equity	(56)	12	(96)	1,509	1,103

MANAGEMENT'S DISCUSSION AND ANALYSIS OF
FINANCIAL CONDITION AND RESULTS OF OPERATIONS

OVERVIEW

EMCORE is a leading designer and developer of compound semiconductor materials and process technology and a leading manufacturer of production systems used to fabricate compound semiconductor wafers. Compound semiconductors are used in a broad range of applications in wireless communications, telecommunications, computers, and consumer and automotive electronics. EMCORE believes that its proprietary TurboDiscTM deposition technology is the critical enabling process step in the cost effective, high volume manufacture of high performance electronic and optoelectronic devices. The Company was founded in 1984 to engage in advanced materials science research and development and to develop and manufacture a viable production platform for the processing of compound semiconductor materials. In 1986, the Company shipped its first TurboDiscTM system and by 1990, had sold systems in the United States, Asia and Europe.

To date, the Company has sold over 160 systems worldwide. From fiscal 1986 until fiscal 1993, the Company's systems revenues consisted principally of sales of research and development systems and small pilot production systems. Beginning in fiscal 1994, due to the increased market demand for compound semiconductor devices, the Company's systems revenues have principally consisted of the sale of larger production platforms. Historically, the Company's revenues have consisted primarily of the sales of MOCVD systems and components, government-sponsored research contracts and service contracts. The Company's systems sales contracts typically require partial advance payments during the design and production phases of the systems manufacturing process. Such advance payments have historically represented a significant funding source to the Company.

Prior to fiscal 1996, the Company was profitable for six consecutive quarters. In fiscal 1996, the Company expanded its product offerings to include wafers and package-ready devices and incurred a consolidated net loss of \$3.2 million, which primarily resulted from significant initial operating expenses related to the Company's expansion. The Company has increased its expense levels to support anticipated growth in demand for each of its compound semiconductor production systems, wafer and package-ready device product offerings, including the hiring of additional manufacturing, research, engineering, sales and administrative personnel and has also increased its investments in inventory and capital equipment. As a result, the Company is dependent upon increasing revenues and profit margins to achieve profitability. If the Company's sales and profit margins do not increase to support the higher levels of operating expenses, the Company's business, financial condition and results of operations would be materially adversely affected. The Company currently anticipates to continue to expand its manufacturing capacity for the production of wafers and package-ready devices, which entails substantial additional capital expenditures. The Company currently anticipates expending a substantial portion of the net proceeds of the Offering for this purpose. The Company expects to incur substantial losses in the first quarter of fiscal 1997. In the future, the Company expects to derive significant revenues from sales of wafers and package-ready devices. However, the Company's ability to derive any such revenues is subject to certain risks and uncertainties, including yield, process and capacity related risks and risks associated with the market acceptance of such products. There can be no assurance that the Company will be successful in developing or marketing such wafers and package-ready devices. The Company's failure to develop or market such products would have a material adverse effect on the Company's business, financial condition and results of operations.

The Company sells its production systems worldwide and has generated a

significant portion of its sales to customers outside the United States. In fiscal 1994, 1995 and 1996, international sales constituted 58.6%, 36.0% and 42.5%, respectively, of revenues. The Company has made international sales in Belgium, France, Germany, Italy, Japan, Korea, the People's Republic of China, Taiwan, Sweden and the United Kingdom. The majority of the Company's international sales have been made to customers in Asia, particularly in Japan. The Company anticipates that international sales will continue to account for a significant portion of revenues. However, the Company's international sales are subject to certain risks and uncertainties, including international regulatory requirements and policy changes, export controls, tariffs and other barriers, and dependence on and difficulties in managing international distributors. There can be no assurance that the Company will continue to derive significant revenues from international sales.

As of September 30, 1996, the Company had an order backlog of approximately \$25.7 million, consisting of \$22.5 million of production systems, \$1.1 million of research contracts and \$2.1 million of package-ready devices, compared to a backlog of \$11.9 million as of September 30, 1995, consisting of \$10.0 million of production systems and \$1.9 million of research contracts. This increase in backlog was a result of the increased market acceptance of the Company's production systems and multiple unit orders for such systems and the introduction of the Company's package-ready device products. The Company includes in backlog only customer purchase orders that have been accepted by the Company and for which shipment dates have been assigned within the twelve months to follow and research contracts that are in process or awarded. The Company receives partial advance payments or irrevocable letters of credit on most production system orders and has never experienced a purchase order cancellation.

The Company recognizes systems and components, wafers and package-ready device revenue upon shipment. The Company incurs certain installation and warranty costs subsequent to system shipment which are estimated and accrued at the time the sale is recognized. The Company reserves for estimated returns and allowances at the time of shipment. For research contracts with the U.S. government and commercial enterprises, with durations greater than six months, the Company recognizes revenue to the extent of costs incurred plus a pro rata portion of estimated gross profit as stipulated in such contracts, based on contract performance. The Company's research contracts require the development or the evaluation of new material applications and have a duration of six to thirty-six months. Contracts with a duration of six months or less are accounted for on the completed contract method. A contract is considered complete when all costs have been incurred and the research reporting requirements to the customer have been met.

RESULTS OF OPERATIONS

The following table sets forth the Statement of Operations data of the Company expressed as a percentage of total revenues for the periods indicated.

	YEARS ENDED SEPTEMBER 30,		
	1994	1995	1996
Revenues	100.00%	100.00%	100.00%
Cost of sales	57.7	54.7	67.0

Gross profit	42.3	45.3	33.0
Operating expenses:			
Selling, general and administrative	29.2	24.5	23.5
Research and development	11.8	10.2	19.4
Operating income (loss)	1.3	10.5	(9.9)
Interest expense, net	3.2	1.4	1.5
Other expense (income)	-	0.1	-
Income (loss) before income taxes	(1.9)	9.0	(11.4)
Provision for income taxes	-	0.6	-
Net income (loss)	(1.9)%	8.4%	(11.4)%

COMPARISON OF FISCAL YEARS ENDED SEPTEMBER 30, 1995 AND 1996

Revenues. Revenues increased 53.6% from \$18.1 million in fiscal 1995 to \$27.8 million in fiscal 1996. This increase was primarily due to greater sales of the Company's compound semiconductor production systems resulting from broader acceptance of these products, coupled with an increased market demand for compound semiconductor devices, and to a lesser extent, increased service revenues, which include parts and service contracts, resulting from the Company's growing installed base. In addition, in fiscal 1996, the Company increased research contract revenues resulting from an arrangement with General Motors to develop and enhance certain magneto-resistive package-ready devices which generated approximately \$1.6 million in revenue. Revenues derived from international sales increased 81.5% from \$6.5 million in fiscal 1995 to \$11.8 million in fiscal 1996. This increase was primarily due to an increased demand for the Company's production systems.

Cost of Sales/Gross Profit. The Company's cost of sales includes direct material and labor costs, manufacturing and service overhead, and installation and warranty costs. Cost of sales increased 87.9% from \$9.9 million in fiscal 1995 to \$18.6 million in fiscal 1996. Gross profit decreased from 45.3% of revenues in fiscal 1995 to 33.0% of revenues in fiscal 1996. This decrease was principally attributable to (i) the sale of three systems at a loss for strategic reasons, (ii) competitive pricing conditions prevailing generally in the market and a resulting decrease in the average selling price of the Company's production systems, (iii) costs associated with system enhancements and (iv) an increase in the Company's cost of obtaining certain components. The Company believes that the three sales made for strategic reasons resulted in an approximately 4% decline in gross profit in fiscal 1996.

Selling, General and Administrative. Selling, general and administrative expenses increased 44.4% from \$4.5 million in fiscal 1995 to \$6.5 million in fiscal 1996. This increase was primarily due to increased marketing expenses associated with the Company's higher level of production systems sales and the hiring of additional personnel to support the Company's expanded activities. As a percentage of revenues, selling, general and administrative expenses decreased from 24.5% in fiscal 1995 to 23.5% in fiscal 1996.

Research and Development. Research and development expenses include the costs of internally-funded research and development projects, as well as

materials prototype product support expenses, which primarily include employee and material costs, depreciation of capital equipment, and other engineering-related costs. Research and development expenses increased 184.2% from \$1.9 million in fiscal 1995 to \$5.4 million in fiscal 1996. This increase was primarily due to the Company's increased research and development activities relating to the initiation of its wafer and package-ready device product lines. As a percentage of revenues, research and development expenses increased from 10.2% in fiscal 1995 to 19.4% in fiscal 1996.

COMPARISON OF FISCAL YEARS ENDED SEPTEMBER 30, 1994 AND 1995

Revenues. Revenues increased 101.1% from \$9.0 million in fiscal 1994 to \$18.1 million in fiscal 1995. This increase was primarily due to increased sales of the Company's production systems, and to a lesser extent an increase in service revenues. Revenues derived from international sales increased 22.6% from \$5.3 million in fiscal 1994 to \$6.5 million in fiscal 1995. This increase was primarily due to broader acceptance of the Company's production systems.

Cost of Sales/Gross Profit. Cost of sales increased 90.4% from \$5.2 million in fiscal 1994 to \$9.9 million in fiscal 1995. Gross profit increased from 42.3% of revenues in fiscal 1994 to 45.3% of revenues in fiscal 1995. This increase was due to favorable product mix consisting of a higher proportion of larger production systems with higher gross profit.

Selling, General and Administrative. Selling, general and administrative expenses increased 73.1% from \$2.6 million in fiscal 1994 to \$4.5 million in fiscal 1995. The increase was primarily due to increased marketing expenses, including customer samples, associated with the Company's higher level of systems sales and the hiring of additional personnel to support the Company's expanded activities. As a percentage of revenues, selling, general and administrative expenses decreased from 29.2% in fiscal 1994 to 24.5% in fiscal 1995 due to the growth in the Company's revenues.

Research and Development. Research and development expenses increased 72.7% from \$1.1 million in fiscal 1994 to \$1.9 million in fiscal 1995. This increase was primarily due to increased research and development activities relating to the development of new production systems for the processing of gallium nitride used in the manufacture of blue high brightness light emitting diodes ("HB LEDs"). As a percentage of revenues, research and development expenses decreased from 11.8% in fiscal 1994 to 10.2% in fiscal 1995.

QUARTERLY RESULTS OF OPERATIONS

The following tables present the Company's unaudited results of operations expressed in dollars and as a percentage of revenues for the eight most recently ended fiscal quarters. The Company believes that all necessary adjustments, consisting only of normal recurring adjustments, have been included in the amounts below to present fairly the selected quarterly information when read in conjunction with the Financial Statements and Notes thereto, included herein. The Company's results from operations may vary substantially from quarter to quarter. Accordingly, the operating results for a quarter are not necessarily indicative of results for any subsequent quarter or for the full year.

	QUARTERS ENDED	
	FISCAL 1995	FISCAL 1996

	DEC. 31	MAR. 31	JUNE 30	SEPT. 30	DEC. 31	MAR. 31	JUNE 30	SEPT. 30
	(IN THOUSANDS)							
Revenues	\$3,394	\$3,836	\$4,875	\$6,032	\$4,255	\$6,014	\$7,727	\$9,783
Cost of sales	1,901	2,154	2,599	3,273	2,782	4,041	5,495	6,289
Gross profit	1,493	1,682	2,276	2,759	1,473	1,973	2,232	3,494
Operating expenses:								
Selling, general and administrative	864	967	1,303	1,318	1,511	1,545	1,900	1,568
Research and development	332	349	375	796	790	1,196	1,710	1,705
Total operating expenses	1,196	1,316	1,678	2,114	2,301	2,741	3,610	3,273
Operating income (loss)	297	366	598	645	(828)	(768)	(1,378)	221
Interest expense, net . . .	63	77	62	63	55	55	104	209
Income before income taxes	234	289	536	582	(883)	(823)	(1,482)	12
Provision for income taxes	32	31	31	31	-	-	-	-
Net income (loss) . . .	\$202	\$258	\$505	\$551	(\$883)	(\$823)	(\$1,482)	\$12
	AS A PERCENTAGE OF REVENUES							
Revenues	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Cost of sales	56.0	56.2	53.3	54.3	65.4	67.2	71.1	64.3
Gross profit	44.0	43.8	46.7	45.7	34.6	32.8	28.9	35.7
Operating expenses:								
Selling, general and administrative	25.4	25.2	26.7	21.9	35.5	25.7	24.6	16.0
Research and development	9.8	9.1	7.7	13.2	18.6	19.9	22.1	17.4
Total operating expenses	35.2	34.3	34.4	35.1	54.1	45.6	46.7	33.4
Operating income (loss)	8.8	9.5	12.3	10.7	(19.5)	(12.8)	(17.8)	2.2
Interest expense, net . . .	1.9	2.0	1.3	1.0	1.3	0.9	1.3	2.1
Income before income taxes	6.9	7.5	11.0	9.6	(20.8)	(13.7)	(19.2)	0.1
Provision for income taxes	0.9	0.8	0.6	0.5	-	-	-	-
Net income (loss) . . .	6.0%	6.7%	10.4%	9.1%	(20.8)%	(13.7)%	(19.2)%	0.1%

The Company has experienced a significant increase in demand for its products as a result of greater demand for compound semiconductor systems, materials and devices. Accordingly, during the two-year period ended September 30, 1996, the Company's quarterly revenues have increased by an average of 50.7% over the corresponding quarterly revenues for the immediately preceding fiscal year.

Historically, the Company has experienced less demand for its products during the spring and summer, resulting in lower revenues during the Company's first fiscal quarter. However, the Company's backlog has continually increased during the two-year period ended September 30, 1996.

The cost of sales remained relatively constant as a percentage of revenues during fiscal 1995. Gross profit ranged from a high of 46.7% to a low of 43.8%. The Company experienced a decline in gross profit throughout fiscal 1996. Gross profit ranged from a high of 35.7% to a low of 28.9%. This decline was principally attributable to (i) the sale of three systems at a loss for strategic reasons, (ii) competitive pricing conditions prevailing generally in the market and a resulting decrease in the average selling price of the Company's production systems, (iii) costs associated with system enhancements and (iv) an increase in the Company's cost of obtaining certain components.

Operating expenses have generally increased in absolute dollars over the quarters shown as the Company has increased staffing in research and development, sales and marketing and general and administrative functions. This increase was due to activities relating to the development of new systems for the processing of gallium nitride used in the manufacture of blue LEDs, the development of the Company's volume production systems and the initiation of the Company's wafer and package-ready device products. Selling, general and administrative expenses have increased as a result of increased marketing and sales related activities, including the hiring of additional personnel, commissions and customer samples, with the exception of the quarter ended September 30, 1996, during which selling, general and administrative expenses decreased as a result of a reduction in the production of sales samples. As a percentage of total revenues, operating expenses in fiscal 1995 have generally increased ranging from a low of 34.3% to a high of 35.2%. In fiscal 1996, operating expenses as a percentage of total revenues fluctuated from a low of 33.4% to a high of 54.1%.

The Company has experienced and expects to continue to experience significant fluctuations in its quarterly results. Factors which have had an influence on and may continue to influence the Company's operating results in a particular quarter include the timing of receipt of orders, cancellation, rescheduling or delay in product shipment or supply deliveries, product mix, competitive pricing pressures, the Company's ability to design, manufacture and ship products on a cost effective and timely basis, including the ability of the Company to achieve and maintain acceptable production yields for its wafers and package-ready devices, and the announcement and introduction of new products by the Company and by its competitors. The timing of sales of the Company's larger, volume production systems may cause substantial fluctuations in quarterly operating results due to the substantially higher per unit price of these products relative to the Company's other products. There can be no assurance that the compound semiconductor industry will not experience downturns or slowdowns, which may materially and adversely affect the Company's business, financial condition and results of operations.

LIQUIDITY AND CAPITAL RESOURCES

Since inception, the Company has funded its operations through the private sale of equity securities, issuance of subordinated debt, capital equipment leases, bank and other third party borrowings, as well as advance payments by customers, and more recently cash flow generated from operations. As of September 30, 1996, the Company had \$1.4 million in cash, working capital of \$1.2 million and subordinated debt with a carrying value of \$8.4 million.

Net cash provided from operations was \$573,000 and \$3.1 million during fiscal 1994 and fiscal 1995, respectively. The cash provided in fiscal 1994 and 1995 was the result of improved operating performance, as evidenced by profitable operations in fiscal 1995. Net cash used in operating activities was \$1.9 million in fiscal 1996 and was primarily attributable to the loss from operations, an increase in inventories and

receivables offset, in part by increases in current liabilities particularly advance billings and accounts payable.

Net cash used for investing activities was \$1.2 million, \$1.3 million and \$7.1 million in fiscal 1994, 1995 and 1996, respectively. These expenditures included the manufacture or purchase of capital equipment including TurboDiscTM production systems, and the purchases of characterization and test equipment, computer equipment, research and development tools, and, particularly during fiscal 1996, tenant improvements in the Company's facility, including construction and refurbishment of two clean rooms. The Company anticipates making additional capital expenditures primarily for manufacturing expansion and improvements including additional cleanroom space, TurboDiscTM production systems, research and development tools and office equipment, including computers and furniture and fixtures. The Company estimates its capital needs will be approximately \$13 million in fiscal 1997.

The Company's financing activities provided net cash of approximately \$967,000, \$90,000 and \$8.0 million in fiscal 1994, 1995 and 1996, respectively. In fiscal 1994, financing cash proceeds were primarily derived from the issuance of \$1.0 million of 7.5% Notes to Hakuto. In fiscal 1995, cash proceeds were generated from the sale of equity securities to senior management. During fiscal 1996, the Company raised \$11.0 million from the issuance of 6% Subordinated Notes due 2001. Of this amount, \$3.0 million was used to repay the outstanding 7.5% Notes held by Hakuto.

On October 25, 1996, the Company entered into a \$10.0 million demand note facility with First Union National Bank. The facility bears interest at the rate of the six-month LIBOR plus 75 basis points and is due and payable on demand. The facility has been guaranteed by JLMP, the Company's majority shareholder. Collateral for the facility, in the form of a custodial account containing marketable equity securities, has been provided by Thomas J. Russell, the Chairman of the Company's Board of Directors and Chairman of JLMP. The Company anticipates using the borrowing under the demand note facility to finance a portion of its capital expenditure requirements in fiscal 1997.

The Company believes that its cash on hand, the receipt of customer deposits and the net proceeds from the Offering will be sufficient to repay the borrowings under the demand note facility, and to provide adequate working capital at least through fiscal 1997. However, there can be no assurance that events in the future will not require the Company to seek additional capital sooner or, if so required, that adequate capital will be available on terms acceptable to the Company. The Company is presently in discussions with certain lenders to put in place a revolving credit facility in place of the demand note facility.

The Company's net operating loss tax carryforwards and research credits are subject to annual limitations under Sections 382 and 383 of the Internal Revenue Code due to a change in ownership.

RECENT ACCOUNTING PRONOUNCEMENTS

In March 1995, the Financial Accounting Standards Board (the "FASB") issued Statement of Financial Accounting Standards No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to be Disposed Of" ("SFAS 121"). This pronouncement establishes accounting standards for when impairment losses relating to long-lived assets, identifiable intangibles and goodwill related to those assets should be recognized and how the losses should be measured. The Company plans to implement SFAS 121 in fiscal 1997. The adoption of SFAS 121 is not expected to have an impact on the Company's financial position or results

of operations, since the Company's current policy is to monitor assets for impairment and record any necessary write-downs.

In October 1995, the FASB issued Statement of Financial Accounting Standards No. 123 "Accounting for Stock Based Compensation" ("SFAS 123"). The provisions of SFAS 123 set forth the method of accounting for stock based compensation based on the fair value of stock options and similar instruments, but do not require the adoption of this preferred method. SFAS 123 also requires the disclosure of additional information about stock compensation plans, even if the preferred method of accounting is not adopted. The Company plans to implement SFAS 123 in fiscal 1997. The Company does not intend to change its method of accounting for stock based compensation to the method under SFAS 123, but instead will continue to apply the provisions of Statement of Financial Accounting Standards No. 25 "Accounting for Stock Issued to Employees." However, the Company will disclose the pro forma effect of SFAS 123 on its net income and earnings per share.

BUSINESS

COMPANY OVERVIEW

EMCORE is a leading designer and developer of compound semiconductor materials and process technology and a leading manufacturer of production systems used to fabricate compound semiconductor wafers. Compound semiconductors are used in a broad range of applications in wireless communications, telecommunications, computers, and consumer and automotive electronics. EMCORE believes that its proprietary TurboDiscTM deposition technology is the critical enabling process step in the cost-effective, volume manufacture of high performance electronic and optoelectronic devices. The Company has recently capitalized on its technology base by expanding into the design and production of compound semiconductor wafers and package-ready devices. The Company offers its customers a complete, vertically-integrated solution for the design, development and production of compound semiconductor wafers and devices. EMCORE's production systems and process technology have been purchased by, among others: Hughes-Spectrolab, General Motors, Hewlett Packard Co., Lucent Technologies, Inc., Motorola, Inc., Rockwell, Samsung Co., Siemens AG, L.M. Ericsson AB, Texas Instruments Incorporated, Thomson CSF and thirteen of the largest electronics manufacturers in Japan.

INDUSTRY OVERVIEW

Recent advances in information technologies have created a growing need for power efficient, high performance electronic systems that operate at very high frequencies, have increased storage capacity and computational and display capabilities, and can be produced cost-effectively in commercial volumes. In the past, electronic systems manufacturers have relied on advances in silicon semiconductor technology to meet many of these demands. However, the newest generation of high-performance electronic and optoelectronic applications require certain functions which are generally not achievable using silicon-based components. To address these market demands, electronic system manufacturers are increasingly incorporating new electronic and optoelectronic devices into their products in order to improve performance or enable new applications.

Compound semiconductors have emerged as an enabling technology to meet the complex requirements of today's advanced information systems. Compound semiconductor devices can be used to perform individual functions as discrete devices, such as HB LEDs, lasers and solar cells, or can be combined into integrated circuits, such as transmitters, receivers and alpha-numeric displays. Compound semiconductor materials have unique physical properties that allow electrons to move at least four times faster than through silicon-based devices. This higher electron mobility enables a compound semiconductor device to operate at much higher speeds than silicon devices with lower power consumption and less noise and distortion. In addition, unlike silicon-based devices, compound semiconductor devices have optoelectronic capabilities that enable them to emit and detect light. As a result, electronics manufacturers are increasingly integrating compound semiconductor devices into their products in order to achieve higher performance in a wide variety of applications, including wireless communications, telecommunications, computers, and consumer and automotive electronics.

Wireless Communications. Compound semiconductor devices have multiple applications in wireless communication products, including cellular telephones, pagers, PCS handsets, DBS systems and global positioning systems ("GPS"). Compound semiconductor devices are used in high frequency transmitters, receivers and power amplifiers to increase capacity, improve signal to noise performance and lower power consumption, which in turn reduces network congestion, increases roaming range and extends battery

life. In addition, HB LEDs are used in electronic displays on these products in order to reduce size, weight and power consumption and to improve display visibility. In satellite communications, compound semiconductor devices are used in ultra-high frequency satellite up-converters and down-converters to cost-effectively deliver information to fixed and mobile users over wide geographic areas. In addition, compound semiconductor solar cells are used to power these satellites because they are more tolerant to radiation levels in space and have higher power-to-weight ratios than silicon-based solar cells, thereby increasing satellite life and payload capacity.

Telecommunications. To accommodate the exponential growth in voice, data and video traffic and the increased demand for higher transmission rates, telecommunications companies and Internet service providers are relying on fiber optic networks utilizing high speed switching technologies. Compound semiconductor components such as lasers and HB LEDs, coupled with optical detectors, are used within these networks to enable high speed data transmission, increase overall network capacity and reduce equipment costs.

Computers. Computer manufacturers are increasingly seeking to achieve higher clock speeds than the architecture prevalent in today's advanced multimedia computer systems. Higher processing speeds necessitate the use of larger cache memory to enable higher transmission rates. Computer manufacturers are increasingly utilizing compound semiconductor devices to achieve these results. In addition, today's advanced multimedia applications require increased data storage capacity, which is commonly addressed by the use of CD ROMs. To achieve these higher storage capabilities, computer manufacturers are increasingly utilizing compound semiconductor lasers and optical detectors. As a result of the migration of multimedia applications into consumer products, computer manufacturers are also incorporating compound semiconductor infrared emitters and optical detectors into their products to replace bulky wires and cables.

Consumer Electronics. Consumer electronics manufacturers are using compound semiconductor devices to improve the performance of many existing products and to develop new applications. For example, next generation compact disc players are utilizing shorter wavelength compound semiconductor lasers to read and record information on high density DVDs which store at least four times more information than a conventional compact disc. In addition, compound semiconductor devices are increasingly being used in advanced display technologies. Ultra-thin LED flat panel displays are being used in a variety of applications, including point-of-purchase displays and outdoor advertising with live-action billboards, and are being developed for use in laptop computers and flat panel television screens.

Automotive Electronics. Compound semiconductor devices are increasingly being used by automotive manufacturers to improve vehicle performance while reducing weight and costs through lower power consumption. These devices are utilized in a wide variety of applications, including dashboard displays, indicator lights, engine sensors, anti-lock braking systems and other electronic systems. In addition, the Company believes that the use of electronic components within automobiles is likely to increase as manufacturers design vehicles to comply with state and federal environmental and safety regulations. Automotive production cycles generally last three to five years, providing a relatively predictable source of demand for compound semiconductor devices once an electronic component is designed into a specific vehicle model.

The high performance characteristics of compound semiconductors, combined with the requirements of advanced information systems, have led to the widespread deployment of compound semiconductor devices within a broad

range of electronic systems. The Company believes that the following factors have resulted in an increased demand for compound semiconductor production systems, wafers and devices which enable electronic systems manufacturers to reach the market faster with high volumes of high-performance products and applications:

- Launch of new wireless services such as PCS and wireless high speed data systems;
- Rapid build-out of satellite communications systems;
- Widespread deployment of fiber optic networks and the increasing use of optical systems within these networks;
- Increasing use of infrared emitters and optical detectors in computer systems to replace bulky interconnect wires and cables;
- Emergence of advanced consumer electronics applications, such as DVDs and flat panel displays; and
- Increasing use of high performance electronic devices in automobiles.

COMPOUND SEMICONDUCTOR PROCESS TECHNOLOGY

Compound semiconductors are composed of two or more elements and usually consist of a metal such as gallium, aluminum or indium and a non-metal such as arsenic, phosphorous or nitrogen. The resulting compounds include gallium arsenide, indium phosphide, gallium nitride, indium antimonide and indium aluminum phosphide. The performance characteristics of compound semiconductors are uniquely dependent on the composition of these compounds. For example, the electrical and optical properties of gallium arsenide are substantially changed by adding aluminum as a third element. Many of the unique properties of compound semiconductor devices are achieved by the layering of different compound semiconductor materials in the same device. For example, infrared compound semiconductor lasers and HB LEDs are fabricated by depositing ultrathin layers of gallium arsenide between layers of gallium aluminum arsenide. This layered structure creates an optimal configuration to permit the conversion of electricity into light.

Accordingly, the composition and properties of each layer and the control of the layering process, or epitaxy, are fundamental to the performance of advanced electronic and optoelectronic compound semiconductor devices. The variation of thickness and composition of layers determines the intensity and color of the light emitted or detected and the efficiency of power conversion. The ability to vary the intensity, color and efficiency of light generation and detection uniquely enables compound semiconductor devices to be used in a broad range of advanced information systems.

Compound semiconductor device manufacturers have predominantly used three methods to deposit compound materials: molecular beam epitaxy, vapor phase epitaxy and liquid phase epitaxy. The Company believes that these traditional methods are subject to a number of inherent chemical process or volume production limitations. While these methods are successfully used for a variety of applications, they are not easily scaled up to high volume commercial production of complex materials, such as those used for optoelectronic devices.

A fourth method, metal organic chemical vapor deposition overcomes these limitations. Using MOCVD, a number of elements can be easily combined into a broad range of compounds. Currently, MOCVD technology is being used to manufacture a number of devices, including, among others high efficiency solar cells, HB LEDs, heterojunction bipolar transistors ("HBTs"), vertical cavity surface emitting lasers ("VCSELs") and MR sensors. The Company believes that compound semiconductor wafers fabricated using MOCVD possess better uniformity, as well as better optical and electronic properties, than wafers manufactured by more traditional methods. The Company believes that MOCVD has gained broad acceptance as the preferred methodology for the production of complex device structures in commercial volumes.

Historically, developers of compound semiconductor devices have met research, pilot production and capacity needs with in-house systems and technologies. However, the requirements for the production of commercial volumes of high-performance compound semiconductor devices have often exceeded the capabilities of such in-house solutions. Simultaneously, the growth of new applications for discrete compound semiconductor devices has challenged manufacturers to develop processes for new applications while simultaneously meeting demand for existing products. In response to these growing demands for higher volumes of higher performance devices, manufacturers are increasingly turning to outside vendors to meet their needs for compound semiconductor wafers and devices.

THE EMCORE SOLUTION

EMCORE provides its customers with materials science expertise, process technology and MOCVD production systems that enable the manufacture of commercial volumes of high-performance compound semiconductor wafers and devices. EMCORE believes that its proprietary TurboDisc™ deposition technology provides the most cost-effective production systems for the commercial volume manufacture of high-performance compound semiconductor wafers and devices. EMCORE is capitalizing on its technology base to address the critical need of electronics manufacturers to cost-effectively get to market faster with high volumes of new and improved high-performance products. EMCORE offers its customers a vertically integrated product line which includes device design, materials and process development, MOCVD production systems, epitaxial wafers and package-ready devices. EMCORE believes that it is the only company that offers such a broad range of products and services to the compound semiconductor market. The Company believes that its knowledge base and materials science expertise uniquely position the Company to become a valuable source for a broad array of solutions for the compound semiconductor industry.

[graphic depicting flowchart of registrant's expertise and registrant's products, indicating the ultimate end markets for those products]

STRATEGY

The Company has become a leading developer of MOCVD process technology and production systems through twelve years of close collaboration with its customers. The Company's objective is to capitalize on this position to become a leading supplier of epitaxial wafers and package-ready devices. The key elements of the Company's strategy include:

Provide Complete Compound Semiconductor Solutions. The Company's vertically-integrated product offerings allow it to provide complete compound semiconductor solutions to a broad range of electronics manufacturers in order to meet their diverse technology requirements. The Company plans to capitalize on the growing need of electronics manufacturers to reach the market faster and more cost-efficiently with high volumes of end products. The Company assists its customers with device design, process development and optimal configuration of production systems. Moreover, the Company can also serve its customers as a reliable source for high volume production of wafers or package-ready devices. Through its materials science expertise, process technology and commercial production systems, the Company intends to become an integral part of its customers' compound semiconductor product life cycle.

Form Strategic Relationships with Customers. By developing enabling technologies, the Company seeks to form strategic alliances with its customers in order to obtain long-term development and high volume production contracts. For example, the Company currently has a strategic relationship with General Motors under which it has developed and enhanced the device structure and production process for, and is manufacturing, MR sensor products for use in General Motors' automotive applications. In addition, the Company has been integrally involved with a large telecommunication concern in connection with the development of solar cell technologies for satellites. Throughout its association with this customer, the Company has successfully customized its production systems to meet the customer's special high-performance device requirements. The Company intends to actively seek similar strategic relationships with other key customers in order to further expand its technological and production base.

Expand Technology Leadership. The Company has developed and optimized its compound semiconductor processes and has developed higher

performance production systems through substantial investments in research and development. The Company works closely with its customers to identify specific performance criteria in its production systems, wafers and package-ready devices. The Company intends to continue to expend substantial resources in research and development in order to enhance the performance of its production systems and to further expand its process and materials science expertise, including the development of new low cost, high volume wafers and package-ready devices for its customers. The Company employs 15 persons holding Ph.Ds in materials science, 9 of whom work in research and development.

PRODUCTS

Production Systems and Materials Processes. The Company is the leading supplier of MOCVD compound semiconductor production systems, and, in 1995, had a 38% share of this market, according to VLSI Research which regularly publishes research on this market. The Company has shipped more than 160 systems to date and believes that its TurboDisc™ systems offer significant cost of ownership advantages over competing systems. The Company believes that its MOCVD production systems, produce materials with superior uniformity of thickness, electrical properties and material composition. Each system is designed for the customer's particular applications and can be customized for the customer's throughput, wafer size and process chemistry requirements.

The Company's proprietary TurboDisc™ technology utilizes a unique high speed rotating disk in a stainless steel growth chamber with integrated vacuum-compatible loading chambers. To produce an epitaxial wafer, a bare substrate, such as gallium arsenide, indium phosphide or germanium, is placed on a wafer carrier in the TurboDisc™ growth chamber and subjected to high temperatures. Based on a predetermined formula, metal organic gases are released into the growth chamber. These gases decompose on the hot, rapidly spinning wafer. Semiconductor materials then become deposited on the substrate in a highly uniform manner. The resulting epitaxial wafer thus carries one or more ultra-thin layers of compound semiconductor material such as gallium arsenide, gallium nitride, or indium aluminum phosphide. The TurboDisc™ technology not only ensures uniformity of deposition across the wafer, but also offers flexibility for diverse applications with improved material results and increased production rates. The unique precision control of reactant gas flow in the TurboDisc™ technology platform allows users to scale easily from research to commercial volumes with substantially reduced time and effort. Wafers from 2 inches to 14 inches in diameter can be prepared using the same platform technology.

Upon removal from the growth chamber, the epitaxial wafer is then transferred to a device processing facility for various steps such as photolithography, etching, masking, metallization and dicing. Upon completion of these steps, the package-ready devices are then sent to the customer's facility for the attachment of leads and encapsulation in resin prior to the ultimate inclusion in the customer's product. The production of such compound semiconductor devices is substantially less complex than that of silicon integrated circuits.

[schematic diagram of production system fabricated and sold by the registrant]

Wafers are loaded on a multiple wafer holder into the growth chamber, where they are subjected to high-temperature vacuum conditions and spun at high speeds. Gases are then introduced into the vacuum growth chamber, and semiconductor materials become deposited onto the substrate in a highly uniform manner.

Compound semiconductor manufacturers, much like their counterparts in the silicon semiconductor industry, place great pressure on process equipment suppliers to decrease the cost of ownership of production systems. Cost of ownership is determined by yield, throughput, direct costs and capital. Yield is primarily determined by material uniformity, which is a function of the precision of the physical and chemical processes by which atomic layers are deposited. Throughput, the volume of wafers produced per unit of time, includes both the time required for a process cycle and the handling time between process steps. Direct costs include consumables used in manufacturing and processing and the clean room space required for the equipment. Capital costs include the cost of acquisition and installation of the process equipment. The Company believes that the high throughput capabilities of its TurboDiscTM systems make possible the lowest cost of ownership for the manufacture of compound semiconductor materials as well as superior reproducibility of thickness, composition, electrical profiles and layer accuracy required for electronic and optoelectronic devices. The Company's production systems also achieve a high degree of reliability with an average time available for production, based on customer data, of approximately 95%.

The Company offers the following family of systems:

Model	List Price	Application
Explorer	\$350,000-450,000	Research
Discovery	\$600,000-1,100,000	Development/Pilot Production
Enterprise	\$1,300,000-2,500,000	Volume Production

Wafer and Device Fabrication. Since its inception, the Company has worked closely with its customers in designing and developing materials processes to be used in production systems for its customers' end use applications. When a customer orders a production system, the customer provides the Company with performance criteria. The Company then determines the chemistry and process to meet these requirements and manufactures and configures the production system to produce the materials needed by the customer. The Company has recently begun to leverage its process and materials science knowledge base to manufacture wafers and package-ready devices in its own facilities. The Company's expansion into wafer and package-ready device production has been spurred almost entirely by requests from customers whose epitaxial wafer needs exceed their available production capabilities.

The Company fabricates package-ready devices on four-inch diameter wafers at its facility in Somerset, New Jersey with a combined clean room area totalling 3,500 square feet. The Company currently anticipates utilizing a significant portion of the net proceeds of the Offering to expand and equip this facility. Production capacity is currently 3,000 wafers per year. The Company is expanding this facility to approximately 7,500 square feet.

The Company is working with its customers to design, engineer and manufacture commercial quantities of package-ready compound semiconductor devices and materials such as MR sensors, HBTs, HEMTs, FETs, HB LEDs, solar cells and other electronic and optoelectronic devices. An example of the Company's close collaboration with its customers is the Company's ongoing relationship with General Motors. In 1985, General Motors was the Company's first customer for compound semiconductor MOCVD production systems. Over the last twelve years, General Motors has frequently consulted the Company for assistance in developing its materials process solutions. In 1995, General Motors asked the Company to determine if it could develop the capability to manufacture high-performance position sensors for use in a variety of automotive applications. Following a close working collaboration, General Motors asked the Company to assess and develop a plan to manufacture commercial volumes of an indium antimonide device that can operate at automotive temperatures. In 1996, General Motors and the Company entered into an agreement under which General Motors paid the Company approximately \$1.6 million to develop and enhance certain MR position sensors for commercial production. In the first quarter of fiscal 1997, the Company received a purchase order from General Motors, pursuant to which it began production of these package-ready position sensors.

CUSTOMERS

The Company's customers include several of the largest semiconductor, telecommunications and computer manufacturing companies in the world and thirteen of the largest electronics manufacturers in Japan. A number of the Company's customers are listed below:

General Motors
Hewlett Packard Co.
Honeywell Inc.
Hughes-Spectrolab
Hyundai Electronics
Samsung Co.
L.M. Ericsson AB

Lucent Technologies, Inc.
Motorola, Inc.
Philips AG
Polaroid Corporation
Rockwell
LG Semiconductor Corp.

Siemens AG
Texas Instruments Incorporated
Thomson CSF
Westinghouse Electric Corp.
International Business Machines
Corporation
Sharp U.S.A., Inc.

In fiscal 1996, the Company adopted a comprehensive Total Quality Management Program with special emphasis on total customer satisfaction. The Company seeks to encourage active customer involvement with the design and operation of its production systems. To accomplish this, the Company conducts user group meetings among its customers on three continents. At annual meetings, the Company's customers provide valuable feedback on key operations, process oriented services, problems and recommendations to improve the Company's products. This direct customer feedback has enabled the Company to constantly update and improve the design of its systems and processes. Changes that affect the reliability and capabilities of the Company's systems are embodied in new designs to enable current and future customers to utilize systems which the Company believes are high quality and cost-efficient. As of September 30, 1996, the Company employed 18 field service engineers who install the Company's systems and provide on-site support for all of the customers' needs. In its continuing effort to maintain and enhance its relationships with its customers, the Company is seeking ISO and QS 9000 quality certification.

SALES AND MARKETING

The Company markets and sells its products through its direct sales force in Europe and North America, and through representatives and distributors in Asia. In 1996, the Company signed a seven year exclusive distributorship agreement with Hakuto, its Asian distributor, whose territory encompasses seven Asian countries. This agreement is presently under renegotiation. Hakuto has marketed and serviced the Company's products since 1988 and is a minority shareholder in the Company. As of September 30, 1996, the Company employed 13 persons in sales and marketing.

The Company's sales and marketing staff, senior management and technical staff work closely with existing and potential customers to provide compound semiconductor solutions for its customers' problems. The sales process begins by understanding the customer's requirements and then attempting to match them with the most optimal solution. Typically, the Company will first try to match the customer's requirements to an existing design or a modification of a standard design. Such modifications often involve changing platform or process design. When necessary, the Company will work with the customer to develop the appropriate design process and to configure and manufacture the production system to meet the customer's needs. The Company will also frequently produce customized samples and aid the customer in matching the customized sample to the customer's requirement. The amount of time from the initial contact with the customer to the customer's placement of an order is typically two to nine months or longer. In addition, the sales cycle for wafers and package-ready devices also includes a period of two to six months during which the Company develops the formula of materials necessary to meet the customer's specifications and qualifies the materials, which may also require the delivery of samples. The Company believes that the high level of marketing, management and engineering support involved in this process is beneficial in developing competitive differentiation and long-term relationships with its customers.

International sales as a percentage of total sales in fiscal 1994, 1995 and 1996 were 58.6%, 36.0% and 42.5%, respectively. Sales to customers in the U.S. in fiscal 1994, 1995 and 1996 were approximately, \$3.7 million, \$11.6 million and \$16.0 million, respectively, while the Company's sales in Asia for the same time periods were \$4.9 million, \$4.0 million and \$8.2 million, respectively, and sales in Europe were \$0.3 million, \$2.5 million and \$3.6 million, respectively. In fiscal 1996, sales to Hughes-Spectrolab accounted for 23.6% of the Company's revenues. The Company receives all payments for all products and services in U.S. dollars.

SERVICE AND SUPPORT

The Company maintains an international service and support network responsible for on site maintenance and process monitoring on either a contractual or time-and-materials basis. Customers may purchase annual service contracts under which the Company is required to maintain an inventory of replacement parts and to service the equipment upon the request of the customer. The Company also sells replacement parts from inventory for customer needs. The Company pursues a program of system upgrades for customers to increase the performance of older systems. The Company generally does not offer extended payment terms to its customers and generally adheres to a warranty policy of one year. Consistent with industry practice, the Company maintains an inventory of components for servicing systems in the field and it believes that its inventory is sufficient to satisfy foreseeable short-term customer requirements.

RESEARCH AND DEVELOPMENT

To maintain and improve its competitive position, the Company's research and development efforts are focused on designing new proprietary products, improving the performance of existing systems, materials and devices and reducing costs in the product manufacturing process. In addition, the Company has developed a research and development production system for thin film ferroelectric oxide applications intended for use in large area memory and embedded logic devices. The Company has sold two such systems. The Company has developed this experimental production system for the deposition of thin-film ferroelectric materials onto silicon. Ferroelectric oxides are anticipated to be necessary for the production of advanced memory chips for one-gigabit memory devices.

The Company has dedicated six EMCORE TurboDiscTM systems for both research and production which are capable of processing virtually all compound semiconductor materials. The research and development staff utilizes state-of-the-art x-ray, optical and electrical characterization equipment which provide instant data allowing for shortened development cycles and rapid customer response. The Company's research and development expenses in fiscal 1994, 1995 and 1996 were approximately \$1.1 million, \$1.8 million and \$5.4 million, respectively. The Company expects that it will continue to expend substantial resources on research and development. As of September 30, 1996, the Company employed 24 persons in research and development, nine of whom hold Ph.Ds in materials science.

The Company also competes for research and development funds. In view of the high cost of development, the Company solicits research contracts that provide opportunities to enhance its core technology base or promote the commercialization of targeted products. The Company presently has two such contracts in process. The contracts fall under the Small Business Innovative Research programs or similar government sponsored programs. From inception until September 30, 1996, government and other external research contracts have provided approximately \$11 million to support the Company's research and development efforts. The Company is also positioned to market technology and process development expertise directly to customers who require it for their own product development efforts.

INTELLECTUAL PROPERTY

The Company has been a leader in the development of new technologies in the compound semiconductor field. The Company's success and competitive position both for production systems, wafers and package-ready devices depend materially on its ability to maintain trade secrets, patents and other intellectual property protections. Trade secrets are routinely employed in the Company's manufacturing processes. A "trade secret" is information that has value to the extent it is not generally known, not readily ascertainable by others through legitimate means, and protected in a way that maintains its secrecy. In order to protect its trade secrets, the Company takes certain measures to ensure their secrecy, such as executing non-disclosure agreements with its employees, customers and suppliers. Sales of the Company's production systems are substantially dependent upon the Company's ability to maintain its trade secrets relating to production system technology and operation. Sales of the Company's wafers and package-ready devices depend heavily on the Company's trade secrets related to its MOCVD technology and processes to give the Company a competitive advantage for winning new customer orders for compound semiconductor devices.

To date, the Company has been issued six U.S. patents. Provided that all requisite maintenance fees are paid, these U.S. patents will expire between 2005 and 2013. None of these U.S. patents claim any material aspect of the current or planned commercial versions of the Company's systems or devices. The Company has been granted the Rockwell License under the Rockwell Patent in connection with sales of its MOCVD production systems and had recently begun discussions with Rockwell in order to obtain further licenses under the Rockwell Patent in connection with the manufacture and sale of certain wafers and devices. On November 15, 1996, the Rockwell Patent was declared invalid by the U.S. Court of Federal Claims. The Company believes that Rockwell will appeal this decision. There can be no assurance that the decision of the U.S. Court of Federal Claims relating to the Rockwell Patent will be upheld. In the event that the foregoing decision is reversed, the Company may be liable to Rockwell for royalty payments, as well as other amounts which the Company may ultimately be deemed to owe Rockwell in connection with the sales of its systems and wafers and devices. Moreover, the Company may need to obtain a license from Rockwell under the Rockwell Patent in connection with the manufacture and sale of certain wafers and devices. There can be no assurance that the Rockwell License can be maintained or that licenses for wafers and devices made with the Company's MOCVD production systems can be obtained or maintained on commercially reasonable terms, if at all. Moreover, the defense and prosecution of infringement claims can be expensive and time consuming, regardless of outcome, and can result in the diversion of substantial resources of the Company.

ENVIRONMENTAL REGULATIONS

The Company is subject to federal, state and local laws and regulations concerning the use, storage, handling, generation, treatment, emission, release, discharge and disposal of certain materials used in its research and development and production operations, as well as laws and regulations concerning environmental remediation and employee health and safety. The Company has retained an environmental consultant to advise it in complying with applicable environmental and health and safety laws and regulations, and believes that it is currently, and in the past has been, in substantial compliance with all such laws and regulations. The Company also believes that the costs of complying with existing environmental and health and safety laws and regulations are not likely to have a material adverse effect on its business, financial position or results of operations. There can be no assurance, however, that future changes in such laws and regulations will not result in expenditures or liabilities, or in restric-

tions on the Company's operation, that could have such an effect. The production of wafers and package-ready devices involves the use of certain hazardous raw materials, including, but not limited to, ammonia, phosphine and arsenic. The Company's expansion to offer wafers and package-ready devices will require the increased usage and maintenance of these materials on the Company's premises. While the Company believes it currently has and will continue to have in place sufficient control systems for the safe use and maintenance of these raw materials, there can be no assurance that the Company's control systems will be successful in preventing a release of these materials or other adverse environmental conditions, which could cause a substantial interruption in the Company's operations. Such an interruption could have a material adverse effect on the Company's business, financial condition and results of operation.

BACKLOG

As of September 30, 1996, the Company had an order backlog of approximately \$25.7 million consisting of \$22.5 million of production systems, \$1.1 million of research contracts and \$2.1 million of package-ready devices, compared to backlog of \$11.9 million as of September 30, 1995 consisting of \$10.0 million of production systems and \$1.9 million of research contracts. This increase in backlog was a result of increased market acceptance of the Company's production systems and multiple unit orders for such systems, and the introduction of the Company's wafer and package-ready device product lines. The Company includes in backlog only customer purchase orders which have been accepted by the Company and for which shipment dates have been assigned within the twelve months to follow and research contracts that are in process or awarded. The Company receives partial advance payments or irrevocable letters of credit on most production system orders and has never experienced an order cancellation. The Company recognizes systems and package-ready device revenue upon shipment. For research contracts with the U.S. government and commercial enterprises, with durations greater than six months, the Company recognizes revenue to the extent of costs incurred plus a portion of estimated gross profit as stipulated in such contracts, based on contract performance. The Company is seeking to increase capacity to meet anticipated continuing increased production needs; however, there can be no assurance that the Company will increase its capacity to meet its scheduled needs.

MANUFACTURING

The Company's manufacturing operations are located at the Company's headquarters in Somerset, New Jersey and include systems engineering and production, wafer fabrication and design and production of package-ready devices. Many of the Company's manufacturing operations are computer monitored or controlled, enhancing reliability and yield. The Company manufactures its own systems and outsources some components and sub-assemblies, but performs all final system integration, assembly and testing. Since nearly all steps in the production process are performed by the Company, any interruption in manufacturing resulting from earthquake, fire, equipment failures or other causes would have a material adverse effect on the Company. As of September 30, 1996, the Company employed 109 persons in its manufacturing operations.

Outside contractors and suppliers are used to supply raw materials and standard components and to assemble portions of end systems from Company specifications. The Company depends on sole or a limited number of suppliers of components and raw materials. The Company generally purchases these single or limited source products through standard purchase orders. The Company also seeks to maintain ongoing communications with its suppliers to guard against interruptions in supply and has, to date, generally been able to obtain sufficient supplies in a timely manner and maintains inventories it believes are sufficient to meet its near term

needs. The Company has recently implemented a vendor program through which it inspects quality and reviews supplies and prices in order to standardize purchasing efficiencies and design requirements to maintain as low a cost of sales as possible. However, operating results could be materially adversely affected by a stoppage or delay of supply, receipt of defective parts or contaminated materials, and increase in the pricing of such parts or the Company's inability to obtain reduced pricing from its suppliers in response to competitive pressures.

In fiscal 1996, the Company received substantial levels of new orders, which will require the Company to increase its manufacturing capacity to meet with demand for its compound semiconductor production systems and its wafers and package-ready devices. The Company currently anticipates utilizing a significant portion of the net proceeds from the Offering for this purpose.

COMPETITION

The markets in which the Company competes are highly competitive. The Company competes with several companies for sales of MOCVD systems including, Aixtron AG, Nippon-Sanso and Thomas Swann. The primary competitors for the Company's wafer foundry include Epitaxial Products Inc., Kopin Corporation and Q.E.D. The Company also faces competition from manufacturers that implement in-house systems for their own use. The Company may experience competition from corporations that have been in business longer than the Company and have broader product lines, more experience with high volume manufacturing, broader name recognition, substantially larger installed bases, alternative technologies which may be better established than the Company's and significantly greater financial, technical and marketing resources than the Company. The Company competes with many research institutions and universities for research contract funding. The Company also sells its products to current competitors and companies with the capability of becoming competitors. As the markets for the Company's products grow, new competitors are likely to emerge, and present competitors may increase their market share.

The Company believes that the primary competitive factors in the markets in which the Company's products compete are yield, throughput, capital and direct costs, system performance, size of installed base, breadth of product line and customer satisfaction, as well as customer commitment to competing technologies. While the Company believes it is in a position to deliver low-cost and reliable solutions to its customers, many of the Company's competitors have significantly greater financial, technical, manufacturing, marketing, sales and other resources than the Company. The Company believes that in order to remain competitive, it must invest significant financial resources in developing new product features and enhancements and in maintaining customer satisfaction worldwide. In marketing its products, the Company may face competition from suppliers employing new technologies in order to extend the capabilities of competitive products beyond their current limits or increase their productivity. In addition, increased competitive pressure could lead to intensified price-based competition, resulting in lower prices and margins, which would materially adversely affect the Company's business, financial condition and results of operations.

LEGAL PROCEEDINGS

The Company is aware of no pending or threatened litigation against it which would cause a material adverse effect on its operating results.

EMPLOYEES

As of September 30, 1996 the Company employed 185 persons. None of the

Company's employees is covered by a collective bargaining agreement. The Company considers its relationships with employees to be good.

FACILITIES

The Company's executive office and manufacturing facility are located in Somerset, New Jersey, where the Company leases a 75,000 square foot facility. This facility lease expires on February 29, 2000. The Company has two five-year renewal options.

MANAGEMENT

The executive officers and directors of the Company and their ages as of the date of this Prospectus are as follows:

NAME	AGE	POSITION(S)
Reuben F. Richards, Jr.	41	President, Chief Executive Officer and Director
Thomas G. Werthan	40	Vice President - Finance and Administration, Chief Financial Officer, Secretary, and Director
Richard A. Stall	40	Vice President - Technology and Director
William T. Kroll	52	Executive Vice President - Business Development
Paul T. Fabiano	32	Vice President - Engineering
Louis A. Koszi	52	Vice President - Device Manufacturing
Laurence P. Wagner	36	Vice President - Electronic Materials
David H. Hess	35	Controller
Thomas J. Russell(1)(2) . . .	65	Chairman of the Board
Howard R. Curd(1)(2)	57	Director
Howard F. Curd(1)(2)	31	Director

(1) Member of Audit Committee

(2) Member of Compensation Committee

All directors of the Company hold office until the next annual meeting of shareholders or until their successors are duly elected and qualified. All officers serve at the discretion of the Board of Directors.

Reuben F. Richards, Jr. - Mr. Richards joined the Company in October 1995 as its President and Chief Operating Officer and became Chief Executive Officer in December 1996. Mr. Richards has been a director of the Company since May 1995. Prior to joining the Company, Mr. Richards was a Senior Managing Director of Jesup & Lamont (a registered broker-dealer), and President of its merchant banking affiliate, JLMP, the Company's largest shareholder. Prior to joining Jesup & Lamont, Mr. Richards was a Director at Prudential-Bache Capital Funding in its Investment Banking Division, having joined that firm in 1986. Mr. Richards also serves as a director of S.A. Telecommunications, Inc., a full service long distance telecommunications company, located in Richardson, Texas.

Thomas G. Werthan - Mr. Werthan joined the Company in 1992 as its Chief Financial Officer, Vice President - Finance and Administration and a director. Mr. Werthan is a Certified Public Accountant and has over fourteen years experience in assisting high technology, venture capital financed growth companies. Prior to joining the Company in 1992, he was associated with The Russell Group, a venture capital partnership, as Chief Financial Officer for several portfolio companies. The Russell Group is affiliated with Thomas J. Russell, a member of and Chairman of JLMP and Chairman of the Board of Directors of the Company. From 1985 to 1989, Mr. Werthan served as Chief Operating Officer and Chief Financial Officer for Audio Visual Labs, Inc., a manufacturer of multi-media and computer graphics equipment.

Richard A. Stall, Ph.D. - Dr. Stall became a director of the Company in December 1996. Dr. Stall helped found the Company in 1984 and has been Vice President - Technology at the Company since October, 1994, except for a sabbatical year in 1993 during which Dr. Stall acted as a consultant to the Company and his position was left unfilled. Prior to 1984, Dr. Stall was a member of the technical staff of AT&T Bell Laboratories and was responsible for the development of MBE and MOCVD technologies. He has co-authored more than 100 papers and holds four patents on MBE and MOCVD

technology and the characterization of compound semiconductor materials.

William J. Kroll - Mr. Kroll joined the Company in 1994 as Vice President - Business Development and in 1996 became Executive Vice President - Business Development. Prior to 1994, Mr. Kroll served for seven years as Senior Vice President of Sales and Marketing for Matheson Gas Products, Inc., a manufacturer and distributor of specialty gases and gas control and handling equipment. In that position, Mr. Kroll was responsible for \$100 million in sales and 700 employees worldwide. Prior to working at Matheson Gas Products, Mr. Kroll was Vice President of Marketing for Machine Technology, Inc., a manufacturer of semiconductor equipment for photoresist or applications, plasma strip, and related equipment.

Paul T. Fabiano - Mr. Fabiano joined the Company in 1985 as a process engineer and has served as Vice President - Engineering since March 1996. Mr. Fabiano has experience in all critical phases of the Company's operations including sales, service, manufacturing and engineering. During his tenure at the Company, Mr. Fabiano has held various managerial positions including Vice President, Manufacturing and Director of Field Engineering.

Louis A. Koszi - Mr. Koszi joined the Company in 1995 as Vice President for the Company's Device Manufacturing. Prior to 1995, Mr. Koszi was a member of AT&T Bell Laboratories for 25 years. Mr. Koszi has experience in all phases of semiconductor device design and manufacturing processes and associated quality programs. Mr. Koszi holds 17 U.S. patents, five foreign patents, and is a co-author of 35 publications. He was named a Distinguished Member of Technical Staff in 1989. In 1992, he was presented with the Excellence in Engineering from the Optical Society of America.

Laurence P. Wagner - Mr. Wagner joined the Company in March 1996 as Vice President - Wafer Manufacturing, and has more than twelve years experience in operations, engineering and research in the electronic and semiconductor materials industries. Before joining EMCORE, he spent seven years at Rohm & Haas, a subsidiary of Shipley Company, L.L.C., where he served successively as Corporate Projects Manager, Product Engineer, Engineering Manager, Manufacturing Manager, and, from 1994 to 1996, Operating Unit Manager.

David A. Hess - Mr. Hess joined the Company in 1989 as General Accounting Manager. He was named Controller in 1990. He is responsible for establishing the manner in which the Company presents its financial and operational data. He has more than ten years experience in monitoring and controlling all phases of product and process cost and general accounting systems. Prior to his employment at EMCORE, he held several positions as cost accounting manager, divisional accountant, and inventory control supervisor in manufacturing firms such as Emerson Quiet Kool (air conditioner manufacturers), Huls, North America (paint/solvent processors), and Brintec Corporation (screw machine manufacturers).

Thomas J. Russell, Ph.D. - Dr. Russell has been a director of the Company since May 1995 and was elected Chairman of the Board on December 6, 1996. Dr. Russell founded Bio/Dynamics, Inc. in 1961 and managed the company until its acquisition by IMS International in 1973, following which he served as President of that company's Life Sciences Division. From 1984, he served as Director, then as Chairman of IMS International until its acquisition by Dun & Bradstreet in 1988. From 1988 to 1992, he served as Chairman of Applied Biosciences, Inc. Dr. Russell also currently serves as a director of Cordiant plc, Adidas AG, and Uniroyal Technology Corporation. Dr. Russell is a member of and Chairman of JLMP, the Company's majority shareholder.

Howard R. Curd - Mr. Curd has been a director of the Company since May

1995. Mr. Curd is Chairman and Chief Executive Officer of Uniroyal Technology Corporation ("UTC"). He is the founder of UTC's predecessor business, Polycast Technology Corporation. He also sits on the advisory board for Investment Seminars, Inc., the nation's leading provider of independent investment advice. Mr. Curd is a member of and Vice President of JLMP, LLC, the Company's majority shareholder. Mr. Curd is the father of Howard F. Curd, a director of the Company.

Howard F. Curd - Mr. Curd has been a director of the Company since May 1995. Mr. Curd is president and chief executive officer and a director of Jesup & Lamont Group Holdings, Inc., a diversified financial holding company. Mr. Curd, together with Mr. Richards, is a director of S.A. Telecommunications, Inc., a full service long distance telecommunication company, located in Richardson, Texas. Mr. Curd is the son of Howard R. Curd, a director of the Company.

Prior to completion of the offering, the Company intends to appoint at least two outside directors to the Company's Board of Directors. It is the intention of the Company that such outside directors will be appointed to and replace the existing members of each of the Company's Audit Committee and Compensation Committee.

COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION

The Company's Compensation Committee, which consists of Dr. Thomas J. Russell, Howard F. Curd and Howard R. Curd, reviews and recommends to the Board of Directors the compensation and benefits of all officers of the Company, reviews general policy matters relating to compensation and benefits of officers and employees of the Company and administers the issuance of stock options and stock appreciation rights and awards of restricted stock to the Company's officers and key salaried employees. No member of the Compensation Committee is now or ever was an officer or an employee of the Company. No executive officer of the Company serves as a member of the compensation committee of the Board of Directors of any entity one or more of whose executive officers serves as a member of the Company's Board of Directors or Compensation Committee. See "Certain Transactions."

AUDIT COMMITTEE

The Company's Audit Committee currently consists of Thomas J. Russell, Howard F. Curd and Howard R. Curd. The Audit Committee recommends the engagement of the Company's independent accountants, approves the auditing services performed, and reviews and evaluates the Company's accounting policies and systems of internal controls.

EXECUTIVE COMPENSATION

The following Summary Compensation Table sets forth certain information concerning the annual and long-term compensation for services in all capacities to the Company in fiscal 1996 of those persons who during such fiscal year (i) served as the Company's chief executive officer or (ii) were the five most highly-compensated officers (other than the chief executive officer) (collectively, the "Named Executive Officers"):

SUMMARY COMPENSATION TABLE

ANNUAL COMPENSATION

NAME AND PRINCIPAL POSITION	FISCAL YEAR	SALARY	ADDITIONAL COMPENSATION (1)	OTHER ANNUAL COMPENSATION(2)
Reuben F. Richards, Jr. (3) President and Chief Operating Officer	1996	\$193,750(4)	\$ --	\$ --
Thomas G. Werthan Vice President-Finance and Administration and Chief Financial Officer	1996	120,487	33,000	6,000
Richard A. Stall Vice President-Technology	1996	126,871	44,000	--
William T. Kroll Executive Vice President- Business Development	1996	104,610	105,000	6,000
Paul T. Fabiano Vice President- Engineering	1996	98,303	15,000	0
Norman E. Schumaker Chairman and Chief Executive Officer(3)	1996	180,330	103,050	6,750

NAME AND PRINCIPAL POSITION	LONG TERM COMPENSATION SECURITIES UNDERLYING OPTIONS	ALL OTHER COMPENSATION
Reuben F. Richards, Jr. (3) President and Chief Operating Officer	--	--
Thomas G. Werthan Vice President-Finance and Administration and Chief Financial Officer	--	--
Richard A. Stall Vice President-Technology	--	--
William T. Kroll Executive Vice President- Business Development	--	--
Paul T. Fabiano Vice President- Engineering	--	--
Norman E. Schumaker Chairman and Chief Executive Officer(3)	--	--

(1) Consists of bonuses, commissions and vacation pay.

(2) Consists of insurance premiums and automobile allowances paid by the Company.

(3) Dr. Schumaker served as Chairman and Chief Executive Officer until his

retirement in December 1996, at which time Mr. Richards became Chief Executive Officer.

- (4) Of this amount, \$145,000 was received from Jesup & Lamont. Mr. Richards' salary is now paid by the Company and his base annual compensation is \$195,000. See "Certain Transactions."

No options were issued to any of the Named Executive Officers in fiscal 1996.

The following table sets forth the number of shares covered by exercisable and unexercisable options held by the Named Executive Officers on September 30, 1996 and the aggregate gains that would have been realized had these options been exercised on September 30, 1996, even though these options had not been exercised by the Named Executive Officers.

AGGREGATED OPTION EXERCISES IN FISCAL 1996
AND OPTION VALUES AT FISCAL YEAR END

NAME	NUMBER OF SECURITIES UNDERLYING UNEXERCISED OPTIONS AT FISCAL YEAR END		VALUE OF UNEXERCISED IN-THE-MONEY OPTIONS AT FISCAL YEAR END(1)	
	EXERCISABLE	UNEXERCISABLE	EXERCISABLE	UNEXERCISABLE
Reuben F. Richards, Jr.	100,000	--	\$211,000	--
Thomas G. Werthan	60,000	40,000	126,600	\$84,400
Richard A. Stall	69,000	46,000	145,590	97,060
William T. Kroll	20,000	30,000	42,200	63,300
Paul T. Fabiano	30,000	20,000	63,300	42,200
Norman E. Schumaker	90,000	60,000	189,900	126,600

(1) Options are in-the-money if the market value of the shares covered thereby is greater than the option exercise price. This calculation is based on the fair market value at September 30, 1996 of \$3.00 per share, less the exercise price. If calculated based on the initial public offering price of _____ per share, the value of unexercised in-the-money options at fiscal year end would be _____% greater.

STOCK OPTION PLAN

In 1995, the Company's Board of Directors and its shareholders approved the Company's 1995 Incentive and Non-Statutory Stock Option Plan (the "Plan"). Under the terms of the Plan, as amended by the shareholders of the Company in March 1996, options to acquire 2,200,000 shares of Common Stock may be granted. Options with respect to 1,154,000 shares were outstanding as of September 30, 1996, at exercise prices of \$0.89 to \$3.00 per share. Options granted generally become exercisable over five years. As of September 30, 1996, options with respect to 553,400 shares were exercisable.

The purpose of the Plan is to give officers and executive personnel, and consultants or non-employee directors, of the Company and its subsidiaries an opportunity to acquire Common Stock, to provide an incentive for key employees and other participants to continue to promote the best interests of the Company and enhance its long-term performance, and to provide an incentive for key employees and other participants to join or remain with the Company and its subsidiaries.

Incentive stock options ("ISOs") intended to qualify for special tax treatment in accordance with Section 422 of the Internal Revenue Code of 1986, as amended, ("Code") and non-statutory stock options ("NSOs"), which do not qualify for such special tax treatment, may be granted under the Plan. In addition, stock appreciation rights ("SARs") may be granted under the Plan in conjunction with ISOs.

The Plan is administered by the Board of directors which, to the extent

it shall determine, may delegate its administrative powers (other than its power to amend or terminate the Plan) to a committee (the "Committee") appointed by the Board of Directors and composed of not less than three members of the Board of Directors. The Board of Directors is authorized to determine (i) the persons to whom awards under the Plan shall be granted, (ii) the time or times at which such awards shall be granted, (iii) the form and amount of the awards, and (iv) the limitations, restrictions and conditions applicable to any such award. In general, the Board of Directors also may interpret the Plan, prescribe, amend, and rescind rules and regulations relating to it, and make all other determinations it deems necessary or advisable for the administration of the Plan.

The Board of Directors may from time to time alter, amend or suspend the Plan or any award granted thereunder, or may at any time terminate the Plan, except that it may not, without the approval of the Company's shareholders (except with respect to certain changes in corporate structure), (i) materially increase the total number of shares of Common Stock available for grant under the Plan, (ii) materially modify the class of eligible employees or participants under the Plan, (iii) materially increase benefits to any key employee who is subject to the restrictions of Section 16 of the Securities Exchange Act of 1934, as amended, (the "Exchange Act") or (iv) effect a change relating to ISOs granted thereunder which is inconsistent with Section 422 of the Code and the regulations issued thereunder. No action taken by the Board of Directors in connection with the Plan, either with or without shareholder approval, may materially and adversely affect any outstanding award without the consent of the holder thereof. No award under the Plan may be granted after September 19, 2005.

A stock option granted under the Plan will be exercisable and subject to such terms and conditions as the Board of Directors or the Committee determines and which may be set forth in a written option agreement. In general, the option price for ISOs shall not be less than 100% of the fair market value of the Common Stock on the date of the grant, and such ISO shall not be exercisable within one year of the date of grant. The option price for NSOs shall not be less than 10% of the fair market value of the Common Stock on the date of the grant. For purposes of the Plan, "fair market value" means, in general, the average of the mean between the bid and asked price for the Common Stock at the close of trading for the ten consecutive trading days immediately preceding a given date.

ISOs granted under the Plan may include a SAR, either at the time of the granting of the ISO or while the ISO is outstanding, which shall be exercisable only (i) to the extent that the underlying ISO is exercisable and (ii) for such period of time as determined by the Board of Directors. A SAR is exercisable only when the fair market value of a share of Common Stock exceeds the option price specified for the ISO under which the SAR was granted. A SAR shall entitle the participant to surrender to the Company unexercised the ISO, or portion thereof, to which such SAR is related, and to receive from the Company in exchange therefor that number of shares of Common Stock having an aggregate fair market value equal to the excess of the fair market value on the date of exercise of one share of Common Stock over the option price per share specified in such ISO, multiplied by the number of shares of Common Stock subject to the ISO, or portion thereof, which is so surrendered, or, at the election of the Board, cash in such amount.

ISOs, NSOs, and SARs shall not be exercisable more than ten years after the date of grant. Upon the termination of employment of an employee, or if the contractual relationship between a non-employee participant and the Company terminates, options and SARs granted to such participant shall expire no later than 30 days after such termination although the Board of Directors, in its sole discretion, may permit the exercise of such option

or SAR to occur up to three months following such termination; provided, that if such termination occurs as a result of the participant's death or disability, outstanding options and SARs shall expire no later than one year thereafter; and provided further, that outstanding options and SARs held by a former employee participant shall earlier expire on the date that such participant violates the terms of any covenant not to compete, if any, in effect between the Company and such participant.

Upon notice of an intent to exercise an option, the option price shall be paid in full in cash or by certified check or, in the Board of Directors' discretion, in shares of Common Stock already owned by the participant.

In the sole discretion of the Board of Directors, adjustments will be made in the number of shares of Common Stock available under the Plan, and the number of shares of Common Stock and the option price of shares subject to outstanding grants of options and SARs to reflect increases or decreases in the number of shares of issued Common Stock resulting from a reorganization, recapitalization, stock split-up, stock distribution or combination of shares, or the payment of a stock dividend or other increase or decrease in the number of such shares outstanding effected without receipt of consideration by the Company.

COMPENSATION OF DIRECTORS

All non-employee directors will receive a fee in the amount of \$3,000 per Board meeting attended and \$500 for each committee meeting attended (\$600 for the Chairman of the committee), including in each case reimbursement of reasonable out-of-pocket expenses incurred in connection with such Board or committee. Payment of all fees will be made in Common Stock of the Company at the average of the last reported bid and ask prices as of the close of trading that day on the Nasdaq National Market. No director who is an employee of the Company will receive compensation for services rendered as a director.

LIMITATION OF OFFICERS' AND DIRECTORS' LIABILITY AND INDEMNIFICATION MATTERS

The Company's 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. Prior to the consummation of this Offering, the Company intends to enter into indemnification agreements with each of its directors and executive officers and to obtain a policy of directors' and officers' liability insurance that insures such persons against the costs of defense, settlement or payment of a judgment under certain circumstances. There is no pending litigation or proceeding involving any director, officer, employee or agent of the Company as to which indemnification is being sought. The Company is not aware of any pending or threatened litigation that might result in claims for indemnification by any director or officer.

CERTAIN TRANSACTIONS

In May 1995, approximately 51% of the Company's outstanding shares of Common Stock were purchased by JLMP, an affiliate of Jesup & Lamont Capital Markets, Inc. ("Jesup & Lamont"), a registered broker-dealer. Since then, four of the Company's six directors have been members of JLMP. In May 1995, the Company entered into a consulting agreement with Jesup & Lamont (herein, the "Agreement") pursuant to which Jesup & Lamont agreed to provide financial advisory services for the Company for one year. The

Agreement provided for monthly retainers to be paid to Jesup & Lamont of \$12,500 per month. In October 1995, Reuben F. Richards, Jr. joined the Company's management team as President and Chief Operating Officer. On that date, the retainer to Jesup & Lamont was increased to \$25,000 per month to cover Mr. Richards' salary. At that time, Mr. Richards received no compensation directly from the Company. Jesup & Lamont covered all employee benefits and taxes for Mr. Richards until October 1, 1996 when Mr. Richards became a full-time employee of the Company, and the monthly retainer paid by the Company to Jesup & Lamont was decreased to \$10,000. The Agreement will terminate upon completion of the Offering.

In May 1996, the Company issued \$9,500,000 Subordinated Notes (the "Subordinated Notes") and warrants to purchase 7,916,667 shares of Common Stock at \$1.20 per share (the "Warrants"). The Warrants became exercisable on November 1, 1996. JLMP holds 78.5% of the Subordinated Notes and Warrants. In addition, Thomas G. Werthan, Vice President - Finance and Administration, Chief Financial Officer, Secretary and a director, currently holds \$96,233 of the Subordinated Notes; Dr. Richard Stall, Vice President - Technology and a director currently holds \$122,450 of the Subordinated Notes; William Kroll, Executive Vice President - Business Development, currently holds \$65,828 of the Subordinated Notes; Paul Fabiano, Vice President - Engineering, currently holds \$60,407 of the Subordinated Notes; and David Hess, Controller, currently holds \$4,753 of the Subordinated Notes. Each of the persons named above also holds Warrants received in conjunction with the Subordinated Notes.

In connection with the offering of the Subordinated Notes and Warrants, on May 1, 1996, the Company executed a registration rights agreement (the "Registration Rights Agreement") with the holders of the warrants (the "Warrant Holders"). Upon written notice given by a majority in interest of the Warrant Holders, the Company is obligated to use its best efforts to register all or part of each Warrant Holders' registrable securities, and to keep such registration open for period of not less than nine months. Pursuant to the Registration Rights Agreement, the Company must give notice to, and include if requested within thirty days of such notice, the Warrant Holders in any registration statement filed by the Company under the Securities Act subject to Underwriters' cut-back. See "Description of Capital Stock - Registration Rights."

On September 1, 1996, the Company issued to JLMP \$2,500,000 additional subordinated notes (the "Additional Notes") with terms identical to those of the Subordinated Notes, and warrants to purchase 833,333 shares of Common Stock at \$3.00 per share (the "Additional Warrants"). The Additional Warrants become exercisable on July 1, 1997. In December 1996, the Company issued to JLMP warrants to purchase 3,333,333 shares on the same terms as the Additional Warrants in consideration of its acting to guarantee and provide security for a \$10 million demand note facility from First Union National Bank. The Company expects to use a portion of the proceeds of the Offering to pay down this facility. In connection with the issuance of the warrants in September and December of 1996, the Company has entered into a registration rights agreement with JLMP similar to the Registration Rights Agreement.

Upon completion of the Offering, four of the Company's eight directors will continue to be members of JLMP. In the event that the Underwriters' over-allotment option is not exercised, JLMP will retain an ownership interest in the Company of approximately __%, _____% fully diluted.

From time to time, the Company has lent money to certain of its executive officers and directors. Between October and December, 1995, pursuant to the due authorization of the Company's Board of Directors the Company lent \$85,000 to Thomas G. Werthan, Vice President - Finance and Administration, Chief Financial Officer and a director of the Company. The

promissory note executed by Mr. Werthan provides for forgiveness of the loan via bonuses payable to Mr. Werthan over a period of 25 years.

On December 4, 1996, Norman E. Schumaker, a founder of the Company and a beneficial holder of more than 5% of the Company's Common Stock, retired as Chairman and Chief Executive Officer. The Company has entered into a Consulting Agreement dated as of December 6, 1996, pursuant to which the Company agreed to retain Dr. Schumaker as a consultant for \$250,000 per year. The Company has also agreed to pay Dr. Schumaker \$103,055 in full satisfaction of accrued bonuses and vacation time. Dr. Schumaker has agreed to provide consulting services for eight, eight-hour work days per month (approximately two days a week less vacation time) for a term of two years commencing January 1, 1997 and ending December 31, 1998. The Agreement will automatically renew for one successive two-year term unless either party gives the other notice of his or its intention not to renew the Agreement. The Company has also agreed to forgive \$115,300 of indebtedness of Dr. Schumaker to the Company and to provide him with a monthly automobile allowance of \$750 during the Agreement. The Company has agreed to provide Dr. Schumaker with participation, during the period ending on December 31, 2001, in the Company's plan of medical benefits and to assign to Dr. Schumaker a disability insurance policy and two life insurance policies in the aggregate face amount of \$1,075,000. To the extent that these policies may not be so assigned, the Company has agreed to establish similar policies for Dr. Schumaker. The Company has also agreed to extend the exercise of Dr. Schumaker's vested stock options to March 4, 1997. Dr. Schumaker has agreed not to become involved, directly or indirectly, in any business activity which the Company's Board of Directors determines to be competitive with the Company. Dr. Schumaker has also agreed, among others, to refrain from engaging in any business competing with the Company in the U.S. for an additional period of two years.

PRINCIPAL SHAREHOLDERS

The following table sets forth, as of December 20, 1996 and as adjusted to reflect the sale of _____ shares of the Company's Common Stock in the Offering, certain information with respect to the beneficial ownership of the Company's Common Stock by: (i) each person who is known by the Company to be the beneficial owner of five percent or more of the Company's Common Stock, (ii) each of the Company's directors, (iii) each Named Executive Officer, and (iv) all officers and directors of the Company as a group.

NAME OF BENEFICIAL OWNER	NUMBER OF SHARES BENEFICIALLY OWNED(1)(2)	PERCENTAGE OF SHARES BENEFICIALLY OWNED	
		PRIOR TO OFFERING	AFTER OFFERING
Reuben F. Richards, Jr. (3)	11,828,382	71.7%	
Richard A. Stall (4)	441,557	4.3	
Thomas G. Werthan (5)	352,793	3.4	
Paul T. Fabiano (6)	213,790	2.1	
William T. Kroll (7)	220,282	2.2	
Howard R. Curd (8)	11,728,382	71.5	
Howard F. Curd (8)	11,728,382	71.5	
Robert Louis-Dreyfus (8)	11,728,382	71.5	
Thomas J. Russell (8)	11,728,382	71.5	
JLMP (9)	11,728,382	71.5	
All directors and executive officers as a group (12 persons)(10)	13,074,265	77.0	
Norman E. Schumaker(11)	341,351	13.1	

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- (1) Unless otherwise indicated in these footnotes, the persons named in the table above have sole voting and investment power with respect to all shares beneficially owned.
- (2) Based on 10,181,168 shares outstanding prior to the Offering and _____ shares to be outstanding after the Offering, except that shares underlying warrants and options exercisable within 60 days of December 20, 1996, are deemed to be outstanding for purposes of calculating shares beneficially owned and percentages owned by the holder of such warrants and options.
- (3) Consists of options to purchase 100,000 shares, and shares and warrants held by JLMP to purchase 6,215,087 shares.
- (4) Includes options to purchase 69,000 shares and warrants to purchase 102,042 shares.
- (5) Includes options to purchase 60,000 shares and warrants to purchase 80,194 shares.
- (6) Includes options to purchase 30,000 shares and warrants to purchase 50,339 shares.
- (7) Includes options to purchase 20,000 shares and warrants to purchase 54,857 shares.
- (8) Consists of 5,513,295 shares and warrants to purchase 6,215,087 shares of Common Stock held by JLMP. See Note 9.
- (9) Includes warrants to purchase 6,215,087 shares of Common Stock. JLMP is a limited liability company whose members are Dr. Thomas J. Russell, Howard R. Curd, Howard F. Curd, Reuben F. Richards, Jr. and

Robert Louis-Dreyfus. The members share voting and investment power. JLMP's address and its members' addresses are c/o JLMP, 650 Fifth Avenue, New York, New York 10019.

- (10) Includes options to purchase 282,000 shares and warrants to purchase 6,506,480 shares. See Notes 3 through 8 above.
- (11) Includes options to purchase 90,000 shares and warrants to purchase 472,027 shares. Pursuant to Dr. Schumaker's consulting agreement with the Company dated December 6, 1996, the warrants to purchase 472,027 shares of Common Stock have been placed in escrow until January 6, 1998. See "Certain Transactions." Dr. Schumaker's business address is 394 Elizabeth Avenue, Somerset, New Jersey 08873.

DESCRIPTION OF CAPITAL STOCK

The authorized capital stock of the Company consists of 80,000,000 shares of Common Stock, no par value, of which 10,181,168 shares are outstanding prior to completion of this Offering, which shares are held by a total of 86 shareholders and 20,000,000 shares of Preferred Stock, none of which are outstanding. In addition, there are outstanding warrants to purchase 7,924,667 shares of Common Stock at \$1.20 per share, warrants to purchase 30,949 shares of Common Stock at \$5.00 a share, and warrants to purchase 4,166,666 shares of Common Stock at \$3.00 per share. Moreover, options to purchase 1,154,000 shares have been granted under the Plan ranging from \$0.89 per share to \$3.00 a share.

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. See "Dividends Policy." 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 or outstanding or which the Company may designate and issue in the future.

The Company has applied for listing of the Common Stock on the Nasdaq National Market under the symbol "EMKR."

PREFERRED STOCK

The Company is authorized to issue up to 20,000,000 shares of Preferred Stock that may be issued from time to time in one or more classes series upon authorization of the Board of Directors. The Board of Directors, without further approval of the shareholders, is authorized to designate in any such class or series resolution, such par value and such priorities, power, preferences and relative, participating, optional or other special rights and qualifications, limitations and restrictions as it shall determine.

The ability of the Company to issue Preferred Stock in this manner, while providing flexibility in connection with possible acquisitions and other corporate purposes, could adversely effect the voting power of the voters of the Common Stock and could have the effect of making it more difficult for a person to acquire, or of discouraging a person from seeking to acquire, control of the Company. The Company has no present plans to issue any of the Preferred Stock.

WARRANTS

The Company has outstanding the following warrants: warrants to purchase a total of 30,949 shares of Common Stock at a purchase price of \$5.00 per share, which warrants expire in July 1997; warrants to purchase a total of 7,924,667 shares of Common Stock at a purchase price of \$1.20 per share which expire in May 2001 and warrants to purchase 4,166,666 shares of Common Stock at \$3.00 per share, which warrants expire in September 2001.

The last two classes of warrants may be repurchased by the Company at \$0.25 per share after May 1997 and September 1997, respectively.

NEW JERSEY LAW AND OTHER LIMITATIONS UPON TRANSACTIONS WITH "INTERESTED SHAREHOLDERS"

The New Jersey Business Corporation Act provides that in determining whether a proposal or offer to acquire a corporation is in the best interest of the corporation, the Board of Directors may, in addition to considering the effects of any action on shareholders, consider any of the following: (a) the effects of the proposed action on the corporation's employees, suppliers, creditors and customers, (b) the effects on the community in which the corporation operates and (c) the long-term as well as short-term interests of the corporation and its shareholders, including the possibility that these interests may best be served by the continued independence of the corporation. The statute further provides that if, based on these factors, the Board of Directors determines that any such offer is not in the best interest of the corporation, it may reject the offer. These provisions may make it more difficult for a shareholder to challenge the Board of Directors' rejection of, and may facilitate the Board of Directors' rejection of, an offer to acquire the Company.

The Company is also subject to the Protection Act, which prohibits certain New Jersey corporations such as the Company from engaging in business combinations (including mergers, consolidations, significant asset dispositions and certain stock issuances) with any Interested Shareholder (defined to include, among others, any person that after the Offering becomes a beneficial owner of 10% or more of the affected corporation's voting power) for five years after such person becomes an Interested Shareholder, unless the business combination is approved by the Board of Directors prior to the date the shareholder became an Interested Shareholder. In addition, the Protection Act prohibits any business combination at any time with an Interested Shareholder other than a transaction that (i) is approved by the Board of Directors prior to the date the Interested Shareholder became an Interested Shareholder, or (ii) is approved by the affirmative vote of the holders of two-thirds of the voting stock not beneficially owned by the Interested Shareholder, or (iii) satisfies certain "fair price" and related criteria. 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.

REGISTRATION RIGHTS

Following the closing of the Offering, persons who hold warrants to purchase 12,091,333 shares of Common Stock (herein, the "Warrant Holders") will be entitled to certain rights with respect to the registration of such shares under the Securities Act. Pursuant to terms of registration rights agreements between the Company and the Warrant Holders, the Warrant Holders have the right on written notice given by a majority of the Warrant Holders, to require the Company, on only one occasion, to file a registration statement under the Securities Act in order to register all or any part of their shares of Common Stock. The Company may in certain circumstances defer such registrations, and the underwriters have the right, subject to certain limitations, to limit the number of shares included in such registrations. In the event that the Company proposes to register any of its securities under the Securities Act, either for its own account or the account of other security holders, the Warrant Holders are also entitled to include their shares of Common Stock in such registration, subject to certain marketing and other limitations. Generally, the Company is required to bear the expense of all such registrations.

TRANSFER AGENT AND REGISTRAR

The transfer agent and registrar for the Common Stock is _____.

SHARES ELIGIBLE FOR FUTURE SALE

Upon completion of the Offering, the Company will have outstanding _____ shares of Common Stock assuming no exercise of outstanding options or warrants. Of these shares, _____ shares sold in the Offering (plus any shares issued upon exercise of the Underwriters' over-allotment options) will be freely tradeable without restriction under the Securities Act, unless purchased by "affiliates" of the Company. As defined in Rule 144, an "affiliate" of an issuer is a person that directly or indirectly through one or more intermediaries, controls or is controlled by, or is under common control with such issuer. The remaining 10,181,168 shares of Common Stock outstanding will be "restricted securities" within the meaning of Rule 144 under the Securities Act ("Restricted Shares"). Restricted Shares may not be sold in the absence of registration under the Securities Act unless an exemption from registration is available, including the exemptions contained in Rule 144. Sales of the Restricted Shares in the public market, or the availability of such shares for sale, could adversely affect the market price of the Common Stock.

In general, under Rule 144 as currently in effect, a person (or persons whose shares are aggregated), including an "affiliate," who has paid for shares is entitled, beginning two years from the later of the date of acquisition of the shares from the Company or from an affiliate of the Company, to sell within any three-month period up to that number of shares that does not exceed the greater of (i) one percent of the shares outstanding, as shown by the most recent report or statement published by the Company, or (ii) the average weekly reported volume of trading in the shares during the four calendar weeks preceding the date on which notice of sale is filed with the Commission. A person (or persons whose shares are aggregated) who is not deemed an affiliate of the Company, who has not been an affiliate within three months prior to the sale and who has paid for his shares is entitled, beginning three years from the later of the date of the acquisition from the Company or from an affiliate of the Company, to sell such shares under Rule 144(k) without regard to the volume limitations described above. Affiliates continue to be subject to such volume limitations after the three-year holding period.

On May 1, 1996, the Company issued warrants to purchase 7,924,667 shares of Common Stock of which warrants to purchase _____ shares have been reacquired. The exercise price of the warrants sold in May 1996 is \$1.20 per share. The Company has entered into a Registration Rights Agreement in connection with the issuance of such warrants. If such registration rights are exercised, the shares covered thereunder can be sold in the open market. See "Description of Capital Stock - Warrants." On September 1, 1996, the Company issued warrants to purchase 833,333 shares of Common Stock to JLMP. The exercise price of the warrants sold in September, 1996 is \$3.00 per share. On December 20, 1996 the Company issued warrants to purchase 3,333,333 shares of Common Stock to JLMP. The exercise price of the warrants issued in December is \$3.00 per share. These warrants are first exercisable on July 1, 1997. In connection with the issuance of the warrants in August and September 1996, the Company has entered into a registration rights agreement similar to the Registration Rights Agreement. See "Description of Capital Stock - Warrants."

The Company, executive officers and directors of the Company and certain shareholders of the Company have agreed that they will not sell any shares of Common Stock (other than by operation of law or pursuant to bona fide gifts or other transactions not involving a public distribution to a person or other entity who agrees in writing not to so sell) for a period of 180 days after the date of the final Prospectus (the "lock-up period") without the written consent of Donaldson, Lufkin & Jenrette Securities Corporation. Upon expiration of the lock-up period, or earlier upon the consent of Donaldson, Lufkin & Jenrette Securities Corporation, _____ shares

will become eligible for sale without restriction under Rule 144(k), and an additional ____ shares will become eligible for sale subject to the restrictions of Rule 144.

Any employee or director of or consultant to the Company who has been granted options to purchase shares or who has purchased shares pursuant to a written compensatory plan or written contract prior to the effective date of this Offering pursuant to Rule 701 will be entitled to rely on the resale provisions of Rule 701, which permits non-affiliates to sell their Rule 701 shares without having to comply with the public information, holding-period, volume-limitation or notice provisions of Rule 144 and permits affiliates to sell their Rule 701 shares without having to comply with the Rule 144 holding period restrictions, in each case commencing 90 days after the date of this Prospectus.

Following the Offering, the Company intends to file a registration statement under the Securities Act to register shares of Common Stock issuable upon the exercise of stock options granted under the Plan. Shares issued upon the exercise of stock options after the effective date of such registration statement generally will be available for sale in the open market. Immediately following the completion of the Offering, the Company estimates that there will be _____ shares issuable upon the exercise of options outstanding under the Plan and _____ shares of Common Stock reserved for future grants of options.

The Company is unable to estimate the number of shares that may be sold under Rule 144 or otherwise because this will depend on the market price for the Common Stock of the Company, the individual circumstances of the sellers and other factors. Prior to the Offering, there has been no public market for the Common Stock. Future sales of shares of Common Stock, or the availability for sale of substantial amounts of Common Stock, or the perception that such sales could occur, could adversely affect prevailing market prices for the Common Stock and could impair the Company's future ability to raise capital through an offering of its equity securities.

UNDERWRITING

Subject to the terms and conditions of the Underwriting Agreement by and among the Company and the Underwriters, the Company has agreed to sell to each of the Underwriters named below and each of such Underwriters, for whom Donaldson, Lufkin & Jenrette Securities Corporation and Needham & Company, Inc. are acting as Representatives, have severally agreed to purchase from the Company ____ shares of Common Stock. The number of shares of Common Stock each Underwriter has agreed to purchase is set forth opposite its name below.

Underwriter	Number of Shares
Donaldson, Lufkin & Jenrette Securities Corporation Needham & Company, Inc.	

The Underwriting Agreement provides that the obligation of the several Underwriters to purchase all of the shares of Common Stock is subject to the approval of certain legal matters by counsel and as to certain other conditions. If any of the shares of Common Stock are purchased pursuant to the Underwriting Agreement, all such shares of Common Stock (other than the over-allotment option described below) must be so purchased.

Prior to the Offering, there has been no established trading market for the Common Stock. The initial price to the public for the Common Stock offered hereby has been determined by negotiations between the Company and the Representatives. The factors considered in determining the initial price to the public include the history of and the prospects for the industry in which the Company competes, the ability of the Company's management, the past and present future earnings of the Company, the historical results of operations of the Company, the prospects for future earnings of the Company, the general condition of the securities markets at the time of this Offering and the recent market prices of generally comparable companies.

The Company has agreed to indemnify the Underwriters against certain liabilities, including liabilities under the Securities Act, or to contribute to payments that the Underwriters may be required to make in respect thereof.

The Company has been advised by the Representatives that the Underwriters propose to offer the shares of Common Stock to the public initially at the public offering price set forth on the cover page of this Prospectus, and to certain securities (who may include the Underwriters) dealers at such price less a concession not in excess of \$____ per share. The Underwriters may allow, and such dealers may re-allow, discounts not in excess of \$____ per share to any other Underwriter and certain other dealers.

The Company has granted to the Underwriters an option to purchase up to an aggregate of ____ additional shares of Common Stock at the initial public offering price less the underwriting discounts and commissions solely to cover over-allotments. Such option may be exercised at anytime until 30 days after the date of this Prospectus. To the extent that the Underwriters exercise such options, each of the Underwriters will be committed, subject to certain conditions, to purchase a number of option shares proportionate to such Underwriter's initial commitment as indicated in the preceding table.

The Company, all directors and executive officers of the Company and certain shareholders, to the extent they are not otherwise shareholders,

have agreed that, without the prior written consent of Donaldson, Lufkin & Jenrette Securities Corporation, they will not, directly or indirectly, offer, sell, contract to sell, grant any option to purchase or otherwise dispose of any share of Common Stock or any securities convertible into or exercisable for such Common Stock, or in any other manner transfer all or a portion of the economic consequence associated with ownership of such Common Stock, except to the Underwriters pursuant to the Underwriting Agreement, for a period of 180 days after the date of this Prospectus.

The Representatives have informed the Company that neither they, nor any other member of the National Association of Securities Dealers, Inc. participating in the distribution of this Offering, will make sales of the Common Stock offered hereby to accounts over which they exercise discretionary authority without the prior specific written approval of the customer.

The Company has applied for quotation of the Common Stock on the Nasdaq National Market under the symbol "EMKR."

LEGAL MATTERS

The validity of the Common Stock offered hereby will be passed upon for the Company by White & Case, New York, New York, who may rely upon Dillon, Bitar & Luther, New Jersey counsel for the Company as to matters of New Jersey law, and for the Underwriters by Brobeck, Phleger & Harrison LLP, New York, New York.

EXPERTS

The balance sheets as of September 30, 1996 and 1995, and the statements of operations, shareholders' (deficit) equity and cash flow for the three years in the period ended September 30, 1996, included in this Registration Statement, have been included herein in reliance on the report of Coopers & Lybrand L.L.P., independent accountants, given on the authority of that firm as experts in accounting and auditing.

The statements in this Prospectus set forth under the captions "Risk Factors - Reliance on Trade Secrets; No Assurance of Continued Intellectual Property Protections" and "Business - Intellectual Property" have been reviewed and approved by Lerner David Littenberg Krumholz & Mentlik, Westfield, New Jersey, patent counsel for the Company, as experts on such matters, and are included herein in reliance upon such review and approval.

ADDITIONAL INFORMATION

The Company has filed with the Commission a Registration Statement on Form S-1 under the Securities Act with respect to the Common Stock offered hereby. This Prospectus does not contain all the information set forth in the Registration Statement and the exhibits and schedules thereto. For further information with respect to the Company and such Common Stock, reference is made to the Registration Statement and the exhibits and schedules filed as part thereof. Statements contained in this Prospectus as to the contents of any contract or other document referred to are not necessarily complete, and, in each instance, if such contract or document is filed as an exhibit, reference is made to the copy of such contract or other document filed as an exhibit to the Registration Statement, each statement being qualified in all respects by such reference to such exhibit. The Registration Statement, including exhibits and schedules thereto, may be inspected without charge at the Commission's principal office, the Public Reference Room of the Securities and Exchange

Commission, Room 1024, Judiciary Plaza, 450 Fifth Street, N.W., Washington, D.C. 20549, and at regional offices of the Commission at Seven World Trade Center, 13th Floor, New York, New York 10048 and Northwestern Atrium Center, Suite 1400, 500 West Madison Street, Chicago, Illinois 60661. Copies of all or any part thereof may be obtained from the Commission at its principal office in Washington, D.C. and its public reference facilities in Chicago, Illinois and New York, New York after payment of fees prescribed by the Commission.

The Company intends to furnish to its shareholders annual reports containing consolidated financial statements audited by its independent public accountants, and quarterly reports containing unaudited consolidated financial statements for the first three quarters of each fiscal year.

Upon completion of the Offering, the Company shall be subject to the informational requirements of the Exchange Act, and in accordance therewith will file reports and other information with the Securities and Exchange Commission. Such reports, proxy and information statements and other information filed by the Company can be inspected and copied at the public reference facilities maintained by the Commission in Washington, D.C., and at its regional offices set forth above, and copies of such material can be obtained from the Public Reference Section of the Commission, 450 Fifth Street, N.W., Washington, D.C. 20549 at prescribed rates. The Commission maintains a Web site that contains reports, proxy and information statements and other information regarding the Company and other registrants that file electronically with the Commission. The address of such site is: <http://www.sec.gov>.

EMCORE CORPORATION

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REPORT OF COOPERS & LYBRAND L.L.P., INDEPENDENT ACCOUNTANTS

To the Board of Directors and Shareholders of
EMCORE Corporation:

We have audited the accompanying balance sheets of EMCORE Corporation (the "Company") as of September 30, 1996 and 1995, the related statements of operations, shareholders' equity (deficit) and cash flows for each of the three years in the period ended September 30, 1996. We have also audited the financial statement schedule listed in Item 16(b). These financial statements and the financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and the financial statement schedule based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of EMCORE Corporation as of September 30, 1996 and 1995, and the consolidated results of its operations and its cash flows for each of the three years in the period ended September 30, 1996, in conformity with generally accepted accounting principles. In addition, in our opinion, the financial statement schedule taken as a whole, presents fairly, in all material respects, the information required to be included therein.

COOPERS & LYBRAND L.L.P.

Parsippany, New Jersey
November 1, 1996, except
for Notes 13 and 15 as to which
the date is December 6, 1996

EMCORE CORPORATION
BALANCE SHEETS

	AS OF SEPTEMBER 30,	
ASSETS	1995	1996
Current assets:		
Cash and cash equivalents	\$ 2,322,896	\$ 1,367,386
Accounts receivable, net of allowance for doubtful accounts of approximately \$164,000 and \$310,000 in 1995 and 1996, respectively	2,129,633	3,025,171
Inventories, net	3,339,474	7,645,040
Costs in excess of billings on uncompleted contracts . .	16,440	19,322
Prepaid expenses and other current assets	33,151	59,935
Total current assets	7,841,594	12,116,854
Property and equipment, net	2,120,784	7,796,832
Other assets, net	180,365	520,735
Total assets	\$ 10,142,743	\$ 20,434,421

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

EMCORE CORPORATION
BALANCE SHEETS

LIABILITIES AND SHAREHOLDERS' EQUITY

AS OF SEPTEMBER 30,

CURRENT LIABILITIES:	1995	1996
Accounts payable	\$ 1,934,360	\$ 5,660,438
Accrued expenses	1,208,747	1,986,646
Advance billings	2,183,795	3,306,462
Billings in excess of costs on uncompleted contracts . . .	306,359	-
Unearned service revenue	-	12,315
Total current liabilities	5,633,261	10,965,861
Long-term debt:		
Subordinated notes, net	-	8,365,392
Convertible notes payable	3,000,000	-
Commitments and contingencies		
Shareholders' equity:		
Common stock, no par value; authorized shares - 80,000,000; issued and outstanding shares 10,181,168 at September 30, 1995 and 1996	16,637,566	19,407,566
Accumulated deficit	(14,981,977) 1,655,589	(18,158,291) 1,249,275
Notes receivable from stock sales	(146,107)	(146,107)
Total shareholders' equity	1,509,482	1,103,168
Total liabilities and shareholders' equity	\$ 10,142,743	\$ 20,434,421

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

EMCORE CORPORATION
STATEMENTS OF OPERATIONS

YEARS ENDED SEPTEMBER 30,
1994 1995 1996

Revenues	\$ 9,038,201	\$ 18,136,667	\$ 27,778,885
Cost of sales	5,212,922	9,926,971	18,606,420
Gross profit	3,825,279	8,209,696	9,172,465
Operating expenses:			
Selling, general and administrative	2,697,172	4,451,534	6,524,482
Research and development	1,064,149	1,851,798	5,401,413
Amortization of deferred gain on sale/leaseback transactions . .	(51,846)	-	-
Operating income (loss)	115,804	1,906,364	(2,753,430)
Other expense:			
Interest expense, net of interest income of \$12,468, \$84,101 and \$71,460 for 1994, 1995 and 1996, respectively . . .	285,613	255,384	422,884
Other	-	10,000	-
(Loss) income before income taxes .	(169,809)	1,640,980	(3,176,314)
Provision for income taxes	-	125,000	-
Net (loss) income	\$ (169,809)	\$ 1,515,980	\$ (3,176,314)

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

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

EMCORE CORPORATION
STATEMENTS OF SHAREHOLDERS' (DEFICIT) EQUITY
As of September 30, 1994, 1995 and 1996

	Common Stock Shares	Amount	Class I Preferred Stock Shares	Amount	Discount
Balance at September 30, 1993	198,439	\$ 301,924	693,900	\$1,235,142	\$ (934,454)
Current year accretion to redemption value of Class III redeemable, convertible preferred stock, redeemable at \$2.50 per share					
Notes receivable due from shareholders in connection with issuance of 146,107 shares of Class IV redeemable, convertible preferred stock					
Net loss					
Balance at September 30, 1994	198,439	301,924	693,900	1,235,142	(934,454)
Warrants exercised and conversions	103,993	92,554	528,450		
Repurchase of Class I Preferred Stock					
November 1994 preferred stock conversions into common stock and retirement of preferred treasury shares	508,543	15,350,689	(1,222,350)	(1,235,142)	934,454
August 1995 conversion of Class A preferred stock into common stock	9,370,193	892,399			
Net income					
Balance at September 30, 1995	10,181,168	16,637,566			
Issuance of common stock purchase warrants		2,770,000			
Net loss					
Balance at September 30, 1996	10,181,168	\$19,407,566		\$	\$

	Accumulated Deficit	Treasury Stock	Shareholders' Notes Receivable	Total Shareholders' Equity (Deficit)
Balance at September 30, 1993	\$(15,087,291)	\$ (28,104)	-	\$(14,512,783)
Current year accretion to redemption value of Class III redeemable, convertible preferred stock, redeemable at \$2.50 per share	(1,240,857)			(1,240,857)
Notes receivable due from shareholders in connection with issuance of 146,107 shares of Class IV redeemable, convertible preferred stock			\$ (146,107)	(146,107)
Net loss	(169,809)			(169,809)
Balance at September 30, 1994	(16,497,957)	(28,104)	(146,107)	(16,069,556)
Warrants exercised and conversions				92,554
Repurchase of Class I Preferred Stock		(12,645)		(12,645)
November 1994 preferred stock conversions into common stock and retirement of preferred treasury shares		40,749		15,090,750
August 1995 conversion of Class A preferred stock into common stock				892,399
Net income	1,515,980			1,515,980
Balance at September 30, 1995	(14,981,977)	-	(146,107)	1,509,482
Issuance of common stock purchase warrants				2,770,000
Net loss	(3,176,314)			(3,176,314)
Balance at September 30, 1996	\$(18,158,291)	\$	\$(146,107)	\$1,103,168
The accompanying notes are an integral part of these financial statements.				

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

EMCORE CORPORATION
STATEMENTS OF CASH FLOWS

	YEARS ENDED SEPTEMBER 30,		
	1994	1995	1996
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net (loss) income	\$ (169,809)	\$ 1,515,980	\$ (3,176,314)
Adjustments to reconcile net (loss) income to net cash provided by (used for) operating activities:			
Depreciation and amortization . .	599,114	887,132	1,871,016
Provision for doubtful accounts .	22,101	95,430	146,418
Provision for inventory valuation	24,849	15,379	105,000
Detachable warrant accretion . . .	-	-	125,792
Amortization of deferred gain on sale/leaseback transactions . . .	(51,846)	-	-
CHANGE IN ASSETS AND LIABILITIES:			
Accounts receivable	(1,041,443)	(353,895)	(1,041,956)
Inventories	(256,427)	(2,209,540)	(4,410,566)
Costs in excess of billings on uncompleted contracts	25,876	17,282	(2,882)
Prepaid expenses and other current assets	(2,319)	(18,858)	(26,784)
Other assets	(74,333)	(8,988)	(468,565)
Accounts payable	408,039	1,100,338	3,398,078
Accrued expenses	82,617	538,719	777,899
Advanced billings	1,006,984	1,176,831	1,122,667
Billings in excess of costs on uncompleted contracts	-	306,359	(306,359)
Unearned service revenue	-	-	12,315
Total adjustments	743,212	1,546,189	1,302,073
Net cash and cash equivalents provided by (used for) operating activities . .	573,403	3,062,169	(1,874,241)
CASH FLOWS FROM INVESTING ACTIVITIES:			
Purchase of property and equipment . .	(1,153,722)	(1,316,968)	(7,090,869)
Net cash and cash equivalents used for investing activities	(1,153,722)	(1,316,968)	(7,090,869)

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

CASH FLOWS FROM FINANCING ACTIVITIES:

Proceeds from subordinated note issuance	-	-	11,009,600
Proceeds from the exercise of stock purchase warrants	-	102,554	-
Repurchase of Class I preferred stock	-	(12,645)	-
Proceeds from the issuance of Class IV Preferred Stock	61,583	-	-
Payments on long-term debt and capital lease obligations	(94,287)	-	(3,000,000)
Proceeds from 7.5% convertible notes payable	1,000,000	-	-
Net cash and cash equivalents provided by financing activities	967,296	89,909	8,009,600
Net increase (decrease) in cash and cash equivalents	386,977	1,835,110	(955,510)
Cash and cash equivalents at beginning of period	100,809	487,786	2,322,896
Cash and cash equivalents at end of period	\$ 487,786	\$ 2,322,896	\$ 1,367,386

SUPPLEMENTAL DISCLOSURES OF CASH FLOW INFORMATION:

Cash paid for interest	\$ 170,174	\$ 285,413	\$ 276,012
Cash paid for income taxes	\$ -	-	55,000
Non-cash expenditures for purchases of property and equipment included in accounts payable	\$ -	-	\$ 328,000
Reference is made to Note 11 - Preferred Stock - for disclosure relating to certain non-cash equity transactions			

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

EMCORE CORPORATION
NOTES TO FINANCIAL STATEMENTS

NOTE 1. DESCRIPTION OF BUSINESS

EMCORE is a designer and developer of compound semiconductor materials and process technology and a manufacturer of production systems used to fabricate compound semiconductor wafers. Compound semiconductors are used in a broad range of applications in wireless communications, telecommunications, computers, and consumer and automotive electronics. The Company has recently capitalized on its technology base by expanding into the design and production of compound semiconductor wafers and package-ready devices. The Company offers its customers a complete, vertically-integrated solution for the design, development and production of compound semiconductor wafers and devices.

For the year ended September 30, 1996, the Company generated an operating loss and a negative cash flow from operations. The Company's operations are subject to a number of risks, including but not limited to a history of losses, future capital needs, dependence on key personnel, competition and risk of technological obsolescence, governmental regulations and approvals and limited compound semiconductor manufacturing and marketing capabilities. The Company's operations for the year ended September 30, 1996, were primarily funded through two subordinated debt issuances completed in May and September of 1996, amounting to \$8.5 million and \$2.5 million, respectively, of cash proceeds (see Note 8). A portion of the proceeds was used to extinguish \$3 million of debt due under a convertible debt agreement. The Company's operating and financing plans include, among other things, (i) attempting to improve operating cash flow through increased sales of compound semiconductor systems, wafers and package-ready devices, (ii) managing its cost structure to its anticipated level of revenues and (iii) seeking equity and debt financing sufficient to meet its obligations on a long-term basis in order to fund its business expansion plans. On October 25, 1996, the Company entered into a \$10.0 million demand note facility to finance its operating and capital requirements.

NOTE 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Cash and Cash Equivalents. The Company considers all highly liquid short-term investments purchased with an original maturity of three months or less to be cash equivalents. The Company had approximately \$1,205,000 and \$106,000 in cash equivalents at September 30, 1995 and 1996, respectively.

Inventories. Inventories are stated at the lower of FIFO (first-in, first-out) cost or market. Reserves are established for slow moving or obsolete inventory based upon historical and anticipated usage.

Property and Equipment. Property and equipment are stated at cost. Significant renewals and betterments are capitalized. Maintenance and repairs which do not extend the useful lives of the respective assets are expensed.

Depreciation is recorded using the straight line method over the estimated useful lives of the applicable assets, which range from three to five years. Leasehold improvements are amortized using the straight-line method over the term of the related leases or the estimated useful lives of the improvements, whichever is less.

When assets are retired or otherwise disposed of, the assets and related accumulated depreciation accounts are adjusted accordingly, and any resulting gain or loss is recorded in current operations.

In the event that facts and circumstance indicate that the value of assets may be impaired an evaluation of recoverability is performed. If an evaluation is required, the estimated future undiscounted cash flows associated with the asset would be compared to the assets carrying amount to determine if an adjustment to the carrying amount is required.

NOTE 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Deferred Costs. Included in other assets are deferred costs related to obtaining product patents and long-term debt refinancing (See Note 8). Such costs are being amortized over a three to five year period, respectively. Amortization expense amounted to approximately \$56,000, \$58,000 and \$128,000 for the years ended September 30, 1994, 1995 and 1996, respectively.

Income Taxes. During fiscal 1994, the Company adopted Statement of Financial Accounting Standards ("SFAS") No. 109, "Accounting for Income Taxes." SFAS No. 109 required a change from the deferred method to the asset and liability method of accounting for income taxes. Under the asset and liability method, deferred income taxes are recognized for the tax consequences of "temporary differences" by applying enacted statutory tax rates applicable to future years to differences between the financial statement carrying amounts and the tax bases of existing assets and liabilities. Under SFAS No. 109, the effect on deferred taxes of a change in tax rates is recognized in income in the period that includes the enactment date. Under the deferred method, deferred taxes were recognized at the tax rate applicable to the year in which the difference between financial statement carrying amounts and the corresponding tax bases arose.

Revenue and Cost Recognition.

Systems, Components and Service Revenues

Revenue from systems sales is recorded by shipment, when title passes to the customer. Subsequent to product shipment, the Company incurs certain installation costs at the customer's facility and warranty costs which are estimated and accrued at the time the sale is recorded.

Component sales and service revenues are recognized when goods are shipped or services are rendered to the customer. Service revenue under contracts with specified service terms is recognized as earned over the service period in accordance with the terms of the applicable contract. Costs in connection with the procurement of the contracts are charged to expense as incurred.

Contract Revenue

The Company's research contracts require the development or evaluation of new material applications and have a duration of six to thirty-six months. For research contracts with the U.S. Government and commercial enterprises, with durations greater than six months, the Company recognizes revenue to the extent of costs incurred plus the estimated gross profit as stipulated in such contracts, based upon contract performance.

Contracts with a duration of six months or less are accounted for on the completed contract method. A contract is considered complete when all costs, except insignificant items, have been incurred, and the research reporting requirements to the customer have been met.

Contract costs include all direct material and labor costs and those indirect costs related to contract performance, such as indirect labor, supplies, tools, repairs and depreciation costs, as well as coverage of certain general and administrative costs. Provisions for estimated losses on uncompleted contracts are made in the period in which such losses are determined. Revenues from contracts amounted to approximately \$1,295,000, \$1,321,000, \$3,295,000 for the years ended September 30, 1994, 1995 and 1996, respectively.

Research and Development. Research and development costs related to

the development of both present and future products and Company sponsored materials application research are charged to expense as incurred.

Fair Value of Financial Instruments. The carrying values of the Company's financial instruments recorded on the accompanying balance sheets approximate fair value.

Use of Estimates. The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements. Estimates also affect the reported amounts of revenues and expenses during the reporting period. Actual results may differ from those estimates.

The Company's most significant estimates relate to accounts receivable and inventory valuation reserves, warranty and installation reserves, estimates of cost and related gross profits on certain research contracts and the valuation of long-lived assets.

Reclassifications. Prior period balances have been reclassified to conform with the current period financial statement presentations.

New Accounting Standards. In March 1995, the Financial Accounting Standards Board ("FASB") issued SFAS No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to be Disposed Of" ("SFAS No. 121"). This pronouncement establishes accounting standards for when impairment losses relating to long-lived assets, identifiable intangibles and goodwill related to those assets should be recognized and how the losses should be measured. The Company plans to implement SFAS No. 121 in fiscal 1997. The adoption of SFAS No. 121 is not expected to have an impact on the Company's financial position or results of operations since Emcore's current policy is to monitor assets for impairment and record any necessary write-downs.

In October 1995, the FASB issued SFAS No. 123 "Accounting for Stock Based Compensation" ("SFAS No. 123"). The provision of SFAS No. 123 sets forth the method of accounting for stock based compensation based on the fair value of stock options and similar instruments, but does not require the adoption of this preferred method. SFAS No. 123 also requires the disclosure of additional information about stock compensation plans, even if the preferred method of accounting is not adopted. The Company plans to implement SFAS No. 123 in fiscal 1997. The Company does not intend to change its method of accounting for stock based compensation to the preferred method under SFAS No. 123, but instead will continue to apply the provisions of No. 25 "Accounting for Stock Issued to Employees." However, the Company will disclose the pro forma effect of SFAS No. 123 on net income and earnings per share.

NOTE 3. CONCENTRATION OF CREDIT RISK

The Company sells its compound semiconductor systems domestically and internationally. The Company also sells wafers and package-ready devices in the U.S. The Company's international sales are generally made under letter of credit arrangements.

For the years ended September 30, 1994, 1995 and 1996, the Company sold 59%, 36%, and 43% of its products to foreign customers, respectively.

The Company's sales to major customers were as follows:

	1994	AS OF SEPTEMBER 30, 1995	1996
Customer A	\$ -	\$ 5,238,620	\$6,558,930
Customer B	1,870,871	887,390	2,075,722
Customer C	-	1,036,000	1,530,000
Customer D	749,000	2,092,986	-
Total	\$ 2,619,871	\$ 9,254,996	\$ 10,164,652

The Company's performs material application research under contract with the U.S. Government or as a subcontractor of U.S. Government funded projects.

The Company performs ongoing credit evaluations of its customers' financial condition and collateral is not requested. The Company maintains reserves for potential credit losses based upon the credit risk of specific customers, historical trends and other information. To reduce credit risk, and to fund manufacturing costs, the Company requires periodic prepayments on equipment orders. Credit losses have generally not exceeded the Company's expectations.

The Company has temporary cash investments with financial institutions in excess of the \$100,000 insured limit of the Federal Deposit Insurance Corporation.

NOTE 4. INVENTORIES

The components of inventories consisted of the following:

	AS OF SEPTEMBER 30,	
	1995	1996
Raw materials	\$ 2,330,991	\$ 4,964,917
Work-in-progress	646,696	2,680,123
Finished goods	361,787	-
	\$ 3,339,474	\$ 7,645,040

NOTE 5. PROPERTY AND EQUIPMENT

Major classes of property and equipment are summarized below:

	AS OF SEPTEMBER 30,	
	1995	1996
Equipment	\$ 6,617,014	\$ 11,748,577
Furniture and fixtures	904,326	1,650,488
Leasehold improvements	605,890	2,147,034
	8,127,230	15,546,099
Less: accumulated depreciation and amortization	(6,006,446)	(7,749,267)
	\$ 2,120,784	\$ 7,796,832

The provisions for depreciation and amortization amounted to approximately \$543,000, \$829,000 and \$1,743,000 for the years ended September 30, 1994, 1995 and 1996, respectively.

Included in equipment above are ten systems and eight systems with a combined net book value of approximately \$1,220,000 and \$2,124,000 at September 30, 1995 and 1996, respectively. Such systems are utilized for systems demonstration purposes, in-house materials applications research, contract research funded by third parties, system sales support and the production of compound semiconductor wafers and package-ready devices for sale to third parties.

NOTE 6. COSTS AND BILLINGS ON UNCOMPLETED CONTRACTS

Costs incurred and billings on uncompleted contracts are summarized below:

AS OF SEPTEMBER 30,

		1995		1996
Costs incurred on uncompleted contracts	\$	178,081	\$	19,322
Billings applicable to uncompleted contracts		(468,000)		-
	\$	(289,919)	\$	19,322

The uncompleted contract costs and billings are classified in the accompanying balance sheets under the following captions:

Costs in excess of billings on uncompleted contracts	\$	16,440	\$	19,322
Billings in excess of costs on uncompleted contracts		(306,359)		-
	\$	(289,919)	\$	19,322

NOTE 7. ACCRUED EXPENSES

Accrued expenses consisted of the following:

	AS OF SEPTEMBER 30,	
	1995	1996
Accrued payroll, vacation and other employee expenses	\$ 476,505	\$ 990,538
Installation and warranty costs	389,676	562,231
Interest	177,048	269,315
Other	165,518	164,562
	\$ 1,208,747	\$ 1,986,646

NOTE 8. LONG-TERM DEBT

On May 1, 1996, the Company issued subordinated notes (the "Subordinated Notes") in the amount of \$9,500,000 to its existing shareholders, \$1,000,000 of which were exchanged for notes receivable from officers and certain employees with identical payment and interest provisions. The officers and employees' notes receivable have been reflected as a contra liability, reducing the Company's Subordinated Notes balance. The Company received cash proceeds of \$8,500,000 in connection with this Subordinated Notes issuance. The Subordinated Notes are scheduled to mature on May 1, 2001, have a stated interest rate of 6.0% which is payable semi-annually on May 1 and November 1. In addition, the noteholders were issued 7,916,667 common stock purchase warrants with an exercise price of \$1.20 per share which expire on May 1, 2001. The warrants are exercisable after November 1, 1996 and are callable at the Company's option, after May 1, 1997, at \$0.25 per warrant.

On September 1, 1996, the Company issued a subordinated note in the amount of \$2,500,000 to the Company's majority shareholder with terms identical to the Subordinated Notes issued on May 1, 1996. In addition, under the terms of this offering, 833,333 common stock purchase warrants were issued to purchase common stock at \$3.00 per share which expire September 1, 2001. These warrants are exercisable after March 1, 1997 and are callable at the Company's option after September 1, 1997 at \$0.25 per warrant.

The Company assigned a value of \$1,440,000 to the May 1, 1996 detachable warrants based upon estimated interest rates which could be obtained from third party creditors. The Company assigned a valuation of \$1,330,000 to the detachable warrants issued on September 1, 1996 based upon estimated rates of return in consideration of the Company's contemplated equity offering. The carrying value of the Subordinated Notes will be subject to periodic accretions, using the interest method, in order for the carrying amount to equal the Company's obligation upon maturity. As a result, the May 1, 1996 and September 1, 1996 Subordinated Notes have an effective interest rate of approximately 9.3% and 15.0%, respectively.

A portion of the proceeds from the May 1, 1996 Subordinated Notes issuance was used to extinguish \$3,000,000 of debt due to Hakuto & Co. Ltd. ("Hakuto"), the Company's Asian distributor under a convertible debt agreement (the "Agreement") scheduled to expire on June 2, 1998. Under the June 2, 1993 Agreement, the Company was permitted to borrow up to

\$3,000,000 at an interest rate of 7.5%. As of September 30, 1995, the entire \$3,000,000 was outstanding.

In connection with the Agreement, the Company issued 10,000 warrants to Hakuto to purchase shares of the Company's Class IV Preferred Stock at \$1.00 per share (See Note 11). The warrants were exercised on January 1, 1995.

Under the Agreement, the \$3,000,000 of debt was convertible into preferred stock subject to the Company authorizing a new Class V series of preferred stock prior to March 31, 1998. The debt was convertible in \$1,000,000 increments at a conversion rate of \$2.50 per share of Class V Preferred Stock. In addition, Hakuto had certain rights of first refusal, with respect to the purchase of the Company through June 2, 1998, and the distribution of the Company's products in Asia, excluding Taiwan and Korea.

The Agreement was collateralized by all the Company's assets. The New Jersey Economic Development Authority ("NJEDA") had guaranteed 90% of the Company's obligation pertaining to \$1,000,000 of its outstanding debt. Under the terms of the Agreement, the Company was required to repay \$1,000,000 of the debt upon expiration of the NJEDA guarantee. The NJEDA guarantee expired on August 31, 1995, however, the lender permanently waived the \$1,000,000 repayment requirement through the expiration date of the Agreement.

The Agreement contained certain covenants which included an employment agreement with the Company's Chief Executive Officer for a period of five years, and a personal guarantee from the Chief Executive Officer in the amount of \$100,000.

The Company had a \$250,000 revolving loan agreement (the "Revolving Loan") with the NJEDA which expired on February 14, 1996. The Revolving Loan provided for the advancement of funds upon the Company's receipt of an export sales contract and required repayment upon receipt of payment from such customer or one hundred twenty days from the date of the advance. The loan bore interest at a rate of the Federal Discount Rate (5.25% at September 30, 1995). The Revolving Loan was collateralized by applicable outstanding letters of credit. As of September 30, 1995, there were no amounts outstanding under this facility.

The Revolving Loan Agreement contained restrictive covenants which included among other restrictions, the Company could not issue any additional stock, declare dividends, purchase its own stock, transfer excess funds to an affiliated entity, borrow any funds or grant a collateral position without the expressed written consent of the NJEDA. The Company did not obtain the required written consent of the NJEDA for the fiscal year 1995 capital restructuring activities as described in Note 11.

On October 25, 1996, the Company entered into a \$10.0 million demand note facility (the "Facility"). The Facility bears interest at the rate of LIBOR plus 75 basis points and is due and payable on demand. The Facility has been guaranteed by the Company's majority shareholder who has provided collateral for the loan. In return for guaranteeing the facility, the Company granted the majority shareholder 3,333,333 common stock purchase warrants at \$3.00 per share which expire September 1, 2001. These warrants are exercisable after July 1, 1997 and are callable at the Company's option after December 1, 1997 at \$0.25 per warrant.

NOTE 9. COMMITMENTS AND CONTINGENCIES

On November 16, 1992, the Company entered into a three-year lease agreement with a bank for 34,000 square feet of space in the building the

Company presently occupies. On March 31, 1995, the agreement was renewed for 5 years for 49,000 square feet.

The Company leases certain equipment under non-cancelable operating leases.

Facility and equipment rent expense amounted to approximately \$298,000, \$292,000 and \$350,000 for the years ended September 30, 1994, 1995 and 1996, respectively.

Future minimum rental payments under the Company's non-cancelable operating leases with an initial or remaining term of one year or more as of September 30, 1996 are as follows:

PERIOD ENDING SEPTEMBER 30,	OPERATING
1997	\$ 322,749
1998	301,120
1999	296,794
2000	126,250
Total minimum lease payments	\$ 1,046,913

In November 1996, the Company signed an agreement to occupy the remaining 26,000 square feet that they previously had not occupied, which will increase the total future minimum lease payments over the remaining 4 years of the lease by approximately \$ 863,000.

The Company is from time to time involved in litigation incidental to the conduct of its business. Management and its counsel believe that such pending litigation will not have a material adverse effect on the Company's results of operations, cash flows or financial condition.

NOTE 10. INCOME TAXES

As described in Note 2, effective October 1, 1993, the Company adopted SFAS No. 109. The adoption of SFAS No. 109 did not have an impact on the financial position of the Company, as a full valuation allowance was provided against the net deferred tax asset position, as of the date of adoption, due to the uncertainty of the ultimate realization of such assets.

Income tax expense consists of the following:

Current:	YEAR ENDED SEPTEMBER 30,		
	1994	1995	1996
Federal	\$ -	\$ 70,000	\$ -
State	-	55,000	-
Deferred:			
Federal	-	-	-
State	-	-	-
Total	\$ -	\$ 125,000	\$ -

The principal differences between the U.S. statutory and effective income tax rates were as follows:

	YEAR ENDED SEPTEMBER 30,		
	1994	1995	1996
U.S. statutory income tax (benefit) expense rate	(34.0)%	34.0%	(34.0)%
Net operating loss carryforward		(45.4)	
Net operating loss not utilized	34.0		27.7
Expenses not yet deductible for tax purposes		11.4	6.3
AMT and state taxes		7.6	
Effective tax rate	0.0%	7.6%	0.0%

NOTE 10. INCOME TAXES (CONTINUED)

The components of the Company's net deferred taxes were as follows:

SEPTEMBER 30,
1995

1996

Deferred tax assets:

Federal net operating loss carryforwards	\$ 2,489,641	\$ 3,283,003
Research credit carryforwards . . .	237,177	264,966
Inventory reserves	77,313	142,593
Accounts receivable reserves	55,601	105,383
Interest payable		84,022
Accrued installation reserve	68,000	109,684
Accrued warranty reserve	57,721	81,475
State net operating loss carryforwards	576,095	801,555
Other	85,597	68,858
Valuation reserve - federal	(3,057,926)	(4,048,583)
Valuation reserve - state	(576,095)	(801,555)
Total deferred tax assets	13,124	91,401

Deferred tax liabilities:

Fixed assets and intangibles	(13,124)	(91,401)
Total deferred tax liabilities	(13,124)	(91,401)
Net deferred taxes	\$ -	\$ -

The Company has established a valuation reserve as it has not determined that it is more likely than not that the deferred tax asset is realizable, based upon the Company's past earnings history.

As of September 30, 1996, the Company has net operating loss carryforwards for regular tax purposes of approximately \$9,600,000 which expire in the years 2003 through 2011. The Company believes that the consummation of certain equity transactions and a significant change in the ownership, during fiscal year 1995, has constituted a change in control under Section 382 of the Internal Revenue Code ("IRC"). Due to the change in control, the Company's ability to use its net operating loss carryovers and research credit carryovers to offset future income and income taxes, respectively, are subject to substantial annual limitations under IRC Section 382 and 383.

NOTE 11. PREFERRED STOCK

Preferred Stock Restructuring Activities. In October 1994, the Company offered the holders 1,399,333 of Class III preferred stock purchase warrants the right to convert such warrants into 528,450 shares (representing a reduced ratio of 1 to .38) of the Company's Class I preferred stock. All the warrant holders exercised such rights. This transaction increased the outstanding number of Class I preferred stock to 1,222,350 shares.

In November 1994, in an effort to simplify its capital structure, the Company's Board of Directors and shareholders approved a capital restructuring plan (the "Plan"). Pursuant to this Plan, a newly formed and wholly-owned subsidiary of the Company was formed and merged with and into the Company. Under the Plan, shares of the Company's Class IV preferred stock were exchanged for shares of Class A senior convertible preferred stock at an exchange rate of 1.5 to 1.0. The shares of all other classes of preferred stock were exchanged into common stock at the following ratios; Class I preferred stock at 100 to 4 and Class III preferred stock at 100 to 10. In addition, the Company effected a reverse stock split of one for one hundred and retired its preferred treasury stock. Prior to this exchange, the Class I preferred stockholders were given the right to have their stock repurchased for \$.09 per share. The holders of approximately 140,000 shares exercised this right, resulting in a stock repurchase amounting to \$12,645.

In August 1995, the outstanding shares of Class A senior convertible preferred stock were exchanged for shares of common stock on the basis of seven shares of common stock for each Class A security. This transaction reduced the classes of stock outstanding to common stock.

As part of the August 1995 restructuring activities, holders of warrants to purchase common stock were allowed to exercise their warrants at \$0.89 per share, resulting in the exercise of 103,999 warrants for aggregate cash consideration of \$92,554.

In January 1995, the holder of 15,000 warrants to purchase Class A senior convertible preferred stock exercised their rights by paying \$0.67 per share, or \$10,000. In August 1995, these 15,000 shares of Class A preferred stock were converted into 105,000 shares of common stock.

The basis of all exchanges were approved by the Company's Board of Directors and its shareholders and reflected the priorities of the Class A securities upon liquidation and other factors.

The following table summarizes the Company's preferred stock activities from October 1, 1993 through September 30, 1995.

	Class I Preferred Stock			Class III Preferred Stock	
	Shares	Amount	Discount	Shares	Amount
Balance at September 30, 1993	696,900	\$ 1,235,142	\$ (934,454)	6,617,227	\$13,849,893
Current year accretion to redemption value of Class III redeemable, convertible preferred stock, redeemable at \$2.50 per share					1,240,857
Issuance of 207,690 shares of Class IV redeemable, convertible preferred stock, redeemable at \$2.50 per share					
Balance at September 30, 1994	696,900	1,235,142	(934,454)	6,617,227	15,090,750
Warrants exercised and conversions	528,450				
November 1994 preferred stock conversions into common stock and Class A preferred stock	(1,222,350)	(1,235,142)	934,454	(6,617,227)	(15,090,750)
August 1995 conversion of Class A preferred stock into common stock					
Balance at September 30, 1995	-	\$ -	\$ -	-	\$ -

	Class IV Preferred Stock		Class A Preferred Stock	
	Shares	Amount	Shares	Amount
Balance at September 30, 1993	674,709	\$ 674,709		
Current year accretion to redemption value of Class III redeemable, convertible preferred stock, redeemable at \$2.50 per share				
Issuance of 207,690 shares of Class IV redeemable, convertible preferred stock, redeemable at \$2.50 per share	207,690	207,690		
Balance at September 30, 1994	882,399	882,399		
Warrants exercised and conversions			15,000	15,000
November 1994 preferred stock conversions into common stock and Class A preferred stock	(882,399)	(882,399)	1,323,599	882,399
August 1995 conversion of Class A preferred stock into common stock			(1,338,599)	(882,399)
Balance at September 30, 1995	-	\$ -	-	\$ -

Class I Preferred Stock. In connection with the restructuring described above, as of September 30, 1995 and 1996, there were no issued or outstanding shares of Class I preferred stock.

Each share of 9% cumulative convertible \$1.78 par value preferred stock was entitled to one vote, a cumulative of 9% annual dividend and certain preference rights in the event of liquidation. Each preferred share was convertible into 1.22 shares of the common stock and could be redeemed for 1.22 shares of common stock upon an initial public offering of the Company's common stock.

Class III Preferred Stock. In connection with the restructuring described above, as of September 30, 1995 and 1996, there were no issued or outstanding shares of Class III preferred stock.

Each share of the no par, Class III preferred stock was entitled to one vote, an annual dividend, when and as declared by the Company's Board of Directors, of \$0.225 per share and had a liquidation preference senior to the Company's Class I preferred stock. This liquidation preference entitled each shareholder of the Class III preferred stock to \$2.50 per share, \$16,543,068, and an amount equal to such amount received by the Company's common stock shareholders upon liquidation. The Class III preferred stock had a mandatory redemption feature which required one-third of the outstanding stock to be redeemed on December 31, 1994, one-third on December 31, 1995 and one-third on December 31, 1996, for \$2.50 per share and one share of the Company's common stock. Further, in the event the Company was acquired, the Class III preferred stock was required to be redeemed at \$2.50 per share plus one share of the acquiring Company's common stock. The Class III preferred stock mandatory redemption amount of \$16,543,068 was in excess of the \$10,210,678 carrying amount of such stock as of the Company's March 28, 1990 recapitalization. Accordingly, the carrying amount was subject to periodic accretions, using the interest rate method, in order for the carrying amount to equal the mandatory redemption amount upon redemption. Each Class III preferred share was convertible into 1 share of common stock.

Class IV Preferred Stock. In connection with the restructuring described above, as of September 30, 1995 and 1996, there were no issued or outstanding shares of Class IV preferred stock.

During fiscal year 1993, the Company issued 674,709 shares of Class IV preferred stock in connection with the conversion of \$674,709 of then outstanding 90-day notes. Each share of the Class IV Stock was entitled to five (5) votes, an annual dividend, when and as declared by the Company's Board of Directors, of \$0.09 per share, which dividend was cumulative, and had a liquidation preference senior to all other existing classes of stock. This liquidation preference entitled each shareholder of Class IV Preferred Stock to an amount equal to the sum of (i) \$1.00 per share, (ii) all accrued and unpaid dividends, and (iii) 95% of the proceeds up to \$14.00 per share.

The Class IV preferred stock had a mandatory redemption feature which required one-third of the outstanding stock to be redeemed on November 30, 1994, one-third on November 30, 1995 and one-third on November 30, 1996, for \$1.00 per share plus share of common stock. Each share of Class IV Preferred Stock was convertible into one share of common stock.

During fiscal year 1994, the Company issued 207,690 shares of Class IV preferred stock for \$1 per share. In connection with such issuance, the Company entered into notes receivable agreements with certain employees amounting to \$146,107. Such notes have been recorded as a reduction to equity. The notes bear interest at a rate of 6.0%.

Class A Preferred Stock. In connection with the restructuring described above, as of September 30, 1995 and 1996, there were no issued or outstanding shares of Class A preferred stock.

In August 1995, all 1,338,599 shares of Class A preferred stock were converted into 9,370,193 shares of common stock. The Class A stock was issued in connection with the Company's plan to exchange the Class IV preferred stock at a ratio of 1.5 shares of Class A for each share of Class IV. The rights and preferences attached to the Class A preferred stock were similar to the Class IV preferred stock.

NOTE 12. STOCK OPTIONS AND WARRANTS

Stock Option Plan. In November 1994, the Company's Incentive Stock Option Plan, initiated in 1987, was eliminated. On June 5, 1995, the Board of Directors approved the 1995 Incentive and Non-Statutory Stock Option Plan (the "Option Plan") and such plan was subsequently approved at the annual meeting of shareholders held on June 23, 1995. Under the terms of the Option Plan, options to acquire 1,100,000 shares of common stock may be granted to eligible employees, as defined, at no less than 100 percent of the fair market value on the date of grant. In March 1996, options to acquire an additional 1,100,000 shares of common stock was approved.

Certain options under the Option Plan are intended to qualify as incentive stock options pursuant to Section 422A of the Internal Revenue Code. Options with respect to 957,000 and 1,154,000 shares were outstanding at September 30, 1995 and 1996 at an exercise prices ranging from \$0.89 to \$3.00 per share. At September 30, 1994, options with respect to 111,500 shares were outstanding under previous plan at exercise prices ranging from \$0.50 to \$2.50 per share.

Stock options granted generally vest over three to five years and are exercisable over a six year period. As of September 30, 1994, 1995 and 1996, options with respect to 97,300, 341,300 and 553,400 shares were exercisable, respectively.

The following table summarizes the activity under the plan:

Outstanding as of	
September 30, 1994	111,500
Granted	957,000
Exercised	
Cancelled	(111,500)
Outstanding as of	
September 30, 1995	957,000
Granted	197,000
Exercised	
Cancelled	
Outstanding as of	
September 30, 1996	1,154,000

Warrants. In connection with the capital restructuring plan described in Note 11 above, certain of the Company's outstanding preferred stock purchase warrants were exchanged for common stock purchase warrants. Set forth below is a summary of the Company's outstanding warrants at September 30, 1996:

SECURITY	PREVIOUS SECURITY	EXERCISE PRICE	WARRANTS	EXPIRATION DATE
Common Stock	Class III preferred stock	\$5.00	30,949	July 24, 1997
Common Stock	-	\$1.20	7,924,667	May 1, 2001
Common Stock	-	\$3.00	833,333	September 1, 2001

The above table excludes: (i) Class III preferred stock purchase warrants which were exchanged for Class I preferred stock in October 1994, (ii) warrants exercised in August 1995, as described in Note 11 and (iii) warrants to purchase 15,000 shares of Class A senior convertible preferred stock which were exercised in January 1995, as described in Note 8 and 11.

As described in Note 8 in December 1996, the Company issued an additional 3,333,333 common stock purchase warrants with a \$3.00 exercise price and September 1, 2001 expiration date.

NOTE 13. RELATED PARTIES

In May 1995, 52% of the Company's outstanding shares of Common Stock were purchased by Jesup & Lamont, L.L.C. ("JLMP LLC"). Since that date four of the Company's six directors have been members of JLMP LLC. As of September 30, 1996, JLMP LLC has an ownership interest in the Company of approximately 59.8%. In May 1995, the Company entered into a consulting agreement with JLMP LLC (the "Agreement") pursuant to which JLMP LLC agreed to provide financial advisory and employee services for the Company for one year. Total fees paid to JLMP LLC amounted to approximately \$241,697 and \$288,385 for the years ended September 30, 1995 and 1996, respectively.

In December 1996, the Company's chairman and chief executive officer retired. The Company has entered into a consulting agreement with him for a term of two years and will provide compensation of \$250,000 per annum. In addition, the Company has also forgiven \$115,300 of his indebtedness to the Company and has agreed to extend the exercise of his vested stock options to March 4, 1997.

NOTE 14. EXPORT SALES

The information below summarizes the Company's export sales by geographic area.

The Company's export sales are as follows:

	FAR EAST	EUROPE	TOTAL
Year ended September 30, 1994	\$ 4,974,957	\$ 319,788	\$ 5,294,745
Year ended September 30, 1995	\$ 3,978,118	\$ 2,546,301	\$ 6,524,419
Year ended September 30, 1996	\$ 8,209,309	\$ 3,588,066	\$ 11,797,375

NOTE 15. SUBSEQUENT EVENTS

On December 6, 1996, the Board of Directors authorized management of the Company to file a Registration Statement with the Securities and Exchange Commission permitting the Company to sell shares of its common stock to the public.

No dealer, salesperson, or other person has been authorized to give any information or to make any representations other than those contained in this Prospectus and, if given or made, such information or representations must not be relied upon as having been authorized by the Company or any of the Underwriters. This Prospectus does not constitute an offer to sell or the solicitation of an offer to buy any securities other than the securities to which it relates or any offer to sell or the solicitation of an offer to buy such securities in any jurisdiction where such an offer or solicitation would be unlawful. Neither the delivery of this Prospectus nor any sale made hereunder shall, under any circumstances, create any implication that the information contained herein is correct as of any time subsequent to the date hereof.

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Until _____, 1997 (25 days after the date of this Prospectus), all dealers effecting transactions in the registered securities, whether or not participating in this distribution, may be required to deliver a Prospectus. This is in addition to the obligation of dealers to deliver a Prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

_____ SHARES

[LOGO]

EMCORE CORPORATION

COMMON STOCK

PROSPECTUS

DONALDSON, LUFKIN & JENRETTE
SECURITIES CORPORATION

NEEDHAM & COMPANY, INC.

[DATE OF PROSPECTUS]

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 13. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION

The following table sets forth the various expenses in connection with the sale and distribution of the securities being registered, other than underwriting discounts and commissions. All amounts shown are estimates except the Securities and Exchange Commission registration fee, the NASD filing fee and the Nasdaq National Market application fee.

	To Be Paid By The Registrant*
Securities and Exchange Commission registration fee	\$ 9,090.91
NASD filing fee	3,500.00
Nasdaq National Market application fee	_____*
Accounting fees and expenses	_____*
Printing expenses	_____*
Transfer agent and registrar fees	_____*
Blue Sky fees and expenses	5,000.00
Legal fees and expenses	_____*
Other expenses	_____*
Total	_____*

* To be filed by amendment.

ITEM 14. INDEMNIFICATION OF DIRECTORS AND OFFICERS

The Company's Certificate of Incorporation provides that the Company shall indemnify its directors and officers to the full extent permitted by New Jersey law, including in circumstances in which indemnification is otherwise discretionary under New Jersey law.

Section 14A:2-7 of the New Jersey Business Corporation Act provides that a New Jersey corporation's:

"certificate of incorporation may provide that a director or officer shall not be personally liable, or shall be liable only to the extent therein provided, to the corporation or its shareholders for damages for breach of any duty owed to the corporation or its shareholders, except that such provision shall not relieve a director or officer from liability for any breach of duty based upon an act or omission (a) in breach of such person's duty of loyalty to the corporation or its shareholders, (b) not in good faith or involving a knowing violation of law or (c) resulting in receipt by such person of an improper personal benefit. As used in this subsection, an act or omission in breach of a person's duty of loyalty means an act or omission which that person knows or believes to be contrary to the best interests of the corporation or its shareholders in connection with a matter in which he has a material conflict of interest."

In addition, Section 14A:3-5 (1995) of the New Jersey Business Corporation Act (1995) provides as follows:

INDEMNIFICATION OF DIRECTORS, OFFICERS AND EMPLOYEES

(1) As used in this section,

(a) "Corporate agent" means any person who is or was a director, officer, employee or agent of the indemnifying corporation or of any constituent corporation absorbed by the indemnifying corporation in a

consolidation or merger and any person who is or was a director, officer, trustee, employee or agent of any other enterprise, serving as such at the request of the indemnifying corporation, or of any such constituent corporation, or the legal representative of any such director, officer, trustee, employee or agent;

(b) "Other enterprise" means any domestic or foreign corporation, other than the indemnifying corporation, and any partnership, joint venture, sole proprietorship, trust or other enterprise, whether or not for profit, served by a corporate agent;

(c) "Expenses" means reasonable costs, disbursements and counsel fees;

(d) "Liabilities" means amounts paid or incurred in satisfaction of settlements, judgments, fines and penalties;

(e) "Proceeding" means any pending, threatened or completed civil, criminal, administrative or arbitrative action, suit or proceeding, and any appeal therein and any inquiry or investigation which could lead to such action, suit or proceeding; and

(f) References to "other enterprises" include employee benefit plans; references to "fines" include any excise taxes assessed on a person with respect to an employee benefit plan; and references to "serving at the request of the indemnifying corporation" include any service as a corporate agent which imposes duties on, or involves services by, the corporate agent with respect to an employee benefit plan, its participants, or beneficiaries; and a person who acted in good faith and in a manner the person reasonably believed to be in the interest of the participants and beneficiaries of an employee benefit plan shall be deemed to have acted in a manner "not opposed to the best interests of the corporation" as referred to in this section.

(2) Any corporation organized for any purpose under any general or special law of this State shall have the power to indemnify a corporate agent against his expenses and liabilities in connection with any proceeding involving the corporate agent by reason of his being or having been such a corporate agent, other than a proceeding by or in the right of the corporation, if

(a) such corporate agent acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation; and

(b) with respect to any criminal proceeding, such corporate agent had no reasonable cause to believe his conduct was unlawful. The termination of any proceeding by judgment, order, settlement, conviction or upon a plea of nolo contendere or its equivalent, shall not of itself create a presumption that such corporate agent did not meet the applicable standards of conduct set forth in paragraphs 14A:3-5(2)(a) and 14A:3-5(2)(b).

(3) Any corporation organized for any purpose under any general or special law of this State shall have the power to indemnify a corporate agent against his expenses in connection with any proceeding by or in the right of the corporation to procure a judgment in its favor which involves the corporate agent by reason of his being or having been such corporate agent, if he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation. However, in such proceeding no indemnification shall be provided in respect of any claim, issue or matter as to which such corporate agent shall have been adjudged to be liable to the corporation, unless and only to the extent that the Superior Court or the court in which such proceeding was brought shall determine upon application that despite the adjudication of liability, but in view of all circumstances of the case, such corporate agent is fairly and reasonably entitled to indemnity

for such expenses as the Superior Court or such other court shall deem proper.

(4) Any corporation organized for any purpose under any general or special law of this State shall indemnify a corporate agent against expenses to the extent that such corporate agent has been successful on the merits or otherwise in any proceeding referred to in subsections 14A:3-5(2) and 14A:3-5(3) or in defense of any claim, issue or matter therein.

(5) Any indemnification under subsection 14A:3-5(2) and, unless ordered by a court, under subsection 14A:3-5(3) may be made by the corporation only as authorized in a specific case upon a determination that indemnification is proper in the circumstances because the corporate agent met the applicable standard of conduct set forth in subsection 14A:3-5(2) or subsection 14A:3-5(3). Unless otherwise provided in the certificate of incorporation or bylaws, such determination shall be made

(a) by the board of directors or a committee thereof, acting by a majority vote of a quorum consisting of directors who were not parties to or otherwise involved in the proceeding; or

(b) if such a quorum is not obtainable, or, even if obtainable and such quorum of the board of directors or committee by a majority vote of the disinterested directors so directs, by independent legal counsel, in a written opinion, such counsel to be designated by the board of directors; or

(c) by the shareholders if the certificate of incorporation or bylaws or a resolution of the board of directors or of the shareholders so directs.

(6) Expenses incurred by a corporate agent in connection with a proceeding may be paid by the corporation in advance of the final disposition of the proceeding as authorized by the board of directors upon receipt of an undertaking by or on behalf of the corporate agent to repay such amount if it shall ultimately be determined that he is not entitled to be indemnified as provided in this section.

(7) (a) If a corporation upon application of a corporate agent has failed or refused to provide indemnification as required under subsection 14A:3-5(4) or permitted under subsections 14A:3-5(2), 14A:3-5(3) and 14A:3-5(6), a corporate agent may apply to a court for an award of indemnification by the corporation, and such court

(i) may award indemnification to the extent authorized under subsections 14A:3-5(2) and 14A:3-5(3) and shall award indemnification to the extent required under subsection 14A:3-5(4), notwithstanding any contrary determination which may have been made under subsection 14A:3-5(5); and

(ii) may allow reasonable expenses to the extent authorized by, and subject to the provisions of, subsection 14A:3-5(6), if the court shall find that the corporate agent has by his pleadings or during the course of the proceeding raised genuine issues of fact or law.

(b) Application for such indemnification may be made:

(i) in the civil action in which the expenses were or are to be incurred or other amounts were or are to be paid; or

(ii) to the Superior Court in a separate proceeding. If the application is for indemnification arising out of a civil action, it shall set forth reasonable cause for the failure to make application for such relief in the action or proceeding in which the expenses were or are to be incurred or other amounts were or are to be paid.

The application shall set forth the disposition of any previous

application for indemnification and shall be made in such manner and form as may be required by the applicable rules of court or, in the absence thereof, by direction of the court to which it is made. Such application shall be upon notice to the corporation. The court may also direct that notice shall be given at the expense of the corporation to the shareholders and such other persons as it may designate in such manner as it may require.

(8) The indemnification and advancement of expenses provided by or granted pursuant to the other subsections of this section shall not exclude any other rights, including the right to be indemnified against liabilities and expenses incurred in proceedings by or in the right of the corporation, to which a corporate agent may be entitled under a certificate of incorporation, bylaw, agreement, vote of shareholders, or otherwise; provided that no indemnification shall be made to or on behalf of a corporate agent if a judgment or other final adjudication adverse to the corporate agent establishes that his acts or omissions (a) were in breach of his duty of loyalty to the corporation or its shareholders, as defined in subsection (3) of N.J.S.14A:2-7, (b) were not in good faith or involved a knowing violation of law or (c) resulted in receipt by the corporate agent of an improper personal benefit.

(9) Any corporation organized for any purpose under any general or special law of this State shall have the power to purchase and maintain insurance on behalf of any corporate agent against any expenses incurred in any proceeding and any liabilities asserted against him by reason of his being or having been a corporate agent, whether or not the corporation would have the power to indemnify him against such expenses and liabilities under the provisions of this section. The corporation may purchase such insurance from, or such insurance may be reinsured in whole or in part by, an insurer owned by or otherwise affiliated with the corporation, whether or not such insurer does business with other insureds.

(10) The powers granted by this section may be exercised by the corporation, notwithstanding the absence of any provision in its certificate of incorporation or bylaws authorizing the exercise of such powers.

(11) Except as required by subsection 14A:3-5(4), no indemnification shall be made or expenses advanced by a corporation under this section, and none shall be ordered by a court, if such action would be inconsistent with a provision of the certificate of incorporation, a bylaw, a resolution of the board of directors or of the shareholders, an agreement or other proper corporate action, in effect at the time of the accrual of the alleged cause of action asserted in the proceeding, which prohibits, limits or otherwise conditions the exercise of indemnification powers by the corporation or the rights of indemnification to which a corporate agent may be entitled.

(12) This section does not limit a corporation's power to pay or reimburse expenses incurred by a corporate agent in connection with the corporate agent's appearance as a witness in a proceeding at a time when the corporate agent has not been made a party to the proceeding.

The Underwriting Agreement provides for indemnification by the Underwriters of the Registrant and its officers and directors for certain liabilities, including liabilities under the Securities Act.

ITEM 15. RECENT SALES OF UNREGISTERED SECURITIES

Since December 1, 1993, the Company has sold and issued the following unregistered securities:

1. November 30, 1994. Exchange of 706,982 shares of Common Stock and 1,338,600 shares of Class A Stock pursuant to a merger by EMCORE Merger Subsidiary Corporation with and into EMCORE

Corporation. All purchasers of these shares were existing shareholders of EMCORE Corporation. The exchange ratio was as follows: 100 shares of EMCORE Corporation Class IV Stock for 150 shares of Class A Stock; 100 shares of EMCORE Corporation Class III Stock for 10 shares of Common Stock; 100 shares of EMCORE Corporation Class I Stock for 4 shares of Common Stock; and, 100 shares of old Common Stock for 1 share of new Common Stock. No cash was involved in this transaction. The transaction was exempt from registration pursuant to Section 3(a)(9) of the Securities Act.

2. October 25, 1995. The issuance of 9,370,200 number of shares of Common Stock in exchange for 1,338,600 shares of Class A Common Stock pursuant to a merger of EMCORE Merger Subsidiary Two Corporation with and into EMCORE Corporation. All purchasers of these shares were existing shareholders of EMCORE Corporation. No cash was involved in this transaction. This exchange was exempt from registration pursuant to Section 3(a)(9) of the Securities Act.
3. October 25, 1995. Sale of 103,993 shares at \$0.89 a share to holders of the Company's warrants to purchase the Company's Common Stock at \$5.00 a shares until 1997. The consideration received included the surrender of warrants plus a total cash consideration of \$92,554. This transaction was exempt from registration pursuant to Section 4(2) of the Securities Act.
4. December 1, 1995. Sale of shares issued to Hakuto upon exercise of warrants held. Hakuto is a publicly held Japanese corporation. The warrants had been issued in connection with a Distributorship Agreement with Hakuto. The total amount of cash consideration was \$10,000. This transaction was exempt from registration pursuant to Regulation S under the Securities Act.
5. May 1, 1996. Issuance of \$9,500,000 of 6% Subordinated Notes due 2001 in a unit paired with warrants to purchase 7,916,667 shares of Common Stock at \$1.20 a share. Holders have the right to use the principal amount of the Note to exercise the warrants until the expiration date. The warrants expire on the same date the Notes mature. In this Offering, \$9,500,000 was raised, of which \$1,000,000 was in the form of notes from officers of the Company. This transaction was exempt from registration pursuant to Section 4(2) of the Securities Act.
6. July 12, 1996. Sale to Dane C. Scott. \$9,600 6% Subordinated Notes due 2001 in a unit paired with warrants to purchase 8,000 shares of Common Stock at \$1.20 a share in the aggregate amount of \$9,600. Mr. Scott is a Senior Design Engineer of the Company. This transaction was exempt from registration pursuant to Section 4(2) of the Securities Act.
7. Employee stock options were granted at various times at prices ranging from \$0.89 a share to \$3.00. These transactions were exempt from registration pursuant to Section 4(2) of and Rule 701 under the Securities Act.
8. September 1996. Sale to JLMP. \$2.5 million 6% Subordinated Note and warrants to purchase 833,333 shares at \$3 a share. This transaction was exempt from registration pursuant to Section 4(2) of the Securities Act.
9. December 1996. Issuance to JLMP. Warrants to purchase 3,333,333 shares at \$3.00 a share in consideration for guaranteeing and securing the guarantee of a \$10 million credit facility. This transaction was exempt from registration pursuant to Section 4(2)

of the Securities Act.

ITEM 16. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) The following exhibits are filed with this Registration Statement:

Exhibit No.	Description
1.1	Form of Underwriting Agreement*
3.1	Amended and Restated Certificate of Incorporation*
3.2	Amended and Restated By-Laws*
4.1	Specimen certificate for shares of Common Stock*
5.1	Opinion of White & Case*
10.1	1995 Incentive and Non-Statutory Stock Option Plan*
10.2	1996 Amendment to Option Plan*
10.3	Specimen Incentive Stock Option Agreement*
10.4	Hakuto Distributorship Agreement*
10.5	Lease for premises at 394 Elizabeth Avenue, Somerset, New Jersey 08873*
10.6	September 1996 Registration Rights Agreement*
10.7	December 1996 Registration Rights Agreement*
10.8	Form of 6% Subordinated Note Due May 1, 2001*
10.9	Form of 6% Subordinated Note Due September 1, 2001*
10.10	Form of \$1.20 Warrants*
10.11	Form of \$5.00 Warrants*
10.12	Form of \$3.00 Warrants*
10.13	Demand note facility with First Union National Bank*
10.14	Consulting Agreement dated December 6, 1996 between the Registrant and Norman E. Schumaker*
23.1	Consent of Coopers & Lybrand L.L.P.
23.2	Consent of White & Case (included in Exhibit 5.1)*
23.3	Consent of Lerner David Littenberg Krumholz & Mentlik
24.1	Power of Attorney (included in signature page of this Registration Statement)
27.1	Financial Data Schedule
99.1	Schedule II: Valuation and Qualified Accounts & Reserves

* To be filed by amendment

(b) Financial Statement Schedule

The following Financial Statement Schedule is filed pursuant to Item 11(e) of Regulation S-X:

Schedule II: Valuation and Qualified Accounts & Reserves

All other schedules are omitted because they are not applicable or the required information is shown in the Financial Statements or Notes thereto.

ITEM 17. UNDERTAKINGS

Insofar as indemnification for liabilities arising under the Securities Act 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 Securities 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 Securities Act and will be governed by the final adjudication of such issue.

The undersigned Registrant hereby undertakes to provide to the Underwriters at the closing specified in the Underwriting Agreement certificates in such denomination and registered in such names as required by the Underwriters to permit prompt delivery to each purchaser.

The undersigned Registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of a registration statement in reliance upon Rule 430A and contained in the form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

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

SIGNATURES

Pursuant to the requirements of the Securities Act, the Registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the Township of Somerset, State of New Jersey, on December 23, 1996.

EMCORE CORPORATION

By /s/ Reuben F. Richards, Jr.
Name: Reuben F. Richards, Jr.
Title: President and Chief
Executive Officer

POWER OF ATTORNEY

Each person whose signature appears below constitutes and appoints and hereby authorizes Reuben F. Richards, Jr. and Thomas G. Werthan, 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 registration statement and to sign any and all additional registration statements relating to the same offering of securities as this registration statement that are filed pursuant to Rule 462(b) of the Securities Act, 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 Act, this Registration Statement on Form S-1 has been signed by the following persons in the capacities indicated, on December 23, 1996.

Signature	Title
/s/ Reuben F. Richards, Jr. Reuben F. Richards, Jr.	President, Chief Executive Officer and Director (Principal Executive Officer)
/s/ Thomas G. Werthan Thomas G. Werthan	Vice President, Chief Financial Officer, Secretary and Director (Principal Accounting and Financial Officer)
Richard A. Stall	Director
/s/ Thomas J. Russell Thomas J. Russell	Chairman of the Board and Director
/s/ Howard R. Curd Howard R. Curd	Director
/s/ Howard F. Curd Howard F. Curd	Director

EXHIBIT INDEX

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23.3	Consent of Lerner David Littenberg Krumholz & Mentlik
24.1	Power of Attorney (included in signature page of this Registration Statement)
27.1	Financial Data Schedule
99.1	Schedule II: Valuation and Qualified Accounts & Reserves

* To be filed by amendment

CONSENT OF INDEPENDENT ACCOUNTANTS

We consent to the inclusion in this registration statement on Form S-1 of our report dated November 1, 1996, except for Notes 13 and 15 as to which the date is December 6, 1996, on our audits of the financial statements and financial statement schedule of EMCORE Corporation. We also consent to the reference to our Firm under the caption "Experts".

Coopers & Lybrand L.L.P.

Parsippany, New Jersey
December 23, 1996

CONSENT OF LERNER DAVID LITTENBERG KRUMHOLZ & MENTLIK

We hereby consent to the reference to our firm under the caption "Experts" in the Registration Statement on Form S-1 of EMCORE Corporation for the registration of its Common Stock.

Lerner David

Littenberg Krumholz & Mentlik

Westfield, New Jersey
December 23, 1996

EMCORE CORPORATION
SCHEDULE II
VALUATION AND QUALIFYING ACCOUNTS AND RESERVES

COLUMN A	COLUMN B	COLUMN C	COLUMN D	COLUMN E
DESCRIPTION	BALANCE AT BEGINNING OF PERIOD	CHARGED TO EXPENSE	RECOVERIES (DEDUCTIONS)	BALANCE AT END OF PERIOD
Allowance for Doubtful Accounts				
For the year ended September 30, 1996	\$163,531	183,000	(36,582)(1)	\$309,949
For the year ended September 30, 1995	\$ 68,101	128,630	(33,200)(1)	\$163,531
For the year ended September 30, 1994	\$ 46,000	17,759	4,342 (2)	\$ 68,101
Reserves for Inventory Obsolescence				
For the year ended September 30, 1996	\$115,000	105,000	-	\$220,000
For the year ended September 30, 1995	\$ 99,621	15,379	-	\$115,000
For the year ended September 30, 1994	\$ 74,752	24,869	-	\$ 99,621

(1) Uncollectible accounts written off.

(2) Recoveries of accounts previously written off.

THIS SCHEDULE CONTAINS SUMMARY FINANCIAL INFORMATION EXTRACTED FROM THE FINANCIAL STATEMENTS AND NOTES INCLUDED IN THE REGISTRATION STATEMENT ON FORM S-1 AND IS QUALIFIED IN ITS ENTIRETY BY REFERENCE TO SUCH FINANCIAL STATEMENTS.

1

YEAR	
	SEP-30-1996
	OCT-01-1995
	SEP-30-1996
	1,367,386
	0
	3,335,171
	310,000
	7,645,040
	12,116,854
	15,546,099
	7,749,267
	20,434,421
10,965,861	
	8,365,392
	0
	0
	19,407,566
	(18,304,398)
20,434,421	
	27,778,885
27,778,885	
	18,606,420
	18,606,420
	11,925,895
	146,418
	422,884
	(3,176,314)
	0
(3,176,314)	
	0
	0
	0
	(3,176,314)
	0
	0