

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

FORM 10-K

☒ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
For the fiscal year ended September 30, 2011

or

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
For the transition period from \_\_\_\_ to \_\_\_\_

Commission File Number 0-22175



**EMCORE Corporation**

(Exact name of registrant as specified in its charter)

New Jersey

(State or other jurisdiction of incorporation or organization)

22-2746503

(I.R.S. Employer Identification No.)

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

(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: (505) 332-5000

Securities registered pursuant to Section 12(b) of the Act:

Common Stock, no par value

(Title of each class)

NASDAQ Stock Market

(Name of each exchange on which registered)

Securities registered pursuant to Section 12(g) of the Act: **None**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. ☐ Yes ☒ **No**

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. ☐ Yes ☒ **No**

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. ☒ **Yes** ☐ No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). ☒ **Yes** ☐ No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definition of "large accelerated filer", "accelerated filer", and "smaller reporting company" in Rule 12b-2 of the Exchange Act. ☐ Large accelerated filer ☒ **Accelerated filer** ☐ Non-accelerated filer ☐ Smaller reporting company

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). ☐ Yes ☒ **No**

The aggregate market value of our common stock held by non-affiliates as of March 31, 2011 (the last business day of our most recently completed second fiscal quarter) was approximately \$185.6 million, based on the closing sale price of \$2.57 per share of common stock as reported on the NASDAQ Global Market. For purposes of this disclosure, shares of common stock held by officers and directors and by each person known by us to own 5% or more of our outstanding common stock have been excluded.

As of December 21, 2011, the number of shares outstanding of our no par value common stock totaled 94,067,694.

## **DOCUMENTS INCORPORATED BY REFERENCE**

In accordance with General Instruction G(3) of Form 10-K, certain information required by Part III hereof will either be incorporated into this Form 10-K by reference to our Definitive Proxy Statement for our Annual Meeting of Stockholders filed within 120 days of September 30, 2011 or will be included in an amendment to this Form 10-K filed within 120 days of September 30, 2011.

## **CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS**

This Annual Report on Form 10-K includes forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Exchange Act of 1934. These forward-looking statements are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These forward-looking statements are largely based on our current expectations and projections about future events and financial trends affecting the financial condition of our business. Such forward-looking statements include, in particular, projections about our future results included in our Exchange Act reports, statements about our plans, strategies, business prospects, changes and trends in our business and the markets in which we operate. These forward-looking statements may be identified by the use of terms and phrases such as “anticipates”, “believes”, “can”, “could”, “estimates”, “expects”, “forecasts”, “intends”, “may”, “plans”, “projects”, “should”, “targets”, “will”, “would”, and similar expressions or variations of these terms and similar phrases. Additionally, statements concerning future matters such as the development of new products, enhancements or technologies, sales levels, expense levels, and other statements regarding matters that are not historical are forward-looking statements. Management cautions that these forward-looking statements relate to future events or our future financial performance and are subject to business, economic, and other risks and uncertainties, both known and unknown, that may cause actual results, levels of activity, performance, or achievements of our business or our industry to be materially different from those expressed or implied by any forward-looking statements. Factors that could cause or contribute to such differences in results and outcomes include without limitation those discussed under [Item 1A - Risk Factors](#), as well as those discussed elsewhere in this Annual Report. These cautionary statements apply to all forward-looking statements wherever they appear in this Annual Report.

Neither management nor any other person assumes responsibility for the accuracy and completeness of any forward-looking statement. All forward-looking statements in this Annual Report are made as of the date hereof, based on information available to us as of the date hereof, and subsequent facts or circumstances may contradict, obviate, undermine, or otherwise fail to support or substantiate such statements. We caution you not to rely on these statements without also considering the risks and uncertainties associated with these statements and our business that are addressed in this Annual Report. Certain information included in this Annual Report may supersede or supplement forward-looking statements in our other reports filed with the Securities and Exchange Commission. We assume no obligation to update any forward-looking statement to conform such statements to actual results or to changes in our expectations, except as required by applicable law or regulation.

See [Explanatory Note](#) on page 4 for a discussion associated with the impact of the floods in Thailand on our operations.

---

**EMCORE Corporation**  
**FORM 10-K**  
**For The Fiscal Year Ended September 30, 2011**

**TABLE OF CONTENTS**

	<b><u>Page</u></b>
<b>Explanatory Note</b>	<b><u>4</u></b>
<b>Part I:</b>	
Item 1. Business	<u>6</u>
Item 1A. Risk Factors	<u>18</u>
Item 1B. Unresolved Staff Comments	<u>38</u>
Item 2. Properties	<u>38</u>
Item 3. Legal Proceedings	<u>38</u>
<b>Part II:</b>	
Item 5. Market for Registrant's Common Equity, Related Stockholder Matters, and Issuer Purchases of Equity Securities	<u>39</u>
Item 6. Selected Financial Data	<u>42</u>
Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations	<u>45</u>
Item 7A. Quantitative and Qualitative Disclosures About Market Risk	<u>62</u>
Item 8. Financial Statements and Supplementary Data	<u>63</u>
Consolidated Statements of Operations and Comprehensive Loss for the fiscal years ended September 30, 2011, 2010, and 2009	<u>63</u>
Consolidated Balance Sheets as of September 30, 2011 and 2010	<u>64</u>
Consolidated Statements of Shareholders' Equity for the fiscal years ended September 30, 2011, 2010, and 2009	<u>65</u>
Consolidated Statements of Cash Flows for the fiscal years ended September 30, 2011, 2010, and 2009	<u>66</u>
Notes to Consolidated Financial Statements	<u>68</u>
Report of Independent Registered Public Accounting Firm - KPMG LLP	<u>103</u>
Report of Independent Registered Public Accounting Firm - Deloitte & Touche LLP	<u>104</u>
Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	<u>105</u>
Item 9A. Controls and Procedures	<u>105</u>
Item 9B. Other Information	<u>109</u>
<b>Part III:</b>	
Item 10. Directors, Executive Officers, and Corporate Governance	<u>109</u>
Item 11. Executive Compensation	<u>109</u>
Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	<u>109</u>
Item 13. Certain Relationships, Related Transactions, and Director Independence	<u>109</u>
Item 14. Principal Accounting Fees and Services	<u>109</u>
<b>Part IV:</b>	
Item 15. Exhibits and Financial Statement Schedules	<u>110</u>
SIGNATURES	<u>115</u>

## **EXPLANATORY NOTE**

### **Impact of Thailand Floods on our Operations**

#### **Background**

On October 24, 2011, our primary contract manufacturer announced that, as a result of the flooding in Thailand, it had suspended operations at its facility that is used to manufacture certain of our fiber optics products. Rising water penetrated the facility and submerged most of our manufacturing and test equipment as well as our inventory at the facility.

#### **Strategic Plan**

Over the last two months, we have developed and implemented alternative manufacturing plans in our own facilities in China and in the U.S. to meet the needs of our customers. Concurrently, we have been focusing on rebuilding our high-volume manufacturing infrastructure at other Thailand locations supported by our contract manufacturer and at our own manufacturing facility in China. We have been working closely with our insurance carriers, banks, customers, and business partners to address short-term liquidity requirements and we and our manufacturing partners have placed purchase orders for long lead-time capital equipment. We expect to complete the rebuild and product qualification for our major product lines in our third quarter of fiscal 2012.

As a result of the flood, certain inventory and fixed assets were damaged or destroyed. Our contract manufacturer is required under its production agreement with us to reimburse us for losses to fixed assets and inventory incurred while at the manufacturer's facilities. We are working with our contract manufacturer (and the contract manufacturer's insurance carrier) to receive insurance proceeds to cover the direct damages to our assets that were impacted by the flood. We are not a named beneficiary of our contract manufacturer's insurance policy. The timing and amounts of the recovery from the contract manufacturer, including insurance proceeds, are uncertain at this time.

Additionally, we claimed damages under our own insurance policy relating to business interruption due to the flooding. To date, we have collected \$2.0 million from our policy and we expect to receive an additional \$3.0 million by January 2012.

With respect to measures taken to improve liquidity:

- In November 2011, we implemented various cost reduction measures, including temporary salary reduction, furlough, reduction of discretionary spending including travel, capital expenditures, and development material costs, and improve working capital management. We believe that our cost reduction activities will reduce the overall cost structure of our operations.

We also entered into an agreement with our contract manufacturer whereby our contract manufacturer will purchase equipment to rebuild our affected manufacturing lines for which we will repay our contract manufacturer from insurance proceeds received from that contract manufacturer. Additionally, we restructured our outstanding payables owed to our contract manufacturer, which delayed payments to future dates to coincide with expected timing of insurance proceeds.

- In December 2011, we signed agreements with certain customers pursuant to which they will receive an allocation of our finished goods inventory as well as a percentage of future output from our new production lines being placed into service in fiscal 2012. As consideration, we have received partial prepayments for future product shipments. These advanced payments will be used to support our working capital requirements until we receive the insurance proceeds.
- On December 21, 2011, we signed an amendment to our credit facility with Wells Fargo Bank that increased our eligible borrowing base by up to \$10 million by adding to the borrowing base formula 85% of the appraised value of the Company's equipment and 50% of the appraised value of the Company's real estate, for which the appraisals are currently in process. In addition, Wells Fargo Bank reduced our restrictions under the excess availability financial covenant requirement from \$7.5 million to \$3.5 million through December 2012. The interest rate on outstanding borrowings was increased to LIBOR rate plus four percent. We now expect at least 70% of the total amount of credit under our \$35 million credit facility to be available for use based on the revised borrowing base formula during fiscal year 2012.

**Financial Impact**

Although we have not yet definitively quantified the possible impacts of the flooding in Thailand on our business, we expect that flooding at our primary contract manufacturer in Thailand will have a significant adverse impact on our operations and our ability to meet customer demand for our fiber optics products in the near-term. Our Thailand contract manufacturer historically supported greater than 50 percent of our total fiber optics-related revenue. Our current evaluation is that our fiber optics revenue could be \$12 to \$15 million less in our first quarter of fiscal 2012 as a result of this natural disaster. There is no assurance that the disruption in our fiscal 2012 fiber optics quarterly revenue will be limited to this range, nor can it be assured that the adverse impact will be limited to the next three fiscal quarters. It is possible that our customers may seek alternative suppliers of comparable products if we are unable to meet their needs. While we believe our insurance coverage, both property and business interruption, will mitigate a portion of the adverse impact, there can be no assurance as to the extent or timing of insurance recoveries. Our Photovoltaics segment has not been affected by the floods in Thailand.

As of December 31, 2011, we will perform an impairment test of our long-lived assets related to our Fiber Optics segment. The outcome of these tests may result in recording of impairment charges. We expect to write-off the carrying value of damaged equipment and inventory which is estimated to be in the range of \$10 to \$20 million. Insurance proceeds including recoveries from our contract manufacturer will be recorded as a gain upon receipt.

**Additional information**

See [Item 1A - Risk Factors](#) for a discussion of certain risk factors associated with this natural disaster.

See [Item 7 - Management's Discussion and Analysis of Financial Condition and Results of Operations](#) for disclosures related to the impact to our operations associated with this natural disaster.

See [Item 8 - Financial Statements and Supplementary Data](#) for disclosures related to the impact to our consolidated financial statements associated with this natural disaster.

## PART I.

### ITEM 1. Business

#### Company Overview

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

Our headquarters and principal executive offices are located at 10420 Research Road, SE, Albuquerque, New Mexico, 87123, and our main telephone number is (505) 332-5000. For specific information about us, our products or the markets we serve, please visit our website at <http://www.emcore.com>. The information contained in or linked to our website is not a part of, nor incorporated by reference into, this Annual Report on Form 10-K or a part of any other report or filing with the Securities and Exchange Commission (SEC).

We are subject to the information requirements of the Securities Exchange Act of 1934. We file periodic reports, current reports, proxy statements, and other information with the SEC. The SEC maintains a website at <http://www.sec.gov> that contains all of our information that has been filed electronically. We make available free of charge on our website a link to our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act, as soon as reasonable practicable, after such material is electronically filed with, or furnished to, the SEC.

#### Overview of Our Industry and Markets We Serve

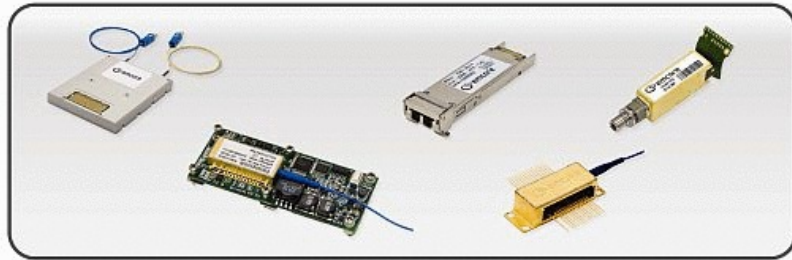
Compound semiconductor-based products provide the foundation of components, subsystems, and systems used in a broad range of technology markets. Compound semiconductor materials are capable of providing electrical or electro-optical functions, such as emitting optical communications signals, detecting optical communications signals, and converting sunlight into electricity.

Collectively, our products serve the telecommunications, enterprise, CATV, FTTP, high-performance computing, defense and homeland security, satellite, and terrestrial solar power markets.

#### Fiber Optics

Our fiber optics products enable information that is encoded on light signals to be transmitted, routed (switched) and received in communication systems and networks. Our Fiber Optics segment primarily offers the following product lines:

- **Telecom Optical Products** - We believe that we are a leading supplier for tunable 10, 40, and 100 gigabits per second (Gb/s) transmission applications for dense wavelength division multiplexed (DWDM) transponders and transceivers for telecommunications transport systems. We are one of few suppliers who offer vertically-integrated products, including external-cavity laser modules, integrated tunable laser assemblies (ITLAs), 300-pin transponders, and tunable 10 gigabits small form factor pluggable (TXFP) transceivers. Our internally developed laser technology is highly suited for applications of 10, 40, and 100 Gb/s due to its superior narrow linewidth and low noise characteristics. Many of our DWDM products are fully Telcordia® qualified and comply with industry multi-source agreements (MSAs). We are currently shipping MSA compliant TXFP product to our customers which we believe will replace 300-pin based transponders over the next few years because the TXFP product enables a higher density transport solution required by carriers. Our TXFP products leverage our proprietary external cavity laser technology to offer identical performance to currently deployed network specifications.



DIGITAL PRODUCTS: Telecom

- **Enterprise Products** - We provide advanced optical components and transceiver modules for data applications that enable switch-to-switch, router-to-router and server-to-server backbone connections at aggregate speeds of 10 Gb/s and above. We offer one of the broadest ranges of products with XENPAK form factor which comply with the 10 Gb/s Ethernet (10-GE) IEEE802.3ae standard. Our 10-GE products include short-reach (SR), long-reach (LR), extended-reach (ER), and coarse WDM LX4 optical transceivers to connect between the photonic physical layer and the electrical section layer as well as CX4 transceivers. In addition to the 10-GE products, we offer traditional MSA compliant small form factor (SFF) and small form factor pluggable (SFP) optical transceivers for use in Gigabit Ethernet and Fiber Channel local-area and storage-area networks (SAN). These transceivers provide integrated duplex data links for bi-directional communication over both single-mode and multimode optical fibers at data rates of 1.25 and 4 Gb/s, respectively.



DIGITAL PRODUCTS: Enterprise

- **Laser/Photodetector Component Products** - We believe that we are a leading provider of optical components including lasers, photodetectors, and various forms of packaged subassemblies. Our technology enables high speed applications for 2, 4, 8, 10, and 14 Gb/s applications for the datacom and SAN markets. Our products include bare die (or chip), transmitter optical subassemblies (TOSA), and TOSA forms of high-speed 850nm vertical cavity surface emitting lasers (VCSELs), distributed feedback (DFB) lasers, positive-intrinsic-negative (PIN) and avalanche photodiode (APD) components for 2, 8, and 10 Gb/s Fiber Channel, 1 and 10 Gb/s Ethernet, InfiniBand, FTTP, and telecom applications. We provide component products to the entire fiber optics industry, and we also leverage the benefits of our vertically-integrated infrastructure through low-cost manufacturing and early access to newly developed internally-produced components.



**DIGITAL PRODUCTS: Laser / Photodetector Components**

- **Parallel Optical Transceiver and Cable Products** - We have long been a technology and product leader of optical transmitter and receiver products utilizing arrays of optical emitting or detection devices, e.g., VCSELs and photodetectors (PDs). These optical transmitter, receiver, and transceiver products are used for back-plane interconnects, switching/routing between telecom racks, and high-performance computing clusters. Our products include 12-lane SNAP-12 MSA compliant transmitter and receivers with single and double data rates. Based on the core competency of multi-lane parallel optical transceivers, we offer optical fiber ribbon cables (ECC - EMCORE Connects Cables) with parallel-optical transceivers embedded within the connectors. These products, with aggregated bandwidths of up to 20, 40, 56, 120, and 150 Gb/s, are ideally suited for high-performance computing clusters and server interconnect applications. Our products provide our customers with increased network capacity, increased data transmission distance and speeds, increased bandwidth, lower power consumption, improved cable management over copper interconnects (less weight and bulk), and lower cost optical interconnections for massive parallel multi-processor installations.



**DIGITAL PRODUCTS: Parallel Optics**

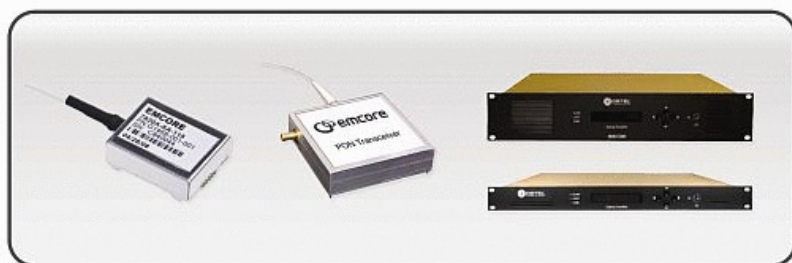
- **Cable Television (CATV) Products** - We are a market leader in providing radio frequency (RF) over fiber products for the CATV industry. Our products are used in hybrid fiber coaxial (HFC) networks that enable cable service operators to offer multiple advanced services to meet the expanding demand for high-speed Internet, on-demand and interactive video, and other advanced services, such as high-definition television (HDTV) and voice over IP (VoIP). Our CATV products include forward and return-path analog and digital lasers, photodetectors and subassembly components, broadcast analog and digital fiber-optic transmitters, and quadrature amplitude modulation (QAM) transmitters and receivers. Our products provide our customers with increased capacity to offer more cable services, increased data transmission distance, speed and bandwidth, lower noise video receive, and lower power consumption.





BROADBAND: Cable Television

- **Fiber-To-The-Premises (FTTP) Products** - Telecommunications companies are increasingly extending their optical infrastructure to their customers' location in order to deliver higher bandwidth services. We have developed customer qualified FTTP components and subsystem products to support plans by telephone companies to offer voice, video, and data services through the deployment of new fiber optics-based access networks. Our FTTP products include passive optical network (PON) transceivers, analog fiber optic transmitters for video overlay and high-power erbium-doped fiber amplifiers (EDFA), analog and digital lasers, photodetectors and subassembly components, analog video receivers, and multi-dwelling unit (MDU) video receivers. Our products provide our customers with higher performance for analog and digital characteristics, integrated infrastructure to support competitive costs, and additional support for multiple standards.



BROADBAND: Fiber-To-The-Premises

- **Satellite Communications (Satcom) Products** - We believe that we are a leading provider of optical components and systems for use in equipment that provides high-performance optical data links for the terrestrial portion of satellite communications networks. Our products include transmitters, receivers, subsystems, and systems that transport wideband radio frequency and microwave signals between satellite hub equipment and antenna dishes. Our products provide our customers with increased bandwidth and lower power consumption.



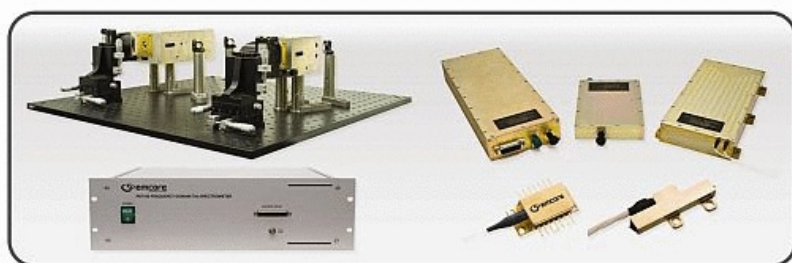
BROADBAND: Satellite Communications

- **Video Transport Products** - Our video transport product line offers solutions for broadcasting, transportation, IP television (IPTV), mobile video, and security and surveillance applications over private and public networks. Our video, audio, data, and RF transmission systems serve both analog and digital requirements, providing cost-effective, flexible solutions geared for network reconstruction and expansion.



**BROADBAND: Broadcast Video Transport**

- **Defense and Homeland Security Products** - Leveraging our expertise in RF module design and high-speed parallel optics, we provide a suite of ruggedized products that meet the reliability and durability requirements of the U.S. government and defense markets. Our specialty defense products include fiber optic gyro components used in precision guided munitions, ruggedized parallel optic transmitters and receivers, high-frequency RF fiber optic link components for towed decoy systems, optical delay lines for radar systems, erbium-doped fiber amplifiers, terahertz spectroscopy systems and other products. Our products provide our customers with high frequency and dynamic range, compact form-factor, and extreme temperature, shock and vibration tolerance.



**BROADBAND: Defense & Homeland Security**

Customers for our Fiber Optics segment include: Alcatel Lucent, Arris/C-Cor Electronics, Aurora Networks, BUPT-GUOAN Broadband, Ciena, Cisco Systems, Fujitsu, Hewlett-Packard, Huawei, Mellanox, Motorola, NEC, Nokia Siemens, Tellabs, and ZTE. For the fiscal year ended September 30, 2011, Cisco Systems represented less than 10% of our total consolidated revenue. For the fiscal years ended September 30, 2010 and 2009, Cisco Systems represented 13% and 15% of our total consolidated revenue, respectively.

See [Explanatory Note](#) on page 4 for a discussion associated with the impact of the floods in Thailand on our Fiber Optics operations.

## **Photovoltaics**

We believe our high-efficiency compound semiconductor-based multi-junction solar cell products provide our customers with compelling cost and performance advantages over competitive solutions. These advantages include higher solar array efficiency and reduced mass and volume, all of which benefit satellite launch costs, as well as, superior resistance to extreme heat and radiation environments. The higher solar cell efficiency of our products enables our customers to reduce their solar product footprint by providing more power output with fewer solar cells, which is a benefit when our product is used in terrestrial CPV systems.

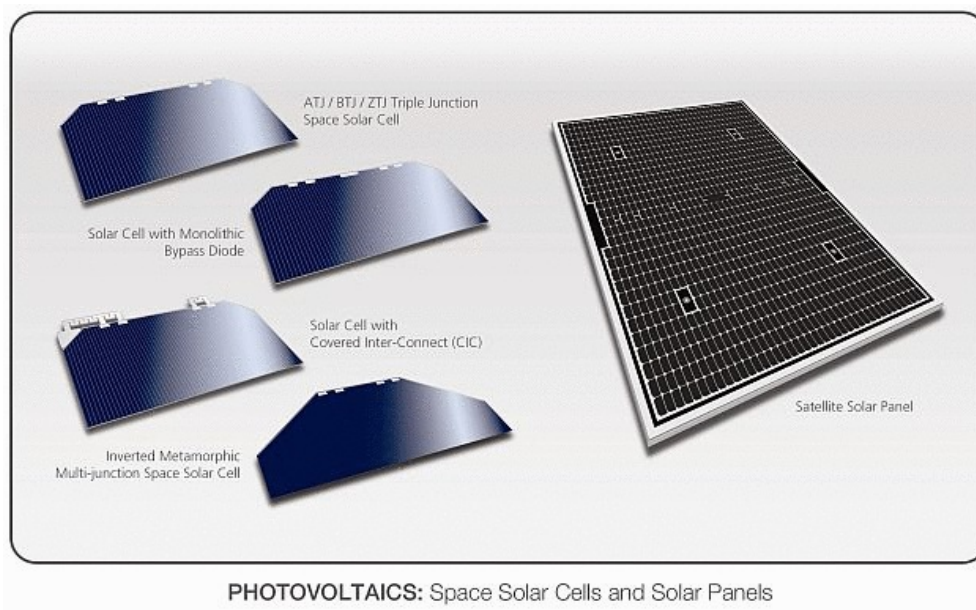
Our Photovoltaics segment targets the following markets:

- **Satellite Solar Power Generation** - We are a leading provider of satellite solar power solutions to the space exploration, defense, intelligence, and global communications industries. A satellite's operational success depends on its available power and its capacity to transmit data. We provide advanced, compound semiconductor-based solar cells and solar panel products that are more resistant to space radiation environments and generate substantially more power from sunlight than competitive technologies. Satellite power systems using our multi-junction solar cells weigh less per unit of power than traditional silicon-based solar cells and provide our customers with reduced solar array size and launch costs.

We currently manufacture and sell one of the most efficient and reliable, radiation resistant advanced triple-junction solar cells in the world, with an average "beginning of life" conversion efficiency of 29.5%. We are the only U.S. manufacturer to supply true monolithic bypass diodes for shadow protection by utilizing several EMCORE patented methods.

Additionally, we are developing an entirely new class of advanced multi-junction solar cells with even higher conversion efficiency. This new architecture, called inverted metamorphic multi-junction (IMM), is being developed in collaboration with the National Renewable Energy Laboratory and the U.S. Air Force Research Laboratory and to date has demonstrated conversion efficiencies above 34% in laboratory measurements.

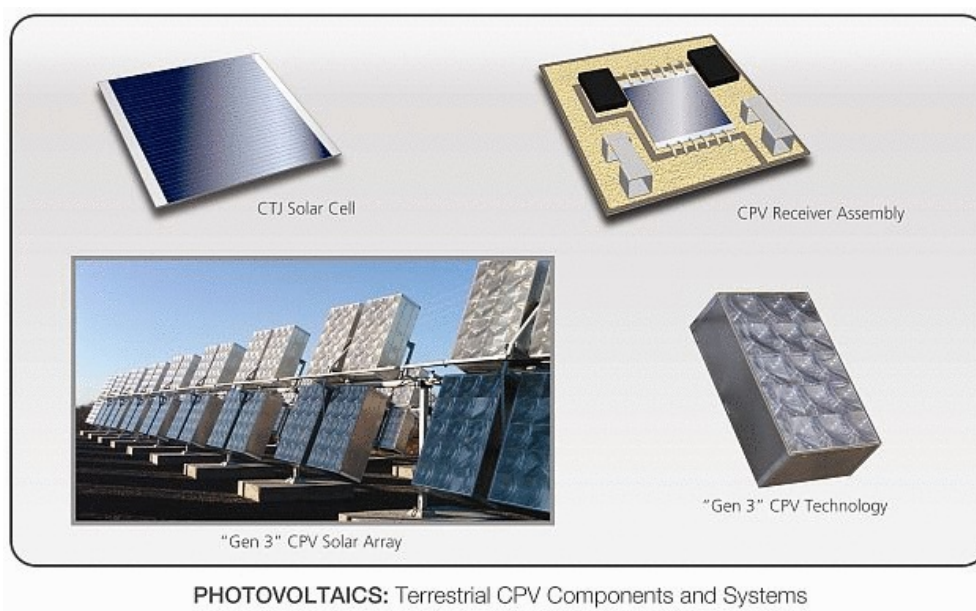
We also offer covered interconnected cells and solar panel lay-down services which allows us to provide our customers fully integrated solar panels for satellite applications. We provide satellite manufacturers with proven integrated power solutions that significantly improve satellite economics. Satellite manufacturers and solar array integrators rely on us to meet their demanding satellite power needs with our proven flight heritage.



- **Terrestrial Solar Power Generation** - Solar power generation systems utilize photovoltaic cells to convert sunlight into electricity and have been used in satellite programs and, to a lesser extent, in terrestrial applications for several decades. We believe the market for terrestrial solar power generation solutions will continue to grow as solar power generation technologies improve in efficiency, as global prices for non-renewable energy sources (*i.e.*, fossil fuels) continue to fluctuate, and as concern regarding the effect of fossil fuel-based carbon emissions on global warming continues to grow. Terrestrial solar power generation has emerged as a rapidly expanding renewable energy source because it has certain advantages when compared to other energy sources, including reduced environmental impact, elimination of fuel price risk, installation flexibility, scalability, distributed power generation (*i.e.*, electric power is generated at the point of use rather than transmitted from a central station to the user), and reliability. The rapid increase in demand for solar power has created a growing demand for highly efficient, reliable, and cost-effective concentrating solar power systems.

We have adapted our high-efficiency, compound semiconductor-based, multi-junction solar cell products for terrestrial applications in utility-scale CPV power systems. We have attained >40% conversion efficiency under 1000x illumination with our terrestrial concentrating solar cell products in volume production. This compares favorably to the 15-21% efficiency of silicon-based solar cells. We believe that solar concentrator systems assembled using our compound semiconductor-based solar cells will be competitive with silicon-based solar power generation systems in certain geographic regions with high direct normal irradiance (DNI). Because our dual axis tracking CPV systems are more efficient, and, when combined with the advantages of concentration (smaller footprint, less usage of photovoltaic material, direct exposure to sunlight throughout the day), the results are a lower system cost per watt. We currently serve the terrestrial solar market with two levels of CPV products: components (including solar cells and solar cell receivers) and CPV terrestrial solar power systems.

While the terrestrial power generation market is still developing, we have shipped more than 4,000,000 solar cells, providing several megawatts of power as part of production orders for CPV components and systems. Our customers include most major solar concentrating systems companies in the United States, Europe, and Asia. We have completed CPV installations totaling approximately one megawatt in Spain, China, and the U.S. with our own Gen-II CPV power system design. Our Gen-III product, with enhanced performance (including a module efficiency of approximately 30%) and a substantially lower cost per watt, now has nearly 2 megawatts on sun.



Customers for our Photovoltaics segment include: Applied Physics Labs - Johns Hopkins University, ATK, Boeing, Dutch Space, Lockheed Martin, Loral Space & Communications, NASA-JPL, Northrop Grumman, and Orbital Sciences Corporation. For the fiscal years ended September 30, 2011, 2010, and 2009, Loral Space & Communications represented 11%, 11%, and 14%, of our total consolidated revenue, respectively.

## Segment Data

See [Footnote 16 - Segment Data and Related Information](#) in the notes to our consolidated financial statements for disclosures related to business segment revenue, geographic revenue, and operating loss by business segment.

## Strategic Plan

***We intend to continue to own and operate our Fiber Optics and Photovoltaics businesses to leverage our scale and corporate infrastructure.***

We had previously contemplated a strategy to separate our Photovoltaics and Fiber Optics businesses to become pure plays in their respective business segments. In light of the formation and operation of our Suncore joint venture to undertake CPV system manufacturing and business development in China, at this time we are planning to continue to own and operate our Photovoltaics and Fiber Optics businesses. Our core competency continues to be our comprehensive knowledge and infrastructure related to compound semiconductor materials and devices, as well as integrated products enabled by these technologies. Therefore, we believe that there are synergies to own and operate both segments. Furthermore, this combined portfolio with unique market applications provides a level of diversification in this highly cyclical economic environment.

***We plan to realign our Fiber Optics product portfolio and focus on business areas with strong technology differentiation and growth opportunities.***

We recently demonstrated several new products and platforms in our Fiber Optics business segment. New products, such as tunable TOSA and tunable XFP transceivers, ITLA and micro-ITLA for 40 and 100 Gb/s coherent transponders, full-band CATV QAM transmitters, and 14-Gb/s parallel optics modules and active cables should strengthen our position as a leader in the industry. We believe these new products have the potential to generate significant growth opportunities in the future. The critical need for these technologies to the industry was validated by significant support by our customers to restore production lines after the recent flooding in Thailand. We are committed to investing capital to re-establish our high-volume manufacturing infrastructure and continuing new product development.

Our strategy for our Fiber Optics segment is to focus our product portfolio in business areas where our technology provides customers with superior and enabling solutions. Concurrently, we intend to exit technology and product lines where we do not hold a leadership position and where our products are approaching their end of life cycle. We will seek to discontinue or divest these product lines and reallocate our resources and commitment to growing market segments.

***We will focus on expanding our customer base for CPV solar cells and developing new opportunities for rooftop CPV systems. In parallel, we plan to support our Suncore joint venture for cost reduction, CPV system deployment, and business growth in China.***

The establishment of our Suncore joint venture with San'an Optoelectronics Co., Ltd. serves as our key strategy in commercializing our CPV system design. Suncore's expected low-cost and high-volume manufacturing capability along with a local presence allows us to penetrate into China's emerging and fast growing renewable energy market. Suncore has already demonstrated initial success with its initial 100-megawatt capacity manufacturing facility scheduled to be in production by March 2012. Additionally, Suncore has secured a 50 megawatt CPV project in Golmud, China to be delivered in 2012. Through Suncore, we expect our Gen-III CPV terrestrial solar power system to provide a competitive cost of energy option for commercial and utility scale projects in certain geographic regions. In the near-term, our focus is to support Suncore in ramping up manufacturing, cost reduction, system deployment, and business growth. The success in deployment and operations of utility scale CPV solar farms, and the significant reduction in CPV module costs through Suncore manufacturing will strengthen our position in domestic CPV project development in the future.



## [Table of Contents](#)

We will also leverage our advanced solar cell technology and manufacturing infrastructure to expand our customer base of CPV solar cells as CPV technology is increasingly recognized as a viable alternative to silicon and thin-film solar cells. With the increased volume and better utilization of our manufacturing capacity, we should be able to lower our cost structure and enhance our business competitiveness.

Our unique CPV systems for commercial rooftop applications has generated significant traction. With the establishment of a new manufacturing infrastructure at Suncore, we expect to launch this product line in fiscal year 2012.

### ***We will aggressively pursue business for government and defense applications by leveraging current business relationships and infrastructure.***

Through our program engagement in the areas of space photovoltaics and specialty photonics, we have developed a strong penetration and customer base for defense and homeland security applications. Our technologies in inverted metamorphic multi-junction (IMM) solar cells, fiber optic gyro transceivers, and terahertz spectroscopy are critical for certain government programs. Our state-of-the-art solar cell manufacturing facility in Albuquerque, New Mexico has been cleared and designated as a U.S. government trusted foundry. This clearance should provide a pathway to additional government program opportunities. We will continue our efforts to further solidify new business opportunities for programs within these areas.

### ***Through the restoration effort of our impacted Fiber Optics production lines, we expect our reestablished manufacturing infrastructure will be more cost competitive.***

In October 2011, flood waters in Thailand infiltrated the production floor of our primary contract manufacturer. Some of the production lines for our Fiber Optics business were impacted. We are redesigning our manufacturing infrastructure to be more cost competitive which should accelerate our path to profitability.

## **Government Research Contracts**

We derive a portion of our revenue from funding by various agencies of the U.S. government through research contracts and subcontracts. These contracts typically cover work performed over extended periods of time, from several months up to several years. These contracts may be modified or terminated at the convenience of the U.S. government and may be subject to governmental budgetary fluctuations.

## **Sources of Raw Materials**

We depend on a limited number of suppliers for certain raw materials, components, and equipment used in our products. We continually review our vendor relationships to mitigate risks and lower costs, especially where we depend on one or two vendors for critical components or raw materials. While maintaining inventories that we believe are sufficient to meet our near-term needs, we strive not to carry significant inventories of raw materials. Accordingly, we maintain ongoing communications with our vendors in order to prevent any interruptions in supply, and have implemented a supply-chain management program to maintain quality and lower purchase prices through standardized purchasing efficiencies and design requirements. To date, we generally have been able to obtain sufficient quantities of quality supplies in a timely manner.

## **Manufacturing**

See [Explanatory Note](#) on page 4 for a discussion of the impact of the floods in Thailand on the manufacturing capabilities of one of our key contract manufacturers.

We utilize MOCVD (metal-organic chemical vapor deposition) systems for both development and production, which are capable of processing virtually all compound semiconductor-based materials and devices. Our operations include wafer fabrication, device design and production, fiber optic module, subsystem and system design and manufacture, and solar panel engineering and assembly. Many of our manufacturing operations are computer monitored or controlled to enhance production output and statistical control. We employ a strategy of minimizing ongoing capital investments, while maximizing

## [Table of Contents](#)

the variable nature of our cost structure. We maintain supply agreements with certain key suppliers. Where we can gain cost advantages while maintaining quality and intellectual property control, we outsource the production of certain products, subsystems, components, and subassemblies to contract manufacturers located overseas. Our contract manufacturers must maintain comprehensive quality assurance and delivery systems, and we continuously monitor them for compliance.

Through the creation of our Suncore joint venture with San'an Optoelectronics (San'an), we expect to establish a low cost manufacturing operation in China for our terrestrial solar power business. Photovoltaic solar cells incorporated into the CPV receivers and CPV modules will continue to be manufactured at our manufacturing facility in Albuquerque, NM. All remaining CPV-related manufacturing efforts residing at San'an and at our Langfang, China manufacturing facility are being transferred to Suncore. Suncore will serve as our primary low-cost / high-volume manufacturing base for CPV receivers incorporating our CPV solar cells and for CPV modules, and systems to support our worldwide sales efforts and San'an's sales efforts in the China market. This joint venture should allow us to share the financial burden of capital equipment expenditures and working capital needs with San'an to address the rapidly growing CPV market demand.

Our various manufacturing processes involve extensive quality assurance systems and performance testing. Our facilities have acquired and maintain certification status for their quality management systems. Our manufacturing facilities located in Albuquerque, New Mexico, Alhambra, California, Ivyland, Pennsylvania, and Langfang, China are registered to ISO 9001 standards.

## **Sales and Marketing**

We sell our products worldwide through our direct sales force, external sales representatives and distributors, and application engineers. Our sales force communicates with our customers' engineering, manufacturing, and purchasing personnel to determine product design, qualifications, performance, and price. Our strategy is to use our direct sales force to sell to key accounts and to expand our use of external sales representatives for increased coverage in international markets and certain domestic segments.

Throughout our sales cycle, we work closely with our customers to qualify our products into their product lines. As a result, we develop strategic and long-lasting customer relationships with products and services that are tailored to our customers' requirements. We focus our marketing communication efforts on increasing brand awareness, communicating our technologies' advantages, and generating leads for our sales force. We use a variety of marketing methods, including our website, participation at trade shows, and selective advertising to achieve these goals.

Externally, our marketing group works with customers to define requirements, characterize market trends, define new product development activities, identify cost reduction initiatives, and manage new product introductions. Internally, our marketing group communicates and manages customer requirements with the goal of ensuring that our product development activities are aligned with our customers' needs. These product development activities allow our marketing group to manage new product introductions and new product and market trends. See [Footnote 16 - Segment Data and Related Information](#) in the notes to the consolidated financial statements for disclosures related to business segment revenue, geographic revenue, and significant customers by business segment.

## **Research and Development**

Our research and development efforts have been focused on maintaining our technological competitive edge by working to improve the quality and features of our product lines. We are also making investments to expand our existing technology and infrastructure in an effort to develop new products and production technology that we can use to expand into new markets. Our industry is characterized by rapid changes in process technologies with increasing levels of functional integration. Our efforts are focused on designing new proprietary processes and products, on improving the performance of our existing materials, components, and subsystems, and on reducing costs in the product manufacturing process.

As part of the ongoing effort to cut costs, many of our projects have focused on developing lower cost versions of our existing products. We also actively compete for research and development funds from U.S. government agencies and other entities. In view of the high cost of development, we solicit research contracts that provide opportunities to enhance our core technology base and promote the commercialization of targeted products. Generally, internal research and development funding is used for the development of products that will be released within twelve months and external funding is used for long-term research and development efforts.

## [Table of Contents](#)

We believe that in order to remain competitive, we must invest significant financial resources in developing new product features and enhancements and in maintaining customer satisfaction worldwide. Research and development expense was \$32.9 million, \$29.5 million, and \$27.1 million for the fiscal years ended September 30, 2011, 2010, and 2009, respectively. As a percentage of revenue, research and development expenses were 16.4%, 15.4%, and 15.4% for the fiscal years ended September 30, 2011, 2010, and 2009, respectively. Our research and development expense consists primarily of compensation expense including non-cash stock-based compensation expense, as well as engineering and prototype costs, depreciation expense, and other overhead expenses, as they related to the design, development, and testing of our products. These costs are expensed as incurred.

In August 2011, we signed a solar rooftop CPV development agreement with our Suncore joint venture pursuant to which we will collaborate on the development and application of the current 500X and next-generation 1000X rooftop CPV systems. In summary, Suncore agreed to purchase joint ownership rights to rooftop CPV intellectual property and reimburse us 50% of all research and development costs incurred related to rooftop CPV solutions in exchange for joint ownership rights to the newly developed intellectual property. In addition, Soliant will pay us a development fee of 20% on research and development costs billed to Suncore with a maximum development fee payout of approximately \$0.2 million.

### **Intellectual Property and Licensing**

We protect our proprietary technology by applying for patents, where appropriate, and in other cases by preserving the technology, related know-how, and information as trade secrets. The success and competitive advantage enjoyed by our product lines depends heavily on our ability to obtain intellectual property protection for our proprietary technologies. We also acquire, through license grants or assignments, rights to patents on inventions originally developed by others. As of September 30, 2011, we held approximately 240 U.S. patents and approximately 40 foreign patents and had over 300 additional patent applications pending. The issued patents cover various products in the major markets we serve. Our U.S. patents will expire on varying dates between 2012 and 2029. These patents and patent applications claim protection for various aspects of current or planned commercial versions of our materials, components, subsystems, and systems.

We also have entered into license agreements with the licensing agencies of universities and other organizations, under which we have obtained exclusive or non-exclusive rights to practice inventions claimed in various patents and applications issued or pending in the U.S. or other foreign jurisdictions. We do not believe our financial obligations under any of these agreements adversely affects our business, financial condition, or results of operations.

We rely on trade secrets to protect our intellectual property when we believe that publishing patents would make it easier for others to reverse engineer our proprietary processes. We also rely on other intellectual property rights such as trademarks and copyrights where appropriate. See [Footnote 9 - Intangible Assets](#) in the notes to our consolidated financial statements for additional disclosures related to intellectual property.

### **Environmental Regulations**

We are subject to U.S. federal, state, and local laws and regulations concerning the use, storage, handling, generation, treatment, emission, release, discharge, and disposal of certain materials used in our research and development and production operations, as well as laws and regulations concerning environmental remediation, homeland security, and employee health and safety. The production of wafers and devices involves the use of certain hazardous raw materials, including, but not limited to, ammonia, phosphine, and arsine. We have in-house professionals to address compliance with applicable environmental, homeland security, and health and safety laws and regulations. We believe that we are currently in compliance with all applicable federal, state, and local environmental protection laws and regulations.

### **Competition**

The markets for our products in each of our reporting segments are extremely competitive and are characterized by rapid technological change, frequent introduction of new products, short product life cycles, and significant price erosion. We face actual and potential competition from numerous domestic and international companies. Many of these companies have greater engineering, manufacturing, marketing, and financial resources than we have.



Partial lists of our competitors in the markets in which we participate include:

### **Fiber Optics**

*CATV Networks.* Our primary competitors include Applied Optoelectronics and Finisar at the subsystem level and Applied Optoelectronics and Sumitomo Electric Device Innovations at the component product level.

*FTTP and Telecommunications Networks.* Our primary competitors include Cyoptics, Mitsubishi, and Source Photonics for FTTP components and transceivers. For 10 Gb/s tunable transponders, our primary competitors include Finisar, JDSU, NeoPhotonics, Oclaro, and Opnext.

*Data Communications, Storage Area Networks and Parallel Optic Device Products.* Our primary competitors include Avago, Finisar, and Opnext.

*Satellite Communications Networks.* Our primary competitors are Foxcom and MITEQ, Inc.

*Video Transport Products.* Our primary competitors are Evertz and Telecast.

### **Photovoltaics**

*Satellite Solar Power Generation.* In the satellite solar power products market, we primarily compete with Azur Space Solar Power, Sharp, and Spectrolab, a subsidiary of Boeing.

*Terrestrial Solar Power Generation.* In the terrestrial solar power products market, we primarily compete with Azur Space Solar Power and Spectrolab on the solar cell side, and Amonix, Concentrix, and SolFocus on the solar power systems side.

In addition to the companies listed above, we compete with many research institutions and universities for research funding. We also sell our products to current competitors and companies with the capability of becoming competitors. As the markets for our products grow, new competitors are likely to emerge and current competitors may increase their market share. In the European Union ("EU"), political and legal requirements encourage the purchase of EU-produced goods, which may put us at a competitive disadvantage against our European competitors.

There are substantial barriers to entry by new competitors across our product lines. These barriers include the large number of existing patents, the time and costs required to develop products, the technical difficulty in manufacturing semiconductor-based products, the lengthy sales and qualification cycles, and the difficulties in hiring and retaining skilled employees with the required scientific and technical backgrounds. We believe that the primary competitive factors within our current markets are product cost, yield, throughput, performance and reliability, breadth of product line, product heritage, customer satisfaction, and customer commitment to competing technologies. Competitors may develop enhancements to or future generations of competitive products that offer superior price and performance characteristics. We believe that in order to remain competitive, we must invest significant financial resources in developing new product features and enhancements and in maintaining customer satisfaction worldwide.

### **Order Backlog**

As of September 30, 2011, the order backlog for our Photovoltaics segment totaled \$43.5 million, an 18% decrease from \$53.0 million reported as of September 30, 2010. Order backlog is defined as purchase orders or supply agreements accepted by us with expected product delivery and/or services to be performed within the next twelve months. From time to time, our customers may request that we delay shipment of certain orders and our order backlog could also be adversely affected if our customers unexpectedly cancel purchase orders that we have previously accepted.

Product sales from our Fiber Optics segment are made pursuant to purchase orders, often with short lead times. These orders are subject to revision or cancellation and often are made without deposits. Fiber optics products typically ship within the same quarter in which a purchase order is received; therefore, our order backlog at any particular date is not necessarily indicative of actual revenue or the level of orders for any succeeding period. Therefore, we do not believe that order backlog is a reliable indicator of future fiber optics-related revenue.

## **Employees**

As of September 30, 2011, we had approximately 1,000 employees, including approximately 225 international employees that are located primarily in China. This represents an increase of approximately 100 employees when compared to September 30, 2010. None of our employees are covered by a collective bargaining agreement. We have never experienced any labor-related work stoppage and believe that our employee relations are good.

Competition is intense in the recruiting of personnel in the semiconductor industry. Our ability to attract and retain qualified personnel is essential to our continued success. We are focused on retaining key contributors, developing our staff, and cultivating their commitment to our Company.

## **ITEM 1A. Risk Factors**

### ***Our results of operations will be materially and adversely affected by the flooding in Thailand.***

On October 24, 2011, our primary contract manufacturer announced that, as a result of the flooding in Thailand, it had suspended operations at its facility that is used to manufacture certain of our fiber optics products. Rising water penetrated the facility and submerged most of our manufacturing and test equipment as well as our inventory at the facility.

Over the last two months, we have developed and implemented alternative manufacturing plans in our own facilities in China and in the U.S. to meet the needs of our customers. Concurrently, we have been focusing on rebuilding our high-volume manufacturing infrastructure at other Thailand locations supported by our contract manufacturer and at our own manufacturing facility in China. We have been working closely with our insurance carriers, banks, customers, and business partners to address short-term liquidity requirements and we and our manufacturing partners have placed purchase orders for long lead-time capital equipment. We expect to complete the rebuild and product qualification for our major product lines in our third quarter of fiscal 2012.

As a result of the flood, certain inventory and fixed assets were damaged or destroyed. Our contract manufacturer is required under its production agreement with us to reimburse us for losses to fixed assets and inventory incurred while at the manufacturer's facilities. We are working with our contract manufacturer (and the contract manufacturer's insurance carrier) to receive insurance proceeds to cover the direct damages to our assets that were impacted by the flood. We are not a named beneficiary of our contract manufacturer's insurance policy. The timing and amounts of the recovery from the contract manufacturer, including insurance proceeds, are uncertain at this time.

Additionally, we claimed damages under our own insurance policy relating to business interruption due to the flooding. To date, we have collected \$2.0 million from our policy and we expect to receive an additional \$3.0 million by January 2012.

With respect to measures taken to improve liquidity:

- In November 2011, we implemented various cost reduction measures, including temporary salary reduction, furlough, reduction of discretionary spending including travel, capital expenditures, and development material costs, and improve working capital management. We believe that our cost reduction activities will reduce the overall cost structure of our operations.

We also entered into an agreement with our contract manufacturer whereby our contract manufacturer will purchase equipment to rebuild our affected manufacturing lines for which we will repay our contract manufacturer from insurance proceeds received from that contract manufacturer. Additionally, we restructured our outstanding payables owed to our contract manufacturer, which delayed payments to future dates to coincide with expected timing of insurance proceeds.

- In December 2011, we signed agreements with certain customers pursuant to which they will receive an allocation of our finished goods inventory as well as a percentage of future output from our new production lines being placed into service in fiscal 2012. As consideration, we have received partial prepayments for future product shipments. These advanced payments will be used to support our working capital requirements until we receive the insurance proceeds.
- On December 21, 2011, we signed an amendment to our credit facility with Wells Fargo Bank that increased our eligible borrowing base by up to \$10 million by adding to the borrowing base formula 85% of the appraised value of the Company's equipment and 50% of the appraised value of the Company's real estate, for which the appraisals are

currently in process. In addition, Wells Fargo Bank reduced our restrictions under the excess availability financial covenant requirement from \$7.5 million to \$3.5 million through December 2012. The interest rate on outstanding borrowings was increased to LIBOR rate plus four percent. We now expect at least 70% of the total amount of credit under our \$35 million credit facility to be available for use based on the revised borrowing base formula during fiscal year 2012.

Although we have not yet definitively quantified the possible impacts of the flooding in Thailand on our business, we expect that flooding at our primary contract manufacturer in Thailand will have a significant adverse impact on our operations and our ability to meet customer demand for our fiber optics products in the near-term. Our Thailand contract manufacturer historically supported greater than 50 percent of our total fiber optics-related revenue. Our current evaluation is that our fiber optics revenue could be \$12 to \$15 million less in our first quarter of fiscal 2012 as a result of this natural disaster. There is no assurance that the disruption in our fiscal 2012 fiber optics quarterly revenue will be limited to this range, nor can it be assured that the adverse impact will be limited to the next three fiscal quarters. It is possible that our customers may seek alternative suppliers of comparable products if we are unable to meet their needs. While we believe our insurance coverage, both property and business interruption, will mitigate a portion of the adverse impact, there can be no assurance as to the extent or timing of insurance recoveries. Our Photovoltaics segment has not been affected by the floods in Thailand.

As of December 31, 2011, we will perform an impairment test of our long-lived assets related to our Fiber Optics segment. The outcome of these tests may result in recording of impairment charges. We expect to write-off the carrying value of damaged equipment and inventory which is estimated to be in the range of \$10 to \$20 million. Insurance proceeds including recoveries from our contract manufacturer will be recorded as a gain upon receipt.

## **Risks Related to Our Business**

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

For the fiscal years ended September 30, 2011, 2010, and 2009, we incurred a net loss of \$34.2 million, \$23.7 million, and \$138.8 million, respectively. Our operating results for future periods are subject to numerous uncertainties and we cannot assure you that we will not continue to experience net losses for the foreseeable future. If we are not able to increase revenue and reduce our costs, we may not be able to achieve profitability.

***We have significant liquidity and capital requirements and may require additional capital in the future. We may not be able to obtain capital when desired on favorable terms, if at all, or without dilution to our stockholders. If we are unable to obtain the additional capital necessary to meet our needs, our business may be adversely affected.***

Historically, we have consumed cash from operations and incurred significant net losses. We have managed our liquidity position through a series of cost reduction initiatives, borrowings under our line of credit agreement, capital markets transactions, and the sale of assets.

In order to meet our liquidity requirements, we may have to raise additional funds by any one or a combination of the following: issuing equity, debt or convertible debt, or selling certain product lines and/or portions of our business. There can be no guarantee that we will be able to raise additional funds on terms acceptable to us, or at all. A significant contraction in the capital markets, particularly in the technology sector, may make it difficult for us to raise additional capital if or when it is required, especially if we experience negative operating results. In the event of unforeseen circumstances, unfavorable market or economic developments, unfavorable results from operations, or if Wells Fargo Bank declares an event of default under our credit facility, our capital needs will be even greater. If adequate capital is not available to us as required, or is not available on favorable terms, our business, financial condition, results of operations, and cash flows may be materially adversely affected.

If we raise additional funds through the issuance of equity or convertible debt securities, the percentage ownership of our stockholders could be significantly diluted, and these newly-issued securities may have rights, preferences, or privileges senior to those of existing stockholders. We cannot assure you that additional financing will be available on terms favorable to us, or at all. If adequate funds are not available or are not available on acceptable terms, if and when needed, our ability to fund our operations, take advantage of unanticipated opportunities, develop or enhance our products, or otherwise respond to competitive pressures could be significantly limited.

## [Table of Contents](#)

***If we sell shares of our common stock under the committed equity line financing facility, our existing shareholders will experience immediate dilution and, as a result, our stock price may decline.***

In August 2011, we entered into a committed equity line financing facility (2011 Equity Facility) under which we may sell up to \$50 million of shares of our common stock to Commerce Court Small Cap Value Fund, Ltd. (Commerce Court) over a 24-month period subject to a maximum of 18,517,820 shares (which includes the 110,947 shares of common stock we issued to Commerce Court in August 2011 as compensation for its commitment to enter into the 2011 Equity Facility, except in the event the average price per share paid by Commerce Court under the 2011 Equity Facility exceeds \$1.851 per share, in which case we may sell additional shares of common stock to Commerce Court under the 2011 Equity Facility. A sale of shares of our common stock pursuant to the 2011 Equity Facility would have a dilutive impact on our existing shareholders and is subject to pricing above \$1 per share of our common stock, unless a waiver is received. Commerce Court may resell some or all of the shares we issue to it under the 2011 Equity Facility and such sales could cause the market price of our common stock to decline.

***Our operating results may be adversely affected by unfavorable economic and market conditions.***

We have significant intangible assets and long-lived assets recorded on our balance sheet. We will continue to evaluate the recoverability of the carrying amount of our goodwill and intangible assets on an ongoing basis, and we may incur substantial impairment charges, which would adversely affect our financial results. There can be no assurance that the outcome of such reviews in the future will not result in substantial impairment charges. Impairment assessment inherently involves judgment as to assumptions about expected future cash flows and the impact of market conditions on those assumptions. Future events and changing market conditions may impact our assumptions as to prices, costs, holding periods, or other factors that may result in changes in our estimates of future cash flows. Although we believe the assumptions we used in testing for impairment are reasonable, significant changes in any one of our assumptions could produce a significantly different result. In any period where our stock price, as determined by our market capitalization, is less than our book value, this too could indicate a potential impairment and we may be required to record an impairment charge in that period.

***We are subject to the cyclical nature of the markets in which we compete and any future downturn may reduce demand for our products and revenue.***

In the past, the markets in which we compete have experienced significant downturns, often connected with, or in anticipation of, the maturation of product cycles, for both manufacturers' and their customers' products, and declining general economic conditions. These downturns have been characterized by diminished product demand, production overcapacity, high inventory levels, and accelerated erosion of average selling prices. These markets are impacted by the aggregate capital expenditures of service providers and enterprises as they build out and upgrade their network infrastructure. These markets are highly cyclical and characterized by constant and rapid technological change, pricing pressures, evolving standards, and wide fluctuations in product supply and demand.

We may experience substantial period-to-period fluctuations in future results of operations. Any future downturn in the markets in which we compete, or changes in demand for our products from our customers, could result in a significant reduction in our revenue. It may also increase the volatility of the price of our common stock.

In addition, the communication networks industry from time to time has experienced and may again experience a pronounced downturn. To respond to a downturn, many service providers and enterprises may slow their capital expenditures, cancel or delay new developments, reduce their workforces and inventories, and take a cautious approach to acquiring new equipment and technologies, any of which could cause our results of operations to fluctuate from period to period and harm our business.

***If spending for optical communications networks does not continue to grow as expected, our business may suffer.***

Our future success depends on continued capital investment in global communications networks infrastructure and on continued demand for high-bandwidth, high-speed communications networks and the ability of original equipment manufacturers to meet this demand. Spending on communications networks is limited by several factors, including limited investment resources, uncertainty regarding the long-term evolution and sustainability of service provider business models, and a changing regulatory environment. We cannot be certain that demand for bandwidth-intensive content will continue to grow at the same pace in the future or that communications service providers will continue to increase spending to meet such demand. If expectations for growth of communications networks and bandwidth consumption are not realized and investment in communications networks does not grow as anticipated, our business, results of operations, and gross margins could be harmed.

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

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

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

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

- a downturn in the markets for our customers' products, particularly the telecom components markets;
- the impact of the flooding in Thailand and whether we are able to restore affected manufacturing and supply lines and manage the effect of the flooding on our liquidity position;
- discontinuation by our vendors, or unavailability of, components or services used in our products;
- disruptions or delays in our manufacturing processes or in our supply of raw materials or product components;
- a failure to anticipate changing customer product requirements;
- market acceptance of our products;
- cancellations or postponements of previously placed orders;
- increased financing costs or any inability to obtain necessary financing;
- the impact on our business of current or future cost reduction measures;
- a loss of key personnel or the shortage of available skilled workers;
- results of our joint venture activities;
- economic conditions in various geographic areas where we or our customers do business;
- significant warranty claims, including those not covered by our suppliers;
- market demand for the products and services provided by our customers;
- other conditions affecting the timing of customer orders;
- reductions in prices for our products or increases in the costs of our raw materials;
- effects of competitive pricing pressures, including decreases in average selling prices of our products;
- fluctuations in manufacturing yields;
- obsolescence of products;
- research and development expenses incurred associated with new product introductions;
- natural disasters, such as hurricanes, earthquakes, fires, and floods;
- changes in the timing and size of orders by our customers;
- the continuation or worsening of the current global economic slowdown;
- the emergence of new industry standards;
- the loss or gain of significant customers;

## [Table of Contents](#)

- the introduction of new products and manufacturing processes;
- intellectual property disputes;
- customs, import/export, and other regulations of the countries in which we do business;
- financial results of joint venture activities and timing of other M&A activities;
- acts of terrorism or violence and international conflicts or crises;
- the effects of competitive pricing pressures, including decreases in average selling prices of our products.

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

As a result of the foregoing factors, we believe that period-to-period comparisons of our results of operations should not be solely relied upon as indicators of future performance.

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

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

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

Our stock price has experienced significant price and volume volatility for the past several years, and our stock price is likely to experience significant volatility in the future as a result of numerous factors outside our control. Significant declines in our stock price may interfere with our ability to raise additional funds through equity financing or to finance strategic transactions with our stock. A significant adverse change in the market value of our common stock could also trigger an interim goodwill impairment test that may result in a non-cash impairment charge. We have historically used equity incentive compensation as part of our overall compensation arrangements. The effectiveness of equity incentive compensation in retaining key employees may be adversely impacted by volatility in our stock price. In addition, there may be increased risk of securities litigation following periods of fluctuations in our stock price. Securities class action lawsuits are often brought against companies after periods of volatility in the market price of their securities. These and other consequences of volatility in our stock price which could be exacerbated by the recent worldwide financial crisis could have the effect of diverting management's attention and could materially harm our business.

***The market for our terrestrial solar power products for utility-scale applications may take time to develop, is rapidly changing and extremely price-sensitive, and involves issues with which we have little experience.***

We have invested and intend to continue to invest significant resources in the adaptation of our high-efficiency compound semiconductor-based GaAs solar cell products for terrestrial applications, including the sale of both CPV components and solar power systems. This investment carries with it significant risk. Factors such as changes in energy prices or the development of new and efficient alternative energy technologies could limit growth in, or reduce the market for, our terrestrial solar power products. In addition, we have experienced difficulties in applying our space-based solar products to terrestrial applications. We may experience further difficulties in the future in competing with new and emerging terrestrial solar power products, which we have determined to be extremely price sensitive and rapidly changing.

## [Table of Contents](#)

There can be no assurance that our bids on solar power installations will be accepted, that we will win any of these bids, that our CPV systems will be qualified for these projects, or that governments will continue to offer electric supply contracts and other incentives that will make our products economically viable. If our terrestrial solar power cell products are not cost competitive or accepted by the market, our business, financial condition, results of operations, and cash flows may be adversely affected.

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

### ***Feed-in tariff and subsidy reductions could impact revenue, results of operations, and cash flows in the renewable energy markets.***

Feed-in tariffs have been a significant driver in the growth of the solar industry, with countries throughout the world providing incentives to spur adoption of renewable energy. While many countries, including the United Kingdom, certain regions in the United States and Canada, India and China, are beginning to adopt feed-in tariffs and varying subsidies, others, including Spain, are re-evaluating the level of incentive they wish to provide. As we do business in these regions, an elimination or reduction of applicable feed-in tariffs could adversely affect the results of our operations, and could result in a significant decline in demand and price levels for renewable energy products, which could have a material adverse effect on our business, financial condition, results of operations, and cash flows.

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

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

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

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

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



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

For the fiscal years ended September 30, 2011, 2010, and 2009, our top five customers accounted for 40%, 44%, and 43%, respectively, of our annual consolidated revenue. There can be no assurance that we will continue to achieve historical levels of sales of our products to our largest customers. Even though our customer base is expected to increase and our revenue streams to diversify, a substantial portion of our revenue continues to depend on sales to a limited number of customers. Our agreements with these customers may be cancelled if we fail to meet certain product specifications or materially breach the agreement, and our customers may seek to renegotiate the terms of current agreements or renewals. The loss of or a reduction in sales to one or more of our larger customers could have a material adverse effect on our business, financial condition, results of operations, and cash flows.

***Customer demand is difficult to forecast and, as a result, we may be unable to optimally match production with customer demand.***

We make planning and spending decisions, including determining the levels of business that we will seek and accept, production schedules, component procurement commitments, personnel needs and other resource requirements, based on our estimates of customer demand. The majority of our products are purchased pursuant to individual purchase orders. While our customers generally provide us with their demand forecasts, they are typically not contractually committed to buy any quantity of products beyond firm purchase orders. The short-term nature of our customer commitments and the possibility of unexpected changes in demand for their products limit our ability to accurately predict future customer demand. On occasion, customers have required rapid increases in production, which has strained our resources. We may not have sufficient capacity at any given time to meet the volume demands of our customers, or one or more of our suppliers may not have sufficient capacity at any given time to meet our volume demands. Conversely, a downturn in the markets in which our customers compete can cause, and in the past has caused, our customers to significantly reduce the amount of products ordered from us or to cancel existing orders, leading to lower utilization of our facilities. Because many of our costs and operating expenses are relatively fixed, reduction in customer demand would have an adverse effect on our gross margin, income (loss) from operations, and cash flow. During an industry downturn, there is also a higher risk that our trade receivables would be uncollectible.

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

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

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

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



***Our operating results could be harmed if we are unable to obtain timely deliveries of sufficient components of acceptable quality from sole or limited sources of materials, components, or services, or if the prices of components for which we do not have alternative sources increase.***

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

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

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

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

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

- unexpected changes in regulatory requirements;
- legal uncertainties regarding liability, tariffs, and other trade barriers;
- inadequate protection of intellectual property in some countries;
- greater incidence of shipping delays;
- greater difficulty in overseeing manufacturing operations;
- greater difficulty in hiring talent needed to oversee manufacturing operations;
- potential political and economic instability and natural disasters;
- potential adverse actions by the U.S. government pursuant to its stated intention to reduce the loss of U.S. jobs;
- trade and travel restrictions; and,
- the outbreak of infectious diseases which could result in travel restrictions or the closure of the facilities of our contract manufacturers.

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

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

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

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

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

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

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

We may need to increase our research and development and/or capital expenditures and expenses above our historical run-rate model in order to attempt to improve our existing technology and develop new technology. Increasing our investments in research and development of technology could cause our cost structure to fall out of alignment with demand for our products, which would have a negative impact on our financial results. If we are unable to obtain financing or implement cost reduction measures necessary to fund these type of expenditures, we may be unable to improve our technology or develop new technologies, which could have a material adverse effect on our business, financial condition and results of operations.

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

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

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

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

## [Table of Contents](#)

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

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

We manufacture many of our wafers and devices in our own production facilities. Difficulties in the production process, such as contamination, raw material quality issues, human error, or equipment failure, could cause a substantial percentage of wafers and devices to be nonfunctional. These problems may be difficult to detect at an early stage of the manufacturing process and often are time-consuming and expensive to correct. Lower-than-expected production yields may delay shipments or result in unexpected levels of warranty claims, either of which could adversely affect our results of operations and cash flows. We have experienced difficulties in achieving planned yields in the past, particularly in pre-production and upon initial commencement of full production volumes, which have adversely affected our gross margins. Because the majority of our manufacturing costs are fixed, achieving planned production yields is critical to our results of operations and cash flows. Changes in manufacturing processes required as a result of changes in product specifications, changing customer needs and the introduction of new product lines could significantly reduce our manufacturing yields, resulting in low or negative margins on those products. Also, we have substantial risk of interruption in manufacturing resulting from fire, natural disaster, equipment failures, or similar events, because we manufacture most of our products using a few facilities, and do not have back-up facilities available for manufacturing these products. We could also incur significant costs to repair and/or replace products that are defective and in some cases costly product redesigns and/or rework may be required to correct a defect. Additionally, any defect could adversely affect our reputation and result in the loss of future orders.

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

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

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

***It could be discovered that our products contain defects that may cause us to incur significant costs, divert management's attention, result in a loss of customers, and result in product liability claims.***

Our products are complex and undergo quality testing and formal qualification by our customers and us. However, defects may occur from time to time. Our customers' testing procedures involve evaluating our products under likely and foreseeable failure scenarios and over varying amounts of time. For various reasons, such as the occurrence of performance problems that are unforeseeable in testing or that are detected only when products age or are operated under peak stress conditions, our products may fail to perform as expected long after customer acceptance. Failures could result from faulty components or design, problems in manufacturing, or other unforeseen reasons. For the majority of our products, we provide a product warranty of one year or less from date of shipment. For select customers, we provide extended warranties beyond our normal product warranty period for specified failures on a case-by-case basis. As a result, we could incur significant costs to repair or replace

## [Table of Contents](#)

defective products under warranty, particularly when such failures occur in installed systems. We have experienced failures in the past and will continue to face this risk going forward, as our products are widely deployed throughout the world in multiple demanding environments and applications. In addition, we may in certain circumstances honor warranty claims after the warranty has expired or for problems not covered by warranty in order to maintain customer relationships. Any significant product failure could result in lost future sales of the affected product and other products, as well as customer relations problems, litigation, and damage to our reputation.

In addition, our products are typically embedded in, or deployed in conjunction with, our customers' products, which incorporate a variety of components, modules and subsystems and may be expected to interoperate with modules and subsystems produced by third parties. As a result, not all defects are immediately detectable and when problems occur, it may be difficult to identify the source of the problem. These problems may cause us to incur significant damages or warranty and repair costs, divert the attention of our engineering personnel from our product development efforts, and cause significant customer relations problems or loss of customers, all of which would harm our business. The occurrence of any defects in our products could also give rise to liability for damages caused by such defects. Although we carry product liability insurance to mitigate this risk, insurance may not adequately cover costs that may arise from defects in our products or otherwise, nor will it protect us from reputational harm that may result from such defects.

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

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

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

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

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

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

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

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

Risks associated with the absence of long-term purchase commitments with our customers include the following:

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

These risks are increased by the fact that our customers in this market are large sophisticated companies which have considerable purchasing power and control over their suppliers. In the Fiber Optics market, we generally sell our products pursuant to individual purchase orders, which often have extremely short lead times. If we are unable to fulfill these orders in a timely manner, it is likely that we will lose sales and customers. In addition, we sell some of our products to the U.S. government and related entities. These contracts are generally subject to termination for convenience provisions and may be cancelled at any time.

Cancellations or rescheduling of customer orders could result in the delay or loss of anticipated sales without allowing us sufficient time to reduce, or delay the incurrence of, our corresponding inventory and operating expenses. In addition, changes in forecasts or the timing of orders expose us to the risks of inventory shortages or excess inventory.

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

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

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

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

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

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

## [Table of Contents](#)

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

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

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

Our business is subject to U.S. government review. We are sometimes subject to certain U.S. government reviews of our business practices due to our participation in government contracts. Any adverse finding in such inquiry or investigation could have an adverse effect on our business, results of operations, and cash flows.

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

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

For the fiscal years ended September 30, 2011, 2010, and 2009, sales to customers located outside the U.S. accounted for approximately 30%, 40%, and 40%, respectively, of our annual consolidated revenue, with revenue assigned to geographic regions based on our customers' billing address. Sales to customers in Far East Asia represent the majority of our international sales. We believe that international sales will continue to account for a significant percentage of our revenue as we seek international expansion opportunities. Because of this, the following international commercial risks may adversely affect our revenue:

- political and economic instability or changes in U.S. government policy with respect to these foreign countries may inhibit export of our products and limit potential customers' access to U.S. dollars in a country or region in which those potential customers are located;
- we may experience difficulties in enforcing our legal contracts or the collecting of foreign accounts receivable in a timely manner and we may be forced to write off these receivables;
- tariffs and other barriers may make our products less cost competitive;
- the laws of certain foreign countries may not adequately protect our trade secrets and intellectual property or may be burdensome to comply with;
- potentially adverse tax consequences to our customers may damage our cost competitiveness;
- customs, import/export, and other regulations of the countries in which we do business may adversely affect our business;

- currency fluctuations may make our products less cost competitive, affecting overseas demand for our products or otherwise adversely affecting our business; and,
- language and other cultural barriers may require us to expend additional resources competing in foreign markets or hinder our ability to effectively compete.

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

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

EMCORE Hong Kong, Ltd., a wholly owned subsidiary of EMCORE, has a manufacturing facility in Langfang, China. Our Chinese subsidiary, Langfang EMCORE Optoelectronics Co. Ltd., is located approximately 20 miles southeast of Beijing and currently occupies a space of 48,000 square feet with a Class-10,000 clean room for optoelectronic device packaging. Another 40,000 square feet is available for future expansion. We have transferred the manufacturing of cost sensitive optoelectronic devices to this facility. This facility, along with a strategic alignment with our existing contract-manufacturing partners, should enable us to improve our cost structure and gross margins across product lines. We expect to develop and provide improved service to our global customers by having a local presence in Asia.

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

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

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

***Our Suncore joint venture will be subject to additional risks and uncertainties that may have an adverse effect on the joint venture's performance.***

The Suncore joint venture requires the joint venture parties to provide financial and technical support to the joint venture entity. The success of the joint venture will depend on the joint venture parties satisfying these obligations, as well as its ability to compete in the emerging renewable energy markets in China and other regions, which will require the joint venture entity to keep pace with rapidly developing technologies and newly emerging competitors. In addition, the success of the joint venture depends on its ability to retain key personnel and successfully penetrate the markets for its products. Because we share ownership and management of the joint venture, the management of these risks will not be entirely within our control, which may have a material adverse effect on the joint venture's performance.



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

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

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

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

Our success and competitive position depends on protecting our trade secrets and other intellectual property. Our strategy is to rely on trade secrets and patents to protect our manufacturing and sales processes and products. Effective trade secret and patent protection may be unavailable or limited in certain foreign jurisdictions. In addition, in certain circumstances, our intellectual property rights associated with government contracts may be limited. Also, reliance on trade secrets is only an effective business practice if trade secrets remain undisclosed and a proprietary product or process is not reverse engineered or independently developed. We take measures to protect our trade secrets, including executing non-disclosure agreements with our employees, customers, suppliers, and joint venture partners. If parties breach these agreements, the measures we take are not properly implemented, or if a competitor is able to reproduce or otherwise capitalize on our technology despite the safeguards we have in place, it may be difficult, expensive, or impossible for us to obtain necessary legal protection. Disclosure of our trade secrets or reverse engineering of our proprietary products, processes, or devices could adversely affect our business, financial condition, results of operations, and cash flows.

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

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

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

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



## [Table of Contents](#)

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

The unfavorable ruling by the U.S. International Trade Commission (ITC) has had a negative impact on our parallel optics device product line within our Fiber Optics segment. While we are currently working on qualifying a new product that we believe would not be subject to the ITC ruling, we have no assurance that we will be successful in this process. Additionally, the time to qualify new products with customers can take up to several calendar quarters. See [Footnote 14 - Commitments and Contingencies](#) in the notes to our consolidated financial statements for disclosures related to the Avago litigation and the ITC ruling.

***If we fail to protect, or incur significant costs in defending, our intellectual property and other proprietary rights, our business and results of operations could be materially harmed.***

Our success depends to a significant degree on our ability to protect our intellectual property and other proprietary rights. We rely on a combination of patent, trademark, trade secret and unfair competition laws, as well as license agreements and other contractual provisions, to establish and protect our intellectual property and other proprietary rights. We have applied for patent registrations in the United States and selected international jurisdictions, most of which have been issued. We cannot guarantee that our pending applications will be approved by the applicable governmental authorities. Moreover, our existing and future patents and trademarks may not be sufficiently broad to protect our proprietary rights or may be held invalid or unenforceable in court. Failure to obtain patents registrations or a successful challenge to our registrations in the United States or other foreign countries may limit our ability to protect the intellectual property rights that these applications and registrations are intended to cover.

We also attempt to protect our intellectual property, including our trade secrets and know-how, through the use of trade secret and other intellectual property laws, and contractual provisions. We enter into confidentiality and invention assignment agreements with our employees and independent consultants. We also use non-disclosure agreements with other third parties who may have access to our proprietary technologies and information. Such measures, however, provide only limited protection, and there can be no assurance that our confidentiality and non-disclosure agreements will not be breached, especially after our employees or those of our third-party contract manufacturers end their employment or engagement, and that our trade secrets will not otherwise become known by competitors or that we will have adequate remedies in the event of unauthorized use or disclosure of proprietary information. Unauthorized third parties may try to copy or reverse engineer our products or portions of our products, otherwise obtain and use our intellectual property, or may independently develop similar or equivalent trade secrets or know-how. If we fail to protect our intellectual property and other proprietary rights, or if such intellectual property and proprietary rights are infringed or misappropriated, our business, results of operations or financial condition could be materially harmed.

Policing unauthorized use of our technology is difficult, and we cannot be certain that the steps we have taken will prevent the misappropriation, unauthorized use, or other infringement of our intellectual property rights. Further, we may not be able to effectively protect our intellectual property rights from misappropriation or other infringement in foreign countries where we have not applied for patent protections, and where effective patent, trademark, trade secret, and other intellectual property laws may be unavailable, or may not protect our proprietary rights as fully as U.S. law.

In the future, we may need to take legal actions to prevent third parties from infringing upon or misappropriating our intellectual property or from otherwise gaining access to our technology. Protecting and enforcing our intellectual property rights and determining their validity and scope could result in significant litigation costs and require significant time and attention from our technical and management personnel, which could significantly harm our business. In addition, we may not prevail in such proceedings. An adverse outcome of such proceedings may reduce our competitive advantage or otherwise harm our financial condition and our business.

***We may be involved in intellectual property disputes in the future, which could divert management's attention, cause us to incur significant costs, and prevent us from selling or using the challenged technology.***

Participants in the markets in which we sell our products have experienced litigation regarding patent and other intellectual property rights. Regardless of their merit, responding to claims against us alleging infringement of certain patents or other intellectual property rights of others can be time consuming, divert management's attention and resources, and may cause us to incur significant expenses. While we do not believe that our products infringe upon the intellectual property rights of other

## [Table of Contents](#)

parties and meritorious defenses would exist with respect to any assertions to the contrary, we cannot be certain that our products would not be found infringing the intellectual property rights of others.

***We may be obligated to indemnify our customers for claims that our intellectual property infringes the rights of others, which may result in substantial expenses to us.***

We often indemnify our customers for intellectual property claims made against them for products incorporating our technology. As such, claims against our customers may require us to incur substantial expenses, such as legal expenses, damages for past infringement or royalties for future use. Future indemnity claims could adversely affect our relationships with our customers and result in substantial costs to us.

***We face certain litigation risks that could harm our business.***

We are and may become subject to various legal proceedings and claims that arise in or outside the ordinary course of business. The results of complex legal proceedings are difficult to predict. Moreover, many of the complaints filed against us do not specify the amount of damages that plaintiffs seek, and we therefore are unable to estimate the possible range of damages that might be incurred should these lawsuits be resolved against us. While we are unable to estimate the potential damages arising from such lawsuits, certain of them assert types of claims that, if resolved against us, could give rise to substantial damages. Thus, an unfavorable outcome or settlement of one or more of these lawsuits could have a material adverse effect on our financial condition, liquidity, and results of operations. Even if these lawsuits are not resolved against us, the uncertainty and expense associated with unresolved lawsuits could seriously harm our business, financial condition, and reputation. Litigation is costly, time-consuming and disruptive to normal business operations. The costs of defending these lawsuits, particularly the securities class actions and stockholder derivative actions, have been significant, will continue to be costly, and may not be covered by our insurance policies. The defense of these lawsuits could also result in continued diversion of our management's time and attention away from business operations, which could harm our business. For additional discussion regarding litigation in which we are involved, see [Footnote 14 - Commitments and Contingencies](#) in the notes to our consolidated financial statements.

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

We are subject to environmental and health and safety laws and regulations and must obtain certain permits and licenses relating to the use of hazardous materials. Our production activities involve the use of certain hazardous raw materials, including, but not limited to, ammonia, gallium, phosphine, and arsine. If our control systems are unsuccessful in preventing a release of these materials into the environment or other adverse environmental conditions or human exposure occurs, we could experience interruptions in our operations and incur substantial remediation and other costs or liabilities. In addition, certain foreign laws and regulations place restrictions on the concentration of certain hazardous materials, including, but not limited to, lead, mercury, and cadmium, in our products. Failure to comply with such laws and regulations could subject us to future liabilities or result in the limitation or suspension of the sale or production of our products. These regulations include the European Union's (EU) Restrictions on Hazardous Substances and Directive on Waste Electrical and Electronic Equipment. Failure to comply with environmental and health and safety laws and regulations may limit our ability to export products to the EU and could adversely affect our business, financial condition, results of operations, and cash flows. In addition, the Department of Homeland Security has commenced a program to evaluate the security of certain chemicals which may be of interest to terrorists, including chemicals utilized by us. This evaluation may lead to regulations or restrictions affecting our ability to utilize these chemicals or the costs of doing so.

In connection with our compliance with such environmental laws and regulations, as well as our compliance with industry environmental initiatives, the standards of business conduct required by some of our customers, and our commitment to sound corporate citizenship in all aspects of our business, we could incur substantial compliance and operating costs and be subject to disruptions to our operations. In addition, in the last few years, there has been increased media scrutiny and associated reports focusing on a potential link between working in semiconductor manufacturing clean room environments and certain illnesses, primarily different types of cancers. Regulatory agencies and industry associations have begun to study the issue to see if any actual correlation exists. Because we utilize clean rooms, we may become subject to liability claims. These reports may also affect our ability to recruit and retain employees. If we were found to be in violation of environmental and safety regulations laws or noncompliance with industry initiatives or standards of conduct, we could be subject to government fines or liabilities

owed to our customers, which could have a material adverse effect on our business, financial condition, results of operations, and cash flows.

Additionally, increasing efforts to control emissions of greenhouse gases, or GHG, may also impact us. Additional restrictions, limits, taxes, or other controls on GHG emissions could significantly increase our operating costs and, while it is not possible to estimate the specific impact any final GHG regulations could have on our operations, there can be no assurance that these measures will not have significant additional impact on us.

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

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

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

For certain risks, we do not maintain insurance coverage because of cost or availability. Because we retain some portion of our insurable risks, and in some cases self-insure completely, unforeseen or catastrophic losses in excess of insured limits may have a material adverse effect on our business, financial position, results of operations, and cash flows.

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

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

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

In addition, implementation of new software programs, including the implementation of an enterprise resource planning program which we intend to install at one or more of our divisions during fiscal 2012, may have adverse impact on us, including interruption of operations, loss of data, budget overruns, and the consumption of management time and resources.

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

We are subject to the ongoing internal control provisions of Section 404 of the Sarbanes-Oxley Act of 2002. These provisions provide for the identification of material weaknesses in internal control over financial reporting, which is a process to provide reasonable assurance regarding the reliability of financial reporting for external purposes in accordance with U.S. GAAP. If we cannot provide reliable and timely financial reports, our brand, operating results, and the market value of our equity securities

could be harmed. We have in the past discovered, and may in the future discover, areas of our internal controls that need improvement.

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

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

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

New Jersey law and our certificate of incorporation, as amended, contain certain provisions that could delay or prevent a takeover attempt that our shareholders may consider to be in their best interests. Our Board of Directors is divided into three classes. Directors are elected to serve staggered three-year terms and are not subject to removal except for cause by the vote of the holders of at least 80% of our capital stock. In addition, approval by the holders of 80% of our voting stock is required for certain business combinations unless these transactions meet certain fair price criteria and procedural requirements or are approved by two-thirds of our continuing directors. We may in the future adopt other measures that may have the effect of delaying or discouraging an unsolicited takeover, even if the takeover were at a premium price or favored by a majority of unaffiliated shareholders. Certain of these measures may be adopted without any further vote or action by our shareholders and this could depress the price of our common stock.

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

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

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

## [Table of Contents](#)

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

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

We prepare our financial statements to conform to U.S. GAAP. These accounting principles are subject to interpretation by the American Institute of Certified Public Accountants, the SEC, and various bodies formed to interpret and create appropriate accounting policies. A change in those policies can have a significant effect on our consolidated reported results and may affect our reporting of transactions completed before a change in accounting principle is announced. Changes to those rules or the questioning of current practices may adversely affect our reported financial results or the way we conduct our business. For example, the SEC issued its long-anticipated proposed International Financial Reporting Standards (IFRS) roadmap outlining milestones that, if achieved, could lead to mandatory transition to IFRS for U.S. domestic registrants. IFRS is a comprehensive series of accounting standards published by the International Accounting Standards Board. Under the proposed roadmap, we could be required to prepare financial statements in accordance with IFRS. We are currently assessing the impact that this potential change could have on our consolidated financial statements and will continue to monitor the development of the potential implementation of IFRS.

### ***Natural disasters or other catastrophic events could have a material adverse effect on our business.***

Natural disasters, such as hurricanes, earthquakes, fires, and floods, could materially adversely affect our operations and financial performance. As further discussed elsewhere in this Annual Report, we expect that the flooding in Thailand will have a material adverse impact on our results of operations, financial condition, and cash flow, as well as on our ability to meet customer demand for our fiber optics products. We have not yet completely assessed the impact of the flooding and may experience consequences that are even more severe than we currently expect. In addition, our business could be further affected by other natural disasters. Such events could result in physical damage to one or more of our facilities, the temporary closure of one or more of our facilities or those of our suppliers, a temporary lack of an adequate work force in a market, a temporary or long-term disruption in the supply of products from some local and overseas suppliers, a temporary disruption in the transport of goods from overseas, and delays in the delivery of goods. Public health issues, whether occurring in the United States or abroad, could disrupt our operations, disrupt the operations of suppliers or customers, or have an adverse impact on customer demand. As a result of any of these events, we may be required to suspend operations in some or all of our locations, which could have a material adverse effect on our business, financial condition, results of operations, and cash flows. These events could also reduce demand for our products or make it difficult or impossible to receive products from suppliers. Although we maintain business interruption insurance and other insurance intended to cover some or all of these risks, such insurance may be inadequate, whether because of coverage amount, policy limitations, the financial viability of the insurance companies issuing such policies, or other reasons. See [Explanatory Note](#) on page 4 for a discussion associated with the impact of the floods in Thailand on our operations.

### ***Because we do not intend to pay dividends, stockholders will benefit from an investment in our common stock only if it appreciates in value.***

We have never declared or paid any dividends on our common stock. We anticipate that we will retain any future earnings to support operations and to finance the development of our business and do not expect to pay cash dividends in the foreseeable future. As a result, the success of an investment in our common stock will depend entirely upon any future appreciation in its value. There is no guarantee that our common stock will appreciate in value or even maintain the price at which stockholders have purchased their shares.

\*\*\*

*The risks above are not the only risks we face. If any of the events described in our risk factors actually occur, or if additional risks and uncertainties not presently known to us or that we currently deem immaterial, materialize, then our business, financial condition, results of operations, and cash flows could be materially affected. Our risk factors include forward-looking statements and our actual results may differ substantially from those discussed in these forward-looking statements.*

## ITEM 1B. Unresolved Staff Comments

Not Applicable.

## ITEM 2. Properties

The following chart contains certain information regarding each of our principal facilities.

<u>Location</u>	<u>Function</u>	<u>Approximate Square Footage</u>	<u>Term (in calendar year)</u>
Albuquerque, New Mexico	Corporate Headquarters Manufacturing and research and development facilities for both photovoltaic and fiber optics products	165,000	Facilities are 100% owned by us. Certain land is leased, which expires in 2050
Alhambra, California	Manufacturing and research and development facilities for fiber optics products	83,000	Multiple leases, which expire in 2011 through 2012 <sup>(1)</sup> <sup>(2)</sup>
Newark, California	Research and development facilities for fiber optics products	55,000	Multiple leases, which expire in 2013 <sup>(1)</sup>
Langfang, China	Manufacturing facility for fiber optics products	48,000	Multiple leases, which expire in 2012 through 2013 <sup>(1)</sup>
Ivyland, Pennsylvania	Manufacturing and research and development facility for fiber optics products	9,000	Lease expires in 2016 <sup>(1)</sup>
Taipei City, Taiwan	Research and development facility for fiber optics products	7,000	Lease expires in 2013 <sup>(1)</sup>
Somerset, New Jersey	Research and development facility	5,000	Lease expires in 2012

### Footnotes

(1) Lease has the option to be renewed by us, subject to inflation and other adjustments.

(2) Management is in negotiations to renew certain facility leases in Alhambra which have expired but are being maintained on a month-to-month basis.

## ITEM 3. Legal Proceedings

See [Footnote 14 - Commitments and Contingencies](#) in the notes to our consolidated financial statements for disclosures related to our legal proceedings.

## PART II.

### ITEM 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Our common stock is traded on the NASDAQ Global Market and is quoted under the symbol "EMKR". The reported closing sale price of our common stock on December 21, 2011 was \$0.89 per share. As of December 21, 2011, we had approximately 162 shareholders of record. Many of our shares of common stock are held by brokers and other institutions on behalf of shareholders, and we are unable to estimate the number of these shareholders.

#### Price Range of Common Stock

The price ranges presented below represents the highest and lowest sales prices for our common stock on the NASDAQ Global Market during each quarter over the two most recent fiscal years.

High and Low Sales Price Ranges of EMCORE Corporation's Common Stock	<u>First Quarter</u>	<u>Second Quarter</u>	<u>Third Quarter</u>	<u>Fourth Quarter</u>
Fiscal 2011	\$0.78 - \$1.65	\$1.06 - \$3.25	\$2.05 - \$2.85	\$0.96 - \$3.10
Fiscal 2010	\$0.83 - \$1.35	\$0.95 - \$1.31	\$0.81 - \$1.72	\$0.71 - \$1.07

#### Dividend Policy

We have never declared or paid dividends on our common stock since our formation. We currently do not intend to pay dividends on our common stock in the foreseeable future so that we may reinvest any earnings in our business. The payment of dividends, if any, in the future is at the discretion of the Board of Directors. Under the terms of our credit facility with Wells Fargo Bank, we agreed to not issue any dividends until full payment is made on any outstanding debt under the credit facility.

#### Sales of Unregistered Securities

On May 31, 2011, we completed an equity private placement transaction with Shanghai Di Feng Investment Co. Ltd. pursuant to which we sold 4,407,603 shares of our common stock for approximately \$9.7 million. The common stock was offered solely to "accredited investors" as defined in Regulation D promulgated under the Securities Act of 1933, as amended, the Act, in reliance on the exemptions from registration afforded by Section 4(2) of the Act. In connection with this transaction, we also entered into a registration rights agreement pursuant to which we agreed to register the shares issued with the SEC on a Form S-1 registration statement within 60 days of the closing date of the transaction and to use commercially reasonable efforts to have the registration statement declared effective within 120 days of the closing date. We filed the registration statement on Form S-1 with the SEC on July 25, 2011 and we received a Notice of Effectiveness from the SEC on August 15, 2011. We used the proceeds from this private placement for general corporate purposes.

On August 16, 2011, we entered into a committed equity line financing facility (2011 Equity Facility) with Commerce Court Small Cap Value Fund, Ltd. (Commerce Court) pursuant to which we may, upon the terms and subject to the conditions set forth therein, require Commerce Court to purchase up to \$50.0 million in shares of our common stock over the 24-month term following the effectiveness of a resale registration statement, subject to limitations set forth in the agreement with Commerce Court. In consideration for Commerce Court's execution and delivery of the 2011 Equity Facility, we issued Commerce Court 110,947 shares of our common stock, which we refer to as the Commitment Shares. The issuance of the Commitment Shares, is exempt from registration under the Securities Act pursuant to the exemption for transactions by an issuer not involving any public offering under Section 4(2) of and Regulation D under the Securities Act. In connection with this transaction, we entered into a registration rights agreement pursuant to which we agreed to prepare and file with the SEC one or more registration statements on Form S-1, or such other form reasonably acceptable to Commerce Court and its legal counsel, for the purpose of registering the resale of the maximum shares of common stock issuable under the 2011 Equity Facility, including the Commitment Shares. We agreed to file the initial registration statement with the SEC within 60 days of the closing date of the transaction and to cause such registration statement to be declared effective by the SEC within the earlier of (i) the fifth

[Table of Contents](#)

business day after we are notified by the SEC that the initial registration statement will not be subject to review (or further review), or (ii) 120 days of the 2011 Equity Facility (180 days if the registration statement is reviewed by the SEC). We filed the registration statement on Form S-1 with the SEC on September 13, 2011 and we received a Notice of Effectiveness from the SEC on September 28, 2011. As of September 30, 2011, there were no draw down transactions completed under the 2011 Equity Facility.

**Equity Compensation Plan Information**

<b>Plan Category</b>	<b>Number of securities to be issued upon exercise of outstanding options, warrants and rights</b>	<b>Weighted average exercise price of outstanding options, warrants and rights</b>	<b>Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))</b>
	(a)	(b)	(c)
Equity compensation plans approved by security holders	9,036,788 (1)	\$4.44	3,161,710 (2)
Equity compensation plans not approved by security holders	—	—	—

(1) Consists of outstanding stock options as of September 30, 2011.

(2) Consists of shares available for grant under the EMCORE Corporation 2010 Equity Incentive Plan.

We compensate our non-employee directors for their services pursuant to the 2007 Directors' Stock Award Plan. In accordance with the 2007 Directors' Stock Award Plan, payments of director fees are made in shares of our common stock which are paid annually based on the closing price of our common stock on the date of issuance. Non-employee directors earn a fee in the amount of \$3,500 per board meeting attended and \$500 per committee meeting attended (\$1,000 for the chairman of a committee). When board members are invited to attend meetings of board committees of which they are not members, these non-committee board members earn a committee meeting fee of \$500.

As of September 30, 2011, we had 2,120,760 shares reserved and available for issuance under our employee stock purchase plan.

Subsequent event:

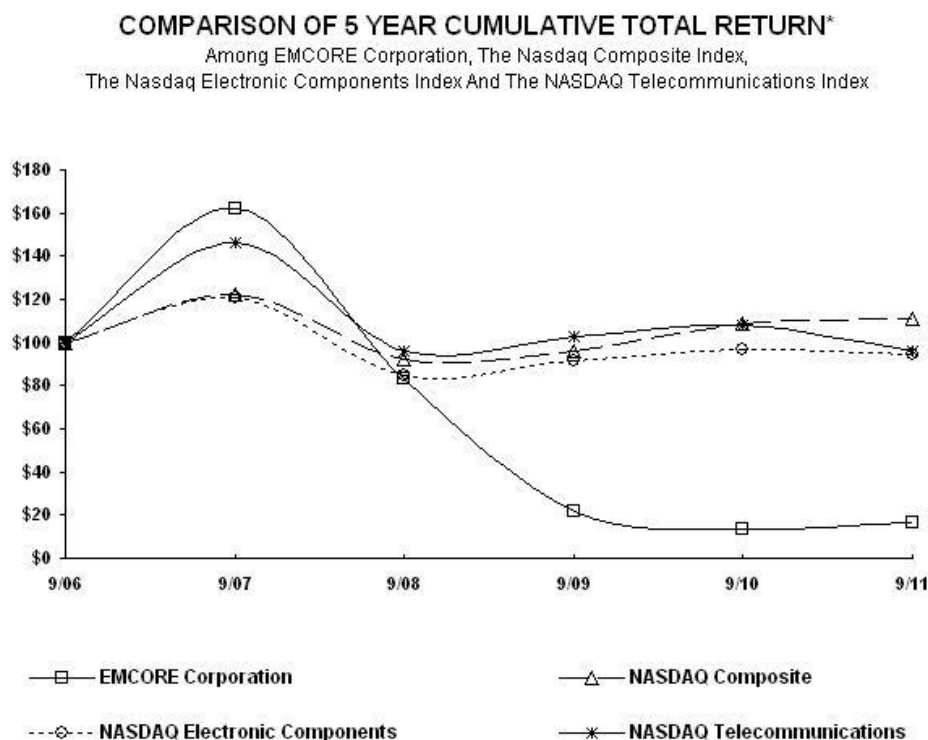
On December 6, 2011, 2,919,465 restricted stock units were granted to executive management and certain employees under the 2010 Equity Plan with a grant date fair value of \$0.96 per unit.



## Performance Graph

The following table and graph compares the cumulative total shareholders' return on our common stock for the five-year period from September 30, 2006 through September 30, 2011 with the cumulative total return on the NASDAQ Composite Index, the NASDAQ Telecommunications Stock Index, and the NASDAQ Electronic Components Stock Index. The comparison assumes \$100 was invested on September 30, 2006 in our common stock. We did not declare, nor did it pay, any dividends during the comparison period.

*The following stock performance graph does not constitute soliciting material, and should not be deemed filed or incorporated by reference into any of our filings under the Securities Act of 1933 or the Securities Exchange Act of 1934, except to the extent we specifically incorporate this stock performance graph by reference therein.*



\*\$100 invested on 9/30/06 in stock or index, including reinvestment of dividends.  
Fiscal year ending September 30.

## Data Table

	As of September 30,					
	2006	2007	2008	2009	2010	2011
<b>EMCORE Corporation</b>	\$100.00	\$162.16	\$83.45	\$21.96	\$13.53	\$16.72
NASDAQ Composite	\$100.00	\$121.92	\$92.52	\$96.24	\$108.69	\$111.20
NASDAQ Telecommunications	\$100.00	\$145.93	\$95.80	\$102.46	\$107.99	\$95.97
NASDAQ Electronic Components	\$100.00	\$120.90	\$84.63	\$91.63	\$96.84	\$94.20

## ITEM 6. Selected Financial Data

In the tables below, we have provided you with consolidated financial data. We derived the statement of operations data for the fiscal years ended September 30, 2011, 2010, and 2009 and the balance sheet data as of September 30, 2011 and 2010 from our audited consolidated financial statements included in [Financial Statements and Supplementary Data](#) under [Item 8](#) within this Annual Report. We derived the statement of operations data for the years ended September 30, 2008 and 2007 and the selected balance sheet data as of September 30, 2009, 2008, and 2007 from audited consolidated financial statements that are not included in this Annual Report. You should read this financial data together with our [Management's Discussion and Analysis of Financial Condition and Results of Operations](#) under [Item 7](#) and [Financial Statements and Supplementary Data](#) under [Item 8](#) within this Annual Report. Our historic results are not necessarily indicative of the results that may be expected in the future.

See [Explanatory Note](#) on page 4 for a discussion associated with the impact of the floods in Thailand on our operations.

### Selected Financial Data

#### **Statements of Operations Data** (in thousands, except loss per share)

	For the Fiscal Years Ended September 30,				
	2011	2010	2009	2008	2007
Revenue	\$ 200,928	\$ 191,278	\$ 176,356	\$ 239,303	\$ 169,606
Gross profit (loss)	42,763	50,661	(6,310)	29,895	30,368
Operating loss	(32,527)	(21,426)	(140,966)	(75,281)	(57,456)
Net loss	(34,219)	(23,694)	(138,801)	(80,860)	(58,722)
Net loss per basic and diluted share	\$ (0.38)	\$ (0.28)	\$ (1.75)	\$ (1.20)	\$ (1.15)

#### **Balance Sheet Data** (in thousands)

	As of September 30,				
	2011	2010	2009	2008	2007
Cash, cash equivalents, restricted cash, and current available-for-sale securities	\$ 16,142	\$ 21,242	\$ 16,899	\$ 22,760	\$ 41,226
Working capital	24,293	34,891	34,725	79,234	63,204
Total assets	170,298	177,838	182,023	329,278	234,736
Long-term liabilities	4,804	562	104	—	84,981
Shareholders' equity	98,436	113,432	123,931	253,722	98,157

Working capital, calculated as current assets minus current liabilities, is a financial metric we use that represents available operating liquidity.

### **Significant Transactions**

Significant transactions that affect the comparability of our operating results and financial condition include:

#### **Fiscal 2011**

- Joint Venture: We entered into a joint venture agreement in fiscal 2010 with San'an Optoelectronics Co., Ltd. (San'an) for the purpose of engaging in the development, manufacturing, and distribution of CPV receivers, modules, and systems for terrestrial solar power applications under a technology license from us. The joint venture, Suncore Photovoltaic Technology Co., Ltd. (Suncore) was established in January 2011. To date, we have contributed \$12.0 million in cash to Suncore as a capital contribution and have received \$8.5 million of consulting fees from an affiliate of San'an. We have accounted for our investment in Suncore using the equity method of accounting and we have recorded the consulting fees as a reduction to our investment in Suncore. During fiscal 2011, we held a 40% registered ownership in Suncore and we recorded a \$1.8 million loss from this equity method investment which was primarily related to start-up activities. See [Footnote 17 - Suncore Joint Venture](#) in the notes to the consolidated financial statements for additional information related to our Suncore joint venture.

- **Litigation Settlements:** During the three months ended March 31, 2011, we received a cash payment of approximately \$2.6 million, net of legal fees, in satisfaction of a judgment for damages awarded. During the three months ended June 30, 2011, we accrued \$1.5 million for legal settlements considered probable. See [Footnote 14 - Commitments and Contingencies](#) in the notes to the consolidated financial statements for additional information related to our litigation proceedings.
- **Impairment Charge:** During the three months ended September 30, 2011, we recorded a non-cash impairment charge of approximately \$8.0 million related to long-lived assets associated with our Fiber Optics segment. See [Footnote 9 - Intangible Assets](#) in the notes to the consolidated financial statements for additional information related to this impairment charge.
- **Asset Retirement Obligations:** We have known conditional asset retirement conditions, such as certain asset decommissioning and restoration of rented facilities to be performed in the future. During the three months ended September 30, 2011, we completed a review of our asset retirement and environmental obligations and we recorded an asset retirement obligation with an offset to fixed assets totaling \$4.8 million. See [Footnote 14 - Commitments and Contingencies](#) in the notes to the consolidated financial statements for additional information related to our asset retirement obligations.

#### **Fiscal 2010**

- **Bad Debt:** In June 2010, we recorded a \$2.4 million reserve on accounts receivable related to a solar power system contract that management had uncertainty with respect to its total collectability.
- **Termination Fee:** In June 2010, we incurred a one-time non-recurring \$2.8 million charge associated with a termination fee on our previously announced joint venture with Tangshan Caofeidian Investment Corporation.
- **Legal Expenses:** Throughout the year, we incurred \$4.7 million related to legal expenses associated with certain patent and other litigation.

#### **Fiscal 2009**

- **Impairment Charges:** In December 2008, we recorded non-cash impairment charges totaling \$33.8 million related to goodwill and intangible assets in our Fiber Optics segment. In June 2009, we recorded a non-cash impairment charge totaling \$27.0 million related to long-lived assets in our Fiber Optics segment.
- **Sale of Investment:** In January 2009, we sold our remaining interest in Entech Solar Inc. (formerly WorldWater and Solar Technologies Corporation) for a gain of \$3.1 million.
- Throughout the year, we incurred the following significant expenses within operations:
  - Inventory write-downs related to excess, obsolete, and lower of cost or market valuation adjustments totaling \$16.1 million;
  - Provisions for losses on firm purchase agreements totaling \$8.5 million;
  - Provisions for doubtful accounts totaling \$5.1 million;
  - Severance and restructuring charges totaling \$2.0 million; and,
  - Legal expenses associated with certain patent and other litigation totaling \$5.6 million.

**Fiscal 2008**

- Convertible Notes: In February 2008, we redeemed all of our outstanding convertible notes. We recognized a loss totaling \$4.7 million related to the conversion of notes to equity.
- Sale of Equity: In February 2008, we completed the sale of \$100 million of restricted common stock and warrants. We used the proceeds from this private placement transaction to acquire the telecom-related assets of Intel Corporation's Optical Platform Division in 2008.
- Acquisitions: In February and April 2008, we acquired the telecom, datacom, and optical cable interconnects-related assets of Intel Corporation's Optical Platform Division for \$112 million in cash and shares of our common stock. We also paid Intel transition service agreement charges totaling \$4.8 million associated with these acquired businesses.
- Sale of Investment: In June and July 2008, we sold a portion of our investment in Entech Solar for a total gain of \$7.4 million.
- Impairment Charges: In September 2008, we recorded a non-cash impairment charge totaling \$22.0 million related to goodwill in our Fiber Optics segment. In September 2008, we also recorded a \$1.5 million non-cash impairment charge related to investments.
- Throughout the year, we incurred the following significant expenses:
  - Inventory write-downs related to excess, obsolete, and lower of cost or market valuation adjustments totaling \$9.6 million;
  - Provisions for doubtful accounts totaling \$2.1 million;
  - Stock-based expense of \$4.3 million associated with the modification of stock options issued to terminated employees.

**Fiscal 2007**

- Investment: In November 2006, we invested \$13.1 million in Entech Solar Inc. in return for convertible preferred stock and warrants.
- Convertible Notes: In April 2007, we modified our convertible subordinated notes. The interest rate was increased from 5% to 5.5% and the conversion price was decreased from \$8.06 to \$7.01. We also repurchased \$11.4 million of outstanding notes to reduce interest expense and share dilution.
- Acquisition: In April 2007, we acquired privately-held Opticomm Corporation for \$4.1 million in cash.
- Throughout the year, we incurred the following significant expenses within operations:
  - \$10.6 million related to our review of historical stock option granting practices;
  - \$6.1 million related to non-recurring corporate legal expenses; and,
  - \$2.8 million related to severance charges associated with facility closures and consolidation of operations.

## ITEM 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

*You should read the following discussion of our financial condition and results of operations in conjunction with the financial statements and the notes thereto included in [Financial Statements and Supplementary Data](#) under [Item 8](#) within this Annual Report. The following discussion contains forward-looking statements that reflect our plans, estimates, and beliefs. Our actual results could differ materially from those discussed in the forward-looking statements. Factors that could cause or contribute to these differences include those discussed below and elsewhere in this Annual Report, particularly in [Risk Factors](#) under [Item 1A](#).*

### Business Overview

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

Our headquarters and principal executive offices are located at 10420 Research Road, SE, Albuquerque, New Mexico, 87123, and our main telephone number is (505) 332-5000. For specific information about us, our products or the markets we serve, please visit our website at <http://www.emcore.com>. The information contained in or linked to our website is not a part of, nor incorporated by reference into, this Annual Report on Form 10-K or a part of any other report or filing with the Securities and Exchange Commission (SEC).

See [Explanatory Note](#) on page 4 for a discussion associated with the impact of the floods in Thailand on our operations.

### Critical Accounting Policies

The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States of America (U.S. GAAP) requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities, as of the date of the financial statements, and the reported amounts of revenue and expenses during the reported period. The accounting estimates that require our most significant, difficult, and/or subjective judgments include:

- the valuation of inventory, goodwill, intangible assets, warrants, and stock-based compensation;
- assessment of recovery of long-lived assets;
- asset retirement obligations and litigation contingencies;
- revenue recognition associated with the percentage of completion method; and,
- the allowance for doubtful accounts and warranty accruals.

We develop estimates based on historical experience and on various assumptions about the future that are believed to be reasonable based on the best information available to us. Our reported financial position or results of operations may be materially different under changed conditions or when using different estimates and assumptions, particularly with respect to significant accounting policies. In the event that estimates or assumptions prove to differ from actual results, adjustments are made in subsequent periods to reflect more current information. A listing and description of our critical accounting policies includes the following:

#### *Accounts Receivable*

We regularly evaluate the collectability of our accounts receivable and maintain allowances for doubtful accounts for estimated losses resulting from the inability of our customers to meet their financial obligations to us. The allowance is based on the age of receivables and a specific identification of receivables considered at risk of collection. We classify charges associated with the allowance for doubtful accounts as sales, general, and administrative expense. If the financial condition of our customers

were to deteriorate, impacting their ability to pay us, additional allowances may be required. See [Footnote 5 - Receivables](#) in the notes to the consolidated financial statements for additional information related to our receivables.

### **Inventory**

Inventory is stated at the lower of cost or market, with cost being determined using the standard cost method that includes material, labor, and manufacturing overhead costs, which approximates weighted average cost. We write-down inventory once it has been determined that conditions exist that may not allow the inventory to be sold for its intended purpose or the inventory is determined to be excess or obsolete based on our forecasted future revenue. The charge related to inventory write-downs is recorded as a cost of revenue. The majority of the inventory write-downs are related to estimated allowances for inventory whose carrying value is in excess of net realizable value and on excess raw material components resulting from finished product obsolescence. In most cases where we sell previously written down inventory, it is typically sold as a component part of a finished product. The finished product is sold at market price at the time resulting in higher average gross margin on such revenue. We do not track the selling price of individual raw material components that have been previously written down or written off, since such raw material components usually are only a portion of the finished products and related sales price. We evaluate inventory levels at least quarterly against sales forecasts on a significant part-by-part basis, in addition to determining its overall inventory risk. We have incurred, and may in the future incur charges to write-down our inventory. See [Footnote 6 - Inventory](#) in the notes to the consolidated financial statements for additional information related to our inventory.

### **Goodwill**

The Company's goodwill of approximately \$20.4 million is associated with our Photovoltaics segment. Goodwill represents the excess of the purchase price of an acquired business over the fair value of the identifiable assets acquired and liabilities assumed. As required by ASC 350, *Intangibles - Goodwill and Other*, we evaluate our goodwill for impairment on an annual basis, or whenever events or changes in circumstances indicate whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount.

Pursuant to ASC 350, circumstances that could trigger an interim impairment test include but are not limited to:

- Macroeconomic conditions such as a deterioration in general economic conditions, limitations on accessing capital, fluctuations in foreign exchange rates, or other developments in equity and credit markets;
- Industry and market considerations such as a deterioration in the environment in which an entity operates, an increased competitive environment, a decline in market-dependent multiples or metrics (considered in both absolute terms and relative to peers), a change in the market for an entity's products or services, or a regulatory or political development;
- Cost factors such as increases in raw materials, labor, or other costs that have a negative effect on earnings and cash flows;
- Overall financial performance such as negative or declining cash flows or a decline in actual or planned revenue or earnings compared with actual and projected results of relevant prior periods;
- Other relevant entity-specific events such as changes in management, key personnel, strategy, or customers; contemplation of bankruptcy; or litigation;
- Events affecting a reporting unit such as a change in the composition or carrying amount of its net assets, a more-likely-than-not expectation of selling or disposing all, or a portion, of a reporting unit, the testing for recoverability of a significant asset group within a reporting unit, or recognition of a goodwill impairment loss in the financial statements of a subsidiary that is a component of a reporting unit; and,
- If applicable, a sustained decrease in share price (considered in both absolute terms and relative to peers).

In performing goodwill impairment testing, we determine the fair value of each reporting unit using a weighted combination of a market-based approach and a discounted cash flow (DCF) approach. The market-based approach relies on values based on market multiples derived from comparable public companies. In applying the DCF approach, management forecasts cash flows over the remaining useful life of its primary asset using assumptions of current economic conditions and future expectations of earnings. This analysis requires the exercise of significant judgment, including judgments about appropriate discount rates based on the assessment of risks inherent in the amount and timing of projected future cash flows. The derived discount rate

may fluctuate from period to period as it is based on external market conditions. All of these assumptions are critical to the estimate and can change from period to period. Updates to these assumptions in future periods, particularly changes in discount rates, could result in different results of goodwill impairment tests. See [Footnote 8 - Goodwill](#) in the notes to the consolidated financial statements for additional disclosures related to our goodwill.

### ***Valuation of Long-lived Assets***

Long-lived assets consist primarily of property, plant, and equipment and intangible assets. Because most of our long-lived assets are subject to amortization, we review these assets for impairment in accordance with the provisions of ASC 360, *Property, Plant, and Equipment*. We review long-lived assets for impairment whenever events or changes in circumstances indicate that its carrying amount may not be recoverable. Our impairment testing of long-lived assets consists of determining whether the carrying amount of the long-lived asset (asset group) is recoverable, in other words, whether the sum of the future undiscounted cash flows expected to result from the use and eventual disposition of the asset (asset group) exceeds its carrying amount. The determination of the existence of impairment involves judgments that are subjective in nature and may require the use of estimates in forecasting future results and cash flows related to an asset or group of assets. In making this determination, we use certain assumptions, including estimates of future cash flows expected to be generated by these assets, which are based on additional assumptions such as asset utilization, the length of service that assets will be used in our operations, and estimated salvage values. See [Footnote 7 - Property, Plant, and Equipment](#) and [Footnote 9 - Intangible Assets](#) in the notes to the consolidated financial statements for additional disclosures related to our long-lived assets.

### ***Revenue Recognition***

Revenue is recognized upon shipment, provided persuasive evidence of a contract exists, the price is fixed, the product meets our customer's specifications, title and ownership have transferred to the customer, and there is reasonable assurance of collection of the sales proceeds. The majority of our products have shipping terms that are free on board or free carrier alongside (FCA) shipping point, which means that we fulfill our delivery obligation when the goods are handed over to the freight carrier at our shipping dock. This means the buyer bears all costs and risks of loss or damage to the goods from that point. In certain cases, we ship our products cost insurance and freight. Under this arrangement, revenue is recognized under FCA shipping point terms, but we pay (and invoice the customer) for the cost of shipping and insurance to the customer's designated location. We account for shipping and related transportation costs by recording the charges that are invoiced to customers as revenue, with the corresponding cost recorded as cost of revenue. In those instances where inventory is maintained at a consigned location, revenue is recognized only when our customer pulls product for use and after title and ownership has transferred to the customer. Revenue from time and material contracts is recognized at contractual rates as labor hours and direct expenses are incurred. Any warranty cost and remaining obligations that are inconsequential or perfunctory are accrued when the corresponding revenue is recognized.

*Distributors.* We use a number of distributors around the world and recognize revenue upon shipment of product to these distributors. Title and risk of loss pass to the distributors upon shipment, and our distributors are contractually obligated to pay us on standard commercial terms, just like our other direct customers. We do not sell to our distributors on consignment and, except in the event of product discontinuance, do not give distributors a right of return.

*Solar Panel and Solar Power Systems Contracts.* Pursuant to ASC 605-35, *Revenue Recognition - Construction-Type and Production*, we record revenue on long-term solar panel and solar power system contracts using either the percentage-of-completion method or the completed contract method. In general, the performance of these types of contracts involves the design, development, and manufacture of complex aerospace or electronic equipment to our customer's specifications. The percentage-of-completion method is used in circumstances in which all the following conditions exist:

- the contract includes enforceable rights regarding goods or services to be provided to the customer, the consideration to be exchanged, and the manner and terms of settlement;
- both the Company and the customer are expected to satisfy all of the contractual obligations; and,
- reasonably reliable estimates of total revenue, total cost, and the progress towards completion can be made.



## Table of Contents

The percentage-of-completion method recognizes estimates for contract revenue and costs in progress as work on the contract continues. Estimates are revised as additional information becomes available. If estimates of costs to complete a contract indicate a loss, a provision is made at that time for the total loss anticipated on the contract.

We use the completed contract method if reasonably dependable estimates cannot be made or for which inherent hazards make estimates doubtful. Under the completed contract method, contract revenue and costs in progress are deferred as work on the contract continues. If a loss becomes evident on the contract, a provision is made at that time for the total loss anticipated on the contract. Total contract revenue and related costs are recognized upon the completion of the contract.

*Government Research and Development Contracts.* Revenue from research and development contracts represents reimbursement by various U.S. government entities, or their contractors, to aid in the development of new technology. The applicable contracts generally provide that we may elect to retain ownership of inventions made in performing the work, subject to a non-exclusive license retained by the U.S. government to practice the inventions for governmental purposes. The research and development contract funding may be based on a cost-plus, cost reimbursement, or a firm fixed price arrangement. The amount of funding under each research and development contract is determined based on cost estimates that include both direct and indirect costs. Cost-plus funding is determined based on actual costs plus a set margin. As we incur costs under cost reimbursement type contracts, revenue is recorded. Contract costs include material, labor, special tooling and test equipment, subcontracting costs, as well as an allocation of indirect costs. A research and development contract is considered complete when all significant costs have been incurred, milestones have been reached, and any reporting obligations to the customer have been met. These contracts may be modified or terminated at the convenience of the U.S. government and may be subject to governmental budgetary fluctuations.

We also participate in cost-sharing research and development arrangements. Under such arrangements in which the actual costs of performance are split between the U.S. government and us on a best efforts basis, no revenue is recorded and our research and development expense is reduced for the amount of the cost-sharing receipts.

*Multiple-Element Arrangements.* Contracts with our customers usually relate to either the delivery of product or the completion of technology or engineering research and development contracts. In a very limited number of cases, a research contract may involve the creation and delivery of a customer-designed product sample based upon the research and development efforts completed. Pursuant to ASC 605-25-25-5, *Revenue Recognition - Multiple-Element Arrangements*, we have concluded that product revenue should not be considered a unit of accounting separate from the service revenue for these types of research contracts.

*Contract Manufacturers.* In our Fiber Optics segment, prior to certain customers accepting product that is manufactured at one of our contract manufacturers, these customers require that they first qualify the product and manufacturing processes at our contract manufacturer. The customers' qualification process determines whether the product manufactured at our contract manufacturer achieves their quality, performance, and reliability standards. After a customer completes the initial qualification process, we receive approval to ship qualified product to that customer. As part of the manufacturing process at our contract manufacturers, the finished product is tested prior to shipment to the customer using the same criteria that our customer uses to test product it receives. Revenue is recognized upon shipment of customer-qualified product, provided persuasive evidence of a contract exists, the price is fixed, the product meets our customer's specifications, title and ownership have transferred to the customer, and there is reasonable assurance of collection of the sales proceeds.

### **Product Warranty Reserves**

We provide our customers with limited rights of return for non-conforming shipments and warranty claims for certain products. Pursuant to ASC 450, *Contingencies*, we make estimates of product warranty expense using historical experience rates as a percentage of revenue and/or costs of revenue and accrue estimated warranty expense as a cost of revenue. We estimate the costs of our warranty obligations based on historical experience of known product failure rates and anticipated rates if warranty claims, use of materials to repair or replace defective products, and service delivery costs incurred in correcting product issues. In addition, from time to time, specific warranty accruals may be made if unforeseen technical problems arise. Should our actual experience relative to these factors differ from our estimates, we may be required to record additional warranty reserves. Alternatively, if we provide more reserves than needed, we may reverse a portion of such provisions in future periods. See [Footnote 10 - Accrued Expenses and Other Current Liabilities](#) in the notes to the consolidated financial statements for additional disclosures related to our product warranty reserves.

### ***Stock-Based Compensation***

Stock-based compensation expense is measured at the stock option grant date, based on the fair value of the award, and is recorded to cost of sales, sales, general, and administrative, and research and development expense based on an employee's responsibility and function over the requisite service period. We use the Black-Scholes option-pricing model and the straight-line attribution approach to determine the fair value of stock-based awards in accordance with ASC 718, *Compensation*. This option-pricing model requires the input of highly subjective assumptions, including the option's expected life, the price volatility of the underlying stock, and expected forfeitures. Expected term represents the period that stock-based awards are expected to be outstanding and is determined based on historical experience of similar awards, giving consideration to the contractual terms of the stock-based awards, vesting schedules and expectations of future employee behavior as influenced by changes to the terms of its stock-based awards. The expected stock price volatility is based on our historical stock prices. We are required to estimate forfeitures at the time of grant and revise those estimates in subsequent periods if actual forfeitures differ from those estimates. We use historical data to estimate pre-vesting option forfeitures and record stock-based compensation expense only for those awards that are expected to vest. If we use different assumptions for estimating stock-based compensation expense in future periods or if actual forfeitures differ materially from our estimated forfeitures, the change in our non-cash stock-based compensation expense could adversely affect our results of operations. See [Footnote 15 - Equity](#) in the notes to the consolidated financial statements for additional disclosures related to our stock-based compensation.

### ***Litigation Contingencies***

We are subject to various legal proceedings, claims, and litigation, either asserted or unasserted that arise in the ordinary course of business. While the outcome of these matters is currently not determinable, we do not expect the resolution of these matters will have a material adverse effect on our business, financial position, results of operations, or cash flows. However, the results of these matters cannot be predicted with certainty. Professional legal fees are expensed when incurred. We accrue for contingent losses when such losses are probable and reasonably estimable. In the event that estimates or assumptions prove to differ from actual results, adjustments are made in subsequent periods to reflect more current information. Should we fail to prevail in any legal matter or should several legal matters be resolved against the Company in the same reporting period, then the financial results of that particular reporting period could be materially affected. See [Footnote 14 - Commitments and Contingencies](#) in the notes to our consolidated financial statements for disclosures related to our legal proceedings.

### ***Warrant Valuation***

As of September 30, 2011 and 2010, warrants representing 3,000,003 shares of our common stock were outstanding. All of our warrants are classified as a liability since the warrants meet the classification requirements for liability accounting pursuant to ASC 815, *Derivatives and Hedging*. Each quarter, we expect an impact on our statement of operations when we record the change in fair value of our outstanding warrants using the Monte Carlo option valuation model. The Monte Carlo option valuation model is used since it allows the valuation of each warrant to factor in the value associated with our right to affect a mandatory exercise of each warrant. The valuation model requires the input of highly subjective assumptions, including the warrant's expected life and the price volatility of the underlying stock. The change in the fair value of the warrants is primarily due to the change in the closing price of our common stock. See [Footnote 4 - Fair Value Accounting](#) in the notes to the consolidated financial statements for additional disclosures related to our valuation of our outstanding warrants.

### ***Asset Retirement Obligations***

Pursuant to ASC 410, *Asset Retirement and Environmental Obligations*, an asset retirement obligation is recorded when there is a legal obligation associated with the retirement of a tangible long-lived asset and the fair value of the liability can reasonably be estimated. Upon initial recognition of an asset retirement obligation, a company increases the carrying amount of the long-lived asset by the same amount as the liability. Over time, the liabilities are accreted for the change in their present value through charges to operations costs. The initial capitalized costs are depleted over the useful lives of the related assets through charges to depreciation, depletion, and/or amortization. If the fair value of the estimated asset retirement obligation changes, an adjustment is recorded to both the asset retirement obligation and the asset retirement cost. Revisions in estimated liabilities can result from revisions of estimated inflation rates, escalating retirement costs, and changes in the estimated timing of settling asset retirement obligations.

[Table of Contents](#)

We have known conditional asset retirement conditions, such as certain asset decommissioning and restoration of rented facilities to be performed in the future. During the three months ended September 30, 2011, we completed a review of our asset retirement and environmental obligations and we recorded an asset retirement obligation with an offset to fixed assets totaling \$4.8 million. See [Footnote 14 - Commitments and Contingencies](#) in the notes to the consolidated financial statements for additional disclosures related to our asset retirement obligations.

\*\*\*

The above listing is not intended to be a comprehensive list of all of our accounting policies. In many cases, U.S. GAAP specifically dictates the accounting treatment of a particular transaction. There are also areas in which management's judgment in selecting any available alternative would not produce a materially different result. For a complete discussion of our accounting policies, recently adopted accounting pronouncements, and other required U.S. GAAP disclosures, we refer you to the accompanying footnotes to our consolidated financial statements in this Annual Report.

## Results of Operations

The following table sets forth our consolidated statements of operations data expressed as a percentage of revenue.

Statement of Operations	For the Fiscal Years Ended September 30,		
	2011	2010	2009
Revenue	100.0 %	100.0 %	100.0 %
Cost of revenue	78.7	73.5	103.6
Gross profit (loss)	21.3	26.5	(3.6)
Operating expenses (income):			
Selling, general, and administrative	17.7	22.3	26.4
Research and development	16.4	15.4	15.4
Impairments	4.0	—	34.5
Litigation settlements, net	(0.6)	—	—
Total operating expenses	37.5	37.7	76.3
Operating loss	(16.2)	(11.2)	(79.9)
Other income (expense):			
Interest income	—	—	—
Interest expense	(0.3)	(0.2)	(0.3)
Foreign exchange gain (loss)	0.4	(0.5)	(0.1)
Loss from equity method investment	(0.9)	—	—
Change in fair value of financial instruments	—	(0.3)	—
Impairment of investment	—	—	(0.2)
Gain from the sale of an unconsolidated affiliate	—	—	1.8
Other expense	—	(0.2)	—
Total other income (expense)	(0.8)	(1.2)	1.2
Net loss	(17.0)%	(12.4)%	(78.7)%

**Comparison of Financial Periods**

<i>Revenue (in thousands, except percentages)</i>	<b>For the Fiscal Years Ended September 30,</b>			<b>Fiscal 2011 vs Fiscal 2010</b>		<b>Fiscal 2010 vs Fiscal 2009</b>	
	<b>2011</b>	<b>2010</b>	<b>2009</b>	<b>\$ Change</b>	<b>% Change</b>	<b>\$ Change</b>	<b>% Change</b>
Fiber Optics revenue	\$ 125,659	\$ 121,724	\$ 114,134	\$ 3,935	3.2%	\$ 7,590	6.7%
Photovoltaics revenue	75,269	69,554	62,222	5,715	8.2%	7,332	11.8%
Total revenue	\$ 200,928	\$ 191,278	\$ 176,356	\$ 9,650	5.0%	\$ 14,922	8.5%

**Fiber Optics Revenue:**

Our Fiber Optics segment offers optical components, subsystems, and systems for high-speed data and telecommunications, cable television (CATV), and fiber-to-the-premises (FTTP) networks within the following two distinct product lines:

- Broadband products, which includes cable television products, fiber-to-the-premises products, satellite communication products, video transport products, and defense and homeland security products; and,
- Digital products, which include telecom optical products, enterprise products, laser/photodetector component products, parallel optical transceiver and cable products, and fiber channel transceiver products.

Fiscal 2011 revenue from broadband products increased approximately 12% from fiscal 2010 which was primarily driven by increased unit shipments of our CATV and video transport products. The increase in CATV unit shipments was primarily driven by our quadrature amplitude modulation (QAM) transmitters and receivers. Fiscal 2010 revenue from broadband products increased 16% from fiscal 2009 which was primarily driven by increased unit shipments of our CATV, specialty, and satellite communication products. Sales of our CATV products represents the largest percentage of our total fiber optics-related revenue.

Fiscal 2011 revenue from digital products decreased approximately 8% from fiscal 2010 which was primarily due to a reduction of approximately \$13.7 million of revenue associated with sales of parallel optics device products primarily as a result of the U.S. International Trade Commission (ITC) ruling. See [Footnote 14 - Commitments and Contingencies](#) in the notes to the consolidated financial statements for additional information related to the ITC ruling. This was partially offset by increased shipments of telecom optical-related products, which includes tunable XFP, tunable 300-pin transponders, and integrated tunable laser assemblies (ITLAs), when compared to fiscal 2010. Our telecom optical-related product line represents the second largest percentage of our total fiber optics-related revenue. Fiscal 2010 revenue from digital products decreased approximately 3% from fiscal 2009 which was primarily driven by a decrease in unit shipments as well as a decline in average selling prices of our legacy zenpak datacom transceivers offset slightly by an increase in sales of our telecom optical-related products.

Our Fiber Optics segment accounted for 63%, 64%, and 65% of our consolidated revenue in the fiscal years ended September 30, 2011, 2010, and 2009, respectively.

**Photovoltaics Revenue:**

Our Photovoltaics segment provides products for both satellite and terrestrial applications. For satellite applications, we offer high-efficiency compound semiconductor-based gallium arsenide (GaAs) multi-junction solar cells, covered interconnected cells (CICs), and fully integrated solar panels. For terrestrial applications, we offer concentrating photovoltaic (CPV) power systems for commercial and utility scale solar applications as well as high-efficiency GaAs solar cells and integrated CPV components for use in other solar power concentrator systems.

Fiscal 2011 revenue from satellite applications increased 6% from fiscal 2010. The increase was primarily driven by higher revenue from our government-related service contracts. Sales of our satellite solar cells and CICs products represents the largest percentage of our total photovoltaics-related revenue. Fiscal 2010 revenue from satellite applications increased 14% from fiscal 2009. Historically, revenue has fluctuated significantly in our Photovoltaics segment due to the completion of long-term contracts, varying shipment schedules on long-term supply agreements, and changes in product mix.

[Table of Contents](#)

Revenue from our terrestrial-related products was not significant as a percentage of total photovoltaics-related revenue.

Our Photovoltaics segment accounted for 37%, 36%, and 35% of our consolidated revenue in the fiscal years ended September 30, 2011, 2010, and 2009, respectively.

**Gross Profit (Loss)**

(in thousands, except percentages)

	For the Fiscal Years Ended September 30,			Fiscal 2011 vs Fiscal 2010		Fiscal 2010 vs Fiscal 2009	
	2011	2010	2009	\$ Change	% Change	\$ Change	% Change
Fiber Optics gross profit (loss)	\$ 23,221	\$ 28,174	\$ (14,796)	\$ (4,953)	(17.6)%	\$ 42,970	290.4%
Photovoltaics gross profit	19,542	22,487	8,486	(2,945)	(13.1)%	14,001	165.0%
Total gross profit (loss)	\$ 42,763	\$ 50,661	\$ (6,310)	\$ (7,898)	(15.6)%	\$ 56,971	902.9%

Our cost of revenue consists of raw materials, compensation expense including non-cash stock-based compensation expense, depreciation expense and other manufacturing overhead costs, expenses associated with excess and obsolete inventories, and product warranty costs. Historically, our cost of revenue, as a percentage of revenue, has fluctuated largely due to inventory and product warranty charges. Our gross margins are also affected by product mix, manufacturing yields and volumes, and timing related to the completion of long-term contracts.

Consolidated gross margin was 21.3%, 26.5%, and (3.6)% for the fiscal years ended September 30, 2011, 2010, and 2009, respectively. For the fiscal years ended September 30, 2011, 2010, and 2009, we recorded expense of approximately \$5.3 million, \$4.3 million, and \$16.1 million for excess and obsolete inventory. In fiscal 2009, a significant portion of the excess and obsolete inventory expense was related to inventory acquired from the fiscal 2008 acquisition of Intel Corporation's Optical Platform Division. For the fiscal years ended September 30, 2011, 2010, and 2009, we recorded product warranty-related expense of approximately \$1.0 million, \$1.2 million, and \$2.6 million, respectively. In fiscal 2009, we also incurred specific contract losses totaling \$8.5 million.

**Fiber Optics Gross Profit:**

Fiber Optics gross margin was 18.5%, 23.1%, and (13.0)% for the fiscal years ended September 30, 2011, 2010, and 2009, respectively. In fiscal 2011, gross margins decreased from both our broadband and digital product lines when compared to fiscal 2010 primarily due to an increase in expense associated with excess and obsolete inventories. In fiscal 2010, gross margins improved from both our broadband and digital product lines when compared to fiscal 2009 primarily due to less expense incurred related to excess and obsolete inventories and less losses recorded on inventory purchase contracts.

**Photovoltaics Gross Profit:**

Photovoltaics gross margin was 26.0%, 32.3%, and 13.6% for the fiscal years ended September 30, 2011, 2010, and 2009, respectively. In fiscal 2011, gross margins decreased from our satellite application product lines when compared to fiscal 2010 primarily due to product mix and lower manufacturing yields. In fiscal 2010, gross margins improved from our satellite application product lines when compared to fiscal 2009 primarily due to product mix and improved manufacturing yields.

**SG&A**

(in thousands, except percentages)

	For the Fiscal Years Ended September 30,			Fiscal 2011 vs Fiscal 2010		Fiscal 2010 vs Fiscal 2009	
	2011	2010	2009	\$ Change	% Change	\$ Change	% Change
SG&A expense	\$ 35,582	\$ 42,549	\$ 46,775	\$ (6,967)	(16.4)%	\$ (4,226)	(9.0)%

**Sales, General, and Administrative (SG&A):**

SG&A consists primarily of compensation expense including non-cash stock-based compensation expense related to executive, finance, and human resources personnel, as well as sales and marketing expenses, professional fees, amortization expense on intangible assets, legal and patent-related costs, and other corporate-related expenses.

The decrease in SG&A expense in fiscal 2011 when compared to fiscal 2010 is attributable to less accounts receivable reserves and corporate charges incurred during the period. In fiscal 2011, we recorded approximately \$30,000 related to accounts receivable reserves. During fiscal 2010, we recorded a \$2.4 million reserve on accounts receivable related to a solar power

[Table of Contents](#)

system contract and we also incurred a \$2.8 million termination fee related to a then-planned joint venture. In fiscal 2011 and 2010, we incurred \$0.6 million and \$4.7 million related to legal expenses associated with certain patent and other litigation, excluding legal settlement amounts discussed below.

The decrease in SG&A expense in fiscal 2010 when compared to fiscal 2009 is also attributable to lower corporate-related adjustments. During fiscal 2009, we recorded \$5.1 million of bad debt expense related to specific receivable accounts, \$5.6 million of patent litigation and other corporate-related legal expense, and \$2.0 million related to severance and other restructuring charges.

As a percentage of revenue, SG&A expenses were 17.7%, 22.3%, and 26.4% for the fiscal years ended September 30, 2011, 2010, and 2009, respectively.

**R&D**

(in thousands, except percentages)

	For the Fiscal Years Ended September 30,			Fiscal 2011 vs Fiscal 2010		Fiscal 2010 vs Fiscal 2009	
	2011	2010	2009	\$ Change	% Change	\$ Change	% Change
R&D expense	\$ 32,853	\$ 29,538	\$ 27,100	\$ 3,315	11.2%	\$ 2,438	9.0%

**Research and Development (R&D):**

R&D consists primarily of compensation expense including non-cash stock-based compensation expense, as well as engineering and prototype costs, depreciation expense, and other overhead expenses, as they related to the design, development, and testing of our products. Our R&D costs are expensed as incurred. We believe that in order to remain competitive, we must invest significant financial resources in developing new product features and enhancements and in maintaining customer satisfaction worldwide.

The increase in R&D expense in fiscal 2011 when compared to fiscal 2010 is attributable to higher expenses incurred related to our development of our tunable XFP (TXFP) transceiver in our Fiber Optics segment and increased R&D expense incurred in our Photovoltaics segment related to our acquisition of Soliant Energy which was completed in March 2011.

The increase in R&D expense in fiscal 2010 when compared to fiscal 2009 is attributable to higher expenses incurred related to our development of our tunable XFP (TXFP) transceiver in our Fiber Optics segment and increased R&D expense in our Photovoltaics segment related to our development of our CPV-related solar power components and systems.

As a percentage of revenue, R&D expenses were 16.4%, 15.4%, and 15.4% for the fiscal years ended September 30, 2011, 2010, and 2009, respectively.

**Other Operating Income and Expense Items**

(in thousands, except percentages)

	For the Fiscal Years Ended September 30,			Fiscal 2011 vs Fiscal 2010		Fiscal 2010 vs Fiscal 2009	
	2011	2010	2009	\$ Change	% Change	\$ Change	% Change
Impairments	\$ 8,000	\$ —	\$ 60,781	\$ 8,000	—%	\$ (60,781)	(100.0)%
Litigation settlements, net	\$ (1,145)	\$ —	\$ —	\$ (1,145)	—%	\$ —	—%

**Impairments:**

Fiscal 2011: As of September 30, 2011, we performed an impairment test of long-lived assets associated with our digital fiber optics product lines. The impairment test was triggered by a change in long-term financial and cash flow forecasts. The changes in financial and cash forecasts were not a result of the recent flooding in Thailand. The financial impact from this natural disaster will be considered a fiscal 2012 first quarter event. As a result of our evaluation we determined that impairment existed and a charge of \$8.0 million was recorded to write down long-lived assets to an estimated fair value which was determined using both the guideline public company valuation method and the discounted cash flow method. See [Footnote 9 - Intangible Assets](#) in the notes to the consolidated financial statements for additional information related to this impairment charge.

## [Table of Contents](#)

Fiscal 2009: In fiscal 2009, we performed our annual goodwill impairment test as of December 31, 2008 and based on this analysis, we determined that goodwill related to our Fiber Optics reporting units was fully impaired. As a result, we recorded a non-cash impairment charge of \$31.8 million and our balance sheet no longer reflects any goodwill associated with our Fiber Optics reporting units. See [Footnote 8 - Goodwill](#) in the notes to the consolidated financial statements for additional information related to our impairment of goodwill.

In fiscal 2009, we recorded a non-cash impairment charge totaling \$2.0 million related to certain intangible assets that were acquired from Intel Corporation that were abandoned. We also performed an evaluation of our Fiber Optics segment asset group for impairment of long-lived assets. The impairment test was triggered by a determination that it was more likely than not those certain assets would be sold or otherwise disposed of before the end of their previously estimated useful lives. As a result of the evaluation, we determined that impairment existed, and a charge of \$27.0 million was recorded to write down the long-lived assets to an estimated fair value which was determined using both the guideline public company valuation method and the discounted cash flow method. Of the total impairment charge, \$17.2 million related to plant and equipment and \$9.8 million related to intangible assets. See [Footnote 9 - Intangible Assets](#) in the notes to the consolidated financial statements for additional information related to this impairment charge.

### Litigation Settlements, Net:

During the three months ended March 31, 2011, we received a cash payment of approximately \$2.6 million, net of legal fees, in satisfaction of a judgment for damages awarded. During the three months ended June 30, 2011, we accrued \$1.5 million for legal settlements considered probable. See [Footnote 14 - Commitments and Contingencies](#) in the notes to the consolidated financial statements for additional information related to our litigation proceedings.

### **Operating Loss**

(in thousands, except percentages)

	For the Fiscal Years Ended September 30,			Fiscal 2011 vs Fiscal 2010		Fiscal 2010 vs Fiscal 2009	
	2011	2010	2009	\$ Change	% Change	\$ Change	% Change
Fiber Optics operating loss	\$ (30,276)	\$ (19,888)	\$ (126,830)	\$ (10,388)	(52.2)%	\$ 106,942	84.3%
Photovoltaics operating loss	(2,251)	(1,538)	(14,136)	(713)	(46.4)%	12,598	89.1%
Total operating loss	\$ (32,527)	\$ (21,426)	\$ (140,966)	\$ (11,101)	(51.8)%	\$ 119,540	84.8%

### Operating Loss:

Income (loss) from operations represents revenue less the cost of revenue and direct operating expenses incurred within the operating segments as well as allocated expenses such as shared service departments. Income (loss) from operations is a measure of profit and loss that executive management uses to assess performance and make decisions. As a percentage of revenue, our operating loss was (16.2)%, (11.2)%, and (79.9)% for the fiscal years ended September 30, 2011, 2010, and 2009, respectively. In fiscal 2009, we recorded non-cash impairment charges totaling \$60.8 million related to goodwill, intangible assets, and fixed assets associated with our Fiber Optics segment.

### **Other Income (Expense)**

(in thousands, except percentages)

	For the Fiscal Years Ended September 30,			Fiscal 2011 vs Fiscal 2010		Fiscal 2010 vs Fiscal 2009	
	2011	2010	2009	\$ Change	% Change	\$ Change	% Change
Interest income	\$ 2	\$ 24	\$ 84	\$ (22)	(91.7)%	\$ (60)	(71.4)%
Interest expense	(642)	(439)	(542)	(203)	(46.2)%	103	19.0%
Foreign exchange gain (loss)	735	(1,008)	(154)	1,743	172.9%	(854)	(554.5)%
Loss from equity method investment	(1,842)	—	—	(1,842)	—%	—	—%
Change in fair value of financial instruments	70	(475)	—	545	114.7%	(475)	—%
Impairment of investment	—	—	(367)	—	—%	367	100.0%
Gain from the sale of an unconsolidated affiliate	—	—	3,144	—	—%	(3,144)	(100.0)%
Other expense	(15)	(370)	—	355	95.9%	(370)	—%
Total other income (expense)	\$ (1,692)	\$ (2,268)	\$ 2,165	\$ 576	25.4%	\$ (4,433)	(204.8)%



## [Table of Contents](#)

### Foreign Exchange

We recognize gains and losses due to the effect of exchange rate changes on foreign currency primarily due to our operations in Spain, the Netherlands, and in China. The assets and liabilities of our foreign operations are translated from their respective functional currencies into U.S. dollars at the rates in effect at the consolidated balance sheet dates, and the revenue and expense amounts are translated at the average rate during the applicable periods reflected on the consolidated statements of operations and comprehensive loss. Foreign currency translation adjustments are recorded as accumulated other comprehensive income. Gains and losses from foreign currency transactions denominated in currencies other than the U.S. dollar, both realized and unrealized, are recorded as foreign exchange gain (loss) on our consolidated statements of operations and comprehensive loss. A majority of the gain or losses recorded relates to the change in value of the euro and yuan renminbi relative to the U.S. dollar.

### Loss from Equity Method Investment

We entered into a joint venture agreement in fiscal 2010 with San'an Optoelectronics Co., Ltd. (San'an) for the purpose of engaging in the development, manufacturing, and distribution of CPV receivers, modules, and systems for terrestrial solar power applications under a technology license from us. The joint venture, Suncore Photovoltaic Technology Co., Ltd. (Suncore) was established in January 2011. To date, we have contributed \$12.0 million in cash to Suncore as a capital contribution and have received \$8.5 million of consulting fees from an affiliate of San'an. We have accounted for our investment in Suncore using the equity method of accounting and we have recorded the consulting fees as a reduction to our investment in Suncore. During fiscal 2011, we held a 40% registered ownership in Suncore and we recorded a \$1.8 million loss from this equity method investment which was primarily related to start-up activities. See [Footnote 17 - Suncore Joint Venture](#) in the notes to the consolidated financial statements for additional information related to our Suncore joint venture.

### Change in Fair Value of Financial Instruments

As of September 30, 2011 and 2010, warrants representing 3,000,003 shares of our common stock were outstanding. All of our warrants are classified as a liability since the warrants meet the classification requirements for liability accounting pursuant to ASC 815, *Derivatives and Hedging*. Each quarter, we expect an impact on our statement of operations and comprehensive loss when we record the change in fair value of our outstanding warrants using the Monte Carlo option valuation model. The Monte Carlo option valuation model is used since it allows the valuation of each warrant to factor in the value associated with our right to affect a mandatory exercise of each warrant. The valuation model requires the input of highly subjective assumptions, including the warrant's expected life and the price volatility of the underlying stock. The change in the fair value of the warrants is primarily due to the change in the closing price of our common stock. See [Footnote 4 - Fair Value Accounting](#) in the notes to the consolidated financial statements for additional information related to our valuation of our outstanding warrants.

### Impairment of Investment

In April 2008, we invested approximately \$1.5 million in Lightron Corporation, a Korean company that is publicly traded on the Korean Stock Market. Due to the decline in the market value of this investment and the expectation of non-recovery of this investment beyond its current market value, we recorded a \$0.5 million "other than temporary" impairment loss on this investment as of September 30, 2008 and another \$0.4 million "other than temporary" impairment loss on this investment as of December 31, 2008. During the quarter ended March 31, 2009, we sold our interest in Lightron Corporation, via several transactions, for a total of \$0.5 million in cash. We recorded a gain on the sale of this investment of approximately \$21,000, after consideration of impairment charges recorded in previous periods, and we also recorded a foreign exchange loss of \$0.1 million due to the conversion from Korean Won to U.S. dollars.

### Gain from the Sale of an Unconsolidated Affiliate

In January 2009, we completed the sale of our remaining interests in a company formerly named WorldWater & Solar Technologies Corporation, now named Entech Solar, Inc. We sold our remaining shares of Entech Solar Series D Convertible Preferred Stock and warrants to a significant shareholder of both our Company and Entech Solar, for approximately \$11.6 million, which included additional consideration of \$0.2 million as a result of the termination of certain operating agreements with Entech Solar. We recognized a gain on the sale of this investment of approximately \$3.1 million.

*Net Loss*  
(in thousands, except  
percentages)

	For the Fiscal Years Ended September 30,			Fiscal 2011 vs Fiscal 2010		Fiscal 2010 vs Fiscal 2009	
	2011	2010	2009	\$ Change	% Change	\$ Change	% Change
Net loss	\$ (34,219)	\$ (23,694)	\$ (138,801)	\$ (10,525)	(44.4)%	\$ 115,107	82.9%

## [Table of Contents](#)

### Net loss.

The net loss per share for the fiscal years ended September 30, 2011, 2010, and 2009, was \$(0.38), \$(0.28), and \$(1.75), respectively. In fiscal 2009, we recorded non-cash impairment charges totaling \$60.8 million related to goodwill, intangible assets, and fixed assets associated with our Fiber Optics segment.

See [Explanatory Note](#) on page 4 for a discussion associated with the impact of the floods in Thailand on our operations in fiscal 2012.

### **Liquidity and Capital Resources**

Historically, we have consumed cash from operations and incurred significant net losses. For the years ended September 30, 2011, 2010 and 2009, we incurred net losses of \$34.2 million, \$23.7 million and \$138.8 million, respectively. We have managed our liquidity position through a series of cost reduction initiatives, borrowings under our line of credit agreement, capital markets transactions, and the sale of assets.

As of September 30, 2011, cash and cash equivalents was approximately \$15.6 million and working capital totaled \$24.3 million. Working capital, calculated as current assets minus current liabilities, is a financial metric we use that represents available operating liquidity. For the fiscal years ended September 30, 2011, 2010 and 2009 net cash provided by (used in) operating activities totaled \$(6.3) million, \$3.4 million, and \$(29.6) million, respectively.

In addition, on October 24, 2011, our primary contract manufacturer announced that, as a result of the flooding in Thailand, it had suspended operations at its facility that is used to manufacture certain of our fiber optics products. Rising water penetrated the facility and submerged most of our manufacturing and test equipment as well as our inventory at the facility. We expect to write-off the carrying value of damaged equipment and inventory which is estimated to be in the range of \$10 to \$20 million.

We expect that flooding at our primary contract manufacturer in Thailand will have a significant adverse impact on our operations and our ability to meet customer demand for our fiber optics products. We are currently focused on rebuilding the manufacturing infrastructure for our impacted product lines.

As a result of the flood, certain inventory and fixed assets were damaged or destroyed. Our contract manufacturer is required under its production agreement with us to reimburse us for losses to fixed assets and inventory incurred while at the manufacturer's facilities. We are working with our contract manufacturer (and the contract manufacturer's insurance carrier) to receive insurance proceeds to cover the direct damages to our assets that were impacted by the flood. We are not a named beneficiary of our contract manufacturer's insurance policy. The timing and amounts of the recovery from the contract manufacturer, including insurance proceeds, are uncertain at this time.

Additionally, we claimed damages under our own insurance policy relating to business interruption due to the flooding. To date, we have collected \$2.0 million from our policy and we expect to receive an additional \$3.0 million by January 2012.

With respect to measures taken to improve liquidity:

- On November 11, 2010, we entered into a Credit and Security Agreement (credit facility) with Wells Fargo Bank (Wells Fargo). The credit facility provides us with a three-year revolving credit of up to \$35 million that can be used for working capital requirements, letters of credit, and other general corporate purposes. The credit facility was initially secured by the Company's accounts receivables and inventory assets and was subject to a borrowing base formula based on the Company's eligible accounts receivable and inventory accounts.

On December 21, 2011, we signed an amendment to our credit facility that increased our eligible borrowing base by up to \$10 million by adding to the borrowing base formula 85% of the appraised value of the Company's equipment and 50% of the appraised value of the Company's real estate, for which the appraisals are currently in process. In addition, Wells Fargo reduced our restrictions under the excess availability financial covenant requirement from \$7.5 million to \$3.5 million through December 2012. The interest rate on outstanding borrowings was increased to LIBOR rate plus four percent. We now expect at least 70% of the total amount of credit under the credit facility to be available for use based on the revised borrowing base formula during fiscal year 2012, of which \$17.6 million was borrowed at September 30, 2011.

## [Table of Contents](#)

The credit facility contains customary representations and warranties, and affirmative and negative covenants, including, among other things, cash balance and excess availability requirements, minimum tangible net worth and EBITDA covenants and limitations on liens and certain additional indebtedness and guarantees. The covenants are written such that as long as we maintain the minimum cash balance and excess availability requirement of \$7.5 million prior to the amendment, and \$3.5 million following the amendment, the other covenants are not required to be met. As of September 30, 2011, we were in compliance with the financial covenants contained in the credit facility since cash on deposit and excess availability exceeded the \$7.5 million financial covenant requirement.

The credit facility also contains certain events of default, including a subjective acceleration clause. Under this clause, Wells Fargo may declare an event of default if it believes in good faith that our ability to pay all or any portion of its indebtedness with Wells Fargo or to perform any of its material obligations under the credit facility has been impaired, or if it believes in good faith that there has been a material adverse change in the business or financial condition of the Company. If an event of default is not cured within the grace period (if applicable), then Wells Fargo may, among other things, accelerate repayment of amounts borrowed under the credit facility, cease making advances under the credit facility or take possession of the Company's assets that secure its obligations under the credit facility. We do not anticipate at this time any change in the business or financial condition of the Company that could be deemed a material adverse change by Wells Fargo. Wells Fargo has confirmed that they do not consider the flooding at our contract manufacturer to be a material adverse change in the business or financial condition of the Company.

- On August 16, 2011, we entered into a committed equity line financing facility (2011 Equity Facility) with Commerce Court Small Cap Value Fund, Ltd. (Commerce Court) whereby Commerce Court has committed, upon issuance of a draw-down request by us, to purchase up to \$50 million worth of our common stock over a two-year period, subject to our common stock trading above \$1 per share during the draw down period, unless a waiver is received.
- In November 2011, we implemented various cost reduction measures, including temporary salary reduction, furlough, reduction of discretionary spending including travel, capital expenditures, and development material costs, and improve working capital management. We believe that our cost reduction activities will reduce the overall cost structure of our operations.

We also entered into an agreement with our contract manufacturer whereby our contract manufacturer will purchase equipment to rebuild our affected manufacturing lines for which we will repay our contract manufacturer from insurance proceeds received from that contract manufacturer. Additionally, we restructured our outstanding payables owed to our contract manufacturer, which delayed payments to future dates to coincide with expected timing of insurance proceeds.

- In December 2011, we signed agreements with certain customers pursuant to which they will receive an allocation of our finished goods inventory as well as a percentage of future output from our new production lines being placed into service in fiscal 2012. As consideration, we have received partial prepayments for future product shipments. These advanced payments will be used to support our working capital requirements until we receive the insurance proceeds.

We believe that our existing balances of cash and cash equivalents, the cash expected to be generated from operations, the agreement with our contract manufacturer to delay payment terms and purchase equipment, expected insurance proceeds, and amounts expected to be available under our credit facility with Wells Fargo and our 2011 Equity Facility will provide us with sufficient financial resources to meet our cash requirements for operations, working capital, and capital expenditures for the next 12 months.

However, in the event of unforeseen circumstances, unfavorable market or economic developments, unfavorable results from operations, or if Wells Fargo declares an event of default on the credit facility, we may have to raise additional funds by any one or a combination of the following: issuing equity, debt or convertible debt, or selling certain product lines and/or portions of our business. There can be no assurance that we will be able to raise additional funds on terms acceptable to us, or at all. A significant contraction in the capital markets, particularly in the technology sector, may make it difficult for us to raise additional capital if or when it is required, especially if we experience negative operating results. If adequate capital is not available to us as required, or is not available on favorable terms, our business, financial condition, results of operations, and cash flows may be adversely affected.

See [Explanatory Note](#) on page 4 for a discussion associated with the impact of the floods in Thailand on our operations.

## Cash Flow

### Net Cash Provided By (Used In) Operating Activities

Operating Activities (in thousands, except percentages)	For the Fiscal Years Ended September 30,			Fiscal 2011 vs Fiscal 2010		Fiscal 2010 vs Fiscal 2009	
	2011	2010	2009	\$ Change	% Change	\$ Change	% Change
Net cash provided by (used in) operating activities	\$ (6,289)	\$ 3,411	\$ (29,562)	\$ (9,700)	(284.4)%	\$ 32,973	111.5%

#### Fiscal 2011:

Our operating activities consumed cash of \$6.3 million in fiscal 2011 as a result of our net loss of \$34.2 million and the net change in our current assets and liabilities (or working capital components) of \$2.5 million; partially offset by depreciation and amortization expense of \$12.0 million, impairment charges of \$8.0 million, stock-based compensation expense of \$7.4 million, and the loss from our equity investment in our Suncore joint venture of \$1.8 million. The change in our current assets and liabilities of \$2.5 million was primarily the result of an increase in prepaid and other assets of \$2.5 million, an increase in inventory of \$0.9 million, and a decrease in accrued expenses and other current liabilities of \$2.8 million; partially offset by a decrease in accounts receivable of \$3.3 million and an increase in accounts payable of \$0.4 million.

#### Fiscal 2010:

Our operating activities provided cash of \$3.4 million in fiscal 2010. Our net loss of \$23.7 million was offset by the net change in our current assets and liabilities of \$0.4 million and our non-cash expenses which included depreciation and amortization expense of \$12.3 million, stock-based compensation expense of \$9.9 million, provision for doubtful accounts of \$2.2 million, and the provision for product warranty of \$1.2 million. The change in our current assets and liabilities of \$0.4 million was primarily the result of an increase in accrued expense and other current liabilities of \$3.8 million, an increase in accounts payable of \$1.2 million; partially offset by an increase in accounts receivable of \$3.3 million, and increase in prepaid and other assets of \$0.9 million, and an increase in inventory of \$0.4 million.

#### Fiscal 2009:

Our operating activities consumed cash of \$29.6 million in fiscal 2009 as a result of our net loss of \$138.8 million which was partially offset by the net change in our current assets and liabilities of \$10.6 million and our non-cash expenses which included impairment charges of \$60.8 million, depreciation and amortization expense of \$16.1 million, stock-based compensation expense of \$8.1 million, provision for doubtful accounts of \$5.1 million, provision for product warranty of \$2.6 million, and a provision of losses on firm commitments of \$8.5 million. The change in our current assets and liabilities of \$10.6 million was primarily the result of a decrease in inventory of \$33.0 million, a decrease in accounts receivable of \$16.0 million, and a decrease in prepaid and other assets of \$1.6 million; partially offset by a decrease in accounts payable of \$27.4 million and a decrease of accrued expenses of \$12.5 million.

#### Working Capital Components:

**Accounts Receivable:** We generally expect the level of accounts receivable at any given quarter to reflect the level of sales in that quarter. Our accounts receivable balances have fluctuated historically due to the timing of account collections, timing of product shipments, and/or change in customer credit terms.

**Inventory:** We generally expect the level of inventory at any given quarter to reflect the change in our expectations of forecasted sales. Our inventory balances have fluctuated historically due to the timing of customer orders and product shipments, changes in our internal forecasts related to customer demand, as well as adjustments related to excess and obsolete inventory.

**Accounts Payable:** The fluctuation of our accounts payable balances is primarily driven by changes in inventory purchases as well as changes related to the timing of actual payments to vendors.

**Accrued Expenses:** Our largest accrued expense typically relates to compensation. Historically, fluctuations of our accrued expense accounts have primarily related to changes in the timing of actual compensation payments, receipt or application of advanced payments, adjustments to our warranty accrual, and accruals related to professional fees.

[Table of Contents](#)

Net Cash Provided By (Used In) Investing Activities

<b>Investing Activities</b> <i>(in thousands, except percentages)</i>	<b>For the Fiscal Years Ended September 30,</b>			<b>Fiscal 2011 vs Fiscal 2010</b>		<b>Fiscal 2010 vs Fiscal 2009</b>	
	<b>2011</b>	<b>2010</b>	<b>2009</b>	<b>\$ Change</b>	<b>% Change</b>	<b>\$ Change</b>	<b>% Change</b>
Net cash provided by (used in) investing activities	\$ (15,286)	\$ (316)	\$ 13,267	\$ (14,970)	(4,737.3)%	\$ (13,583)	(102.4)%

Fiscal 2011:

Our investing activities consumed \$15.3 million of net cash in fiscal 2011 primarily due to a \$12.0 million investment in our Suncore joint venture, \$7.3 million related to capital expenditures, \$1.0 million related to deposits on equipment orders, \$0.8 million related to the purchase of Soliant rooftop CPV-related assets, and \$0.4 million related to investment in patents; partially offset by \$5.5 million in proceeds in the form of advanced payments for consulting fees received from an unconsolidated affiliate and \$0.8 million related to the release of restricted cash.

Fiscal 2010:

Our investing activities consumed \$0.3 million of net cash in fiscal 2010 primarily due to \$1.4 million related to capital expenditures and \$0.6 million related to investment in patents; partially offset by \$1.3 million in proceeds from the sale of available-for-sale securities and \$0.4 million related to the release of restricted cash.

Fiscal 2009:

Our investing activities provided \$13.3 million of net cash in fiscal 2009 primarily from \$11.0 million received from the sale of an unconsolidated affiliate, \$2.7 million received from the sale of available-for-sale securities, and \$0.7 million related to the release of restricted cash; partially offset by \$1.3 million related to capital expenditures.

Net Cash Provided By Financing Activities

<b>Financing Activities</b> <i>(in thousands, except percentages)</i>	<b>For the Fiscal Years Ended September 30,</b>			<b>Fiscal 2011 vs Fiscal 2010</b>		<b>Fiscal 2010 vs Fiscal 2009</b>	
	<b>2011</b>	<b>2010</b>	<b>2009</b>	<b>\$ Change</b>	<b>% Change</b>	<b>\$ Change</b>	<b>% Change</b>
Net cash provided by financing activities	\$ 17,887	\$ 2,365	\$ 12,100	\$ 15,522	656.3%	\$ (9,735)	(80.5)%

Fiscal 2011:

Our financing activities provided \$17.9 million of net cash in fiscal 2011 primarily from \$9.7 million of proceeds from a private placement transaction, \$7.0 million related to borrowings on our bank credit facility, and \$1.9 million of proceeds received from our stock plans; partially offset by \$0.6 million of payments on our capital lease obligations.

Fiscal 2010:

Our financing activities provided \$2.4 million of net cash in fiscal 2010 primarily from \$2.0 million of proceeds from our equity line financing facility, \$1.0 million of proceeds received from our stock plans, and \$0.2 million related to borrowings on our bank credit facility; partially offset by net payments on our short-term debt totaling \$0.8 million.

Fiscal 2009:

Our financing activities provided \$12.1 million of net cash in fiscal 2009 primarily from \$10.3 million related to borrowings on our bank credit facility, \$0.9 million of proceeds received from our stock plans, and \$0.8 million related to other short-term debt borrowings.

## Contractual Obligations and Commitments

Our contractual obligations and commitments over the next five years are summarized in the table below:

### Contractual Obligations and Commitments (in thousands)

	Total	For the Fiscal Years Ended September 30,			
		2012	2013 to 2014	2015 to 2016	2017 and later
Purchase obligations	\$ 27,977	\$ 27,651	\$ 235	\$ 91	\$ —
Credit facility	17,557	17,557	—	—	—
Asset retirement obligations	4,800	—	409	33	4,358
Operating lease obligations	5,154	1,234	1,069	302	2,549
Capital lease obligations	3,475	2,405	1,070	—	—
Total contractual obligations and commitments	\$ 58,963	\$ 48,847	\$ 2,783	\$ 426	\$ 6,907

Interest payments are not included in the contractual obligations and commitments table above since they are insignificant to our consolidated results of operations.

### Purchase Obligations

Our purchase obligations represent agreements to purchase goods or services that are enforceable and legally binding, that specify all significant terms, including: fixed or minimum quantities to be purchased; fixed, minimum or variable price provisions; and the approximate timing of the transactions.

In November 2011, we entered into an agreement with our contract manufacturer that was affected by the floods in Thailand whereby our contract manufacturer will purchase equipment to rebuild our affected manufacturing lines. Additionally, we restructured our outstanding payables owed to our contract manufacturer which delayed payments to future dates to coincide with expected timing of insurance proceeds.

### Credit Facility

As of September 30, 2011, we had a \$17.6 million LIBOR rate loan outstanding, with an interest rate of 3.38%, and approximately \$2.6 million reserved under eight outstanding standby letters of credit under the credit facility. As of November 2, 2011, we paid off the outstanding loan with cash on hand.

On December 21, 2011, we signed an amendment to our credit facility that increased our eligible borrowing base by up to \$10 million by adding to the borrowing base formula 85% of the appraised value of the Company's equipment and 50% of the appraised value of the Company's real estate, for which the appraisals are currently in process. In addition, Wells Fargo Bank reduced our restrictions under the excess availability financial covenant requirement from \$7.5 million to \$3.5 million through December 2012. The interest rate on outstanding borrowings was increased to LIBOR rate plus four percent. We now expect at least 70% of the total amount of credit under the credit facility to be available for use based on the revised borrowing base formula during fiscal year 2012. See [Footnote 11 - Credit Facilities](#) for additional information related to our bank credit facility.

### Asset Retirement Obligations

We have known conditional asset retirement conditions, such as certain asset decommissioning and restoration of rented facilities to be performed in the future. During the three months ended September 30, 2011, we completed a review of our asset retirement and environmental obligations and we recorded a long-term liability totaling \$4.8 million. We increased the carrying amount of our long-lived assets by the same amount as the asset retirement obligation. The fair value was estimated by discounting projected cash flows over the estimated life of the related assets using credit adjusted risk-free rates which ranged from 3.25% to 5.78%. The asset retirement obligations in the table above includes assumptions related to renewal option periods where we expect to extend facility lease terms. In future periods, the asset retirement obligation is accreted for the change in its present value and capitalized costs are depreciated over the useful life of the related assets. If the fair value of the estimated asset retirement obligation changes, an adjustment will be recorded to both the asset retirement obligation and the asset retirement capitalized cost. Revisions in estimated liabilities can result from revisions of estimated inflation rates, escalating retirement

## [Table of Contents](#)

costs, and changes in the estimated timing of settling asset retirement obligations. No liabilities associated with asset retirements were settled in fiscal years 2009, 2010, and 2011. No accretion expense was incurred in fiscal years 2009, 2010, and 2011.

### Operating and Capital Leases

Operating leases include non-cancelable terms and exclude renewal option periods, property taxes, insurance and maintenance expenses on leased properties. There are no off-balance sheet arrangements other than our operating leases. Our capital lease obligation listed above includes \$1.3 million of liability on our balance sheet as of September 30, 2011 as well as \$2.2 million in commitments for additional equipment to be acquired under capital lease as of September 30, 2011. See [Footnote 14 - Commitments and Contingencies](#) in the notes to the consolidated financial statements for additional information related to our operating and capital lease obligations. See [Footnote 20 - Subsequent Event](#) for a discussion associated with the impact of the floods in Thailand on our equipment which includes those under capital lease.

### Suncore Joint Venture

The total registered capital of Suncore is \$30 million, of which San'an has contributed \$18 million in cash and EMCORE has contributed \$12 million in cash. We are not required to contribute additional funds in excess of our initial \$12 million investment, and at this time, we do not anticipate contributing any additional funds to Suncore. The joint venture agreement provides for any working capital needs to be provided by San'an. See [Footnote 17 - Suncore Joint Venture](#) in the notes to the consolidated financial statements for additional information related to this joint venture.

### **Segment Data and Related Information**

See [Footnote 16 - Segment Data and Related Information](#) in the notes to the consolidated financial statements for disclosures related to business segment revenue, geographic revenue, significant customers, and operating loss by business segment.

### **Recent Accounting Pronouncements**

See [Footnote 3 - Recent Accounting Pronouncements](#) in the notes to the consolidated financial statements for disclosures related to recent accounting pronouncements.

### **Restructuring Accruals**

See [Footnote 10 - Accrued Expenses and Other Current Liabilities](#) in the notes to the consolidated financial statements for disclosures related to our severance and restructuring-related accrual accounts.

### **Officers and Directors**

- Mr. Mark B. Weinswig was hired as the Company's Chief Financial Officer effective October 11, 2010.
- Dr. James A. Tegnalia joined the Company's Board of Directors on March 2, 2011.



## **ITEM 7A. Quantitative and Qualitative Disclosures About Market Risk**

We are exposed to financial market risks, including changes in currency exchange rates and interest rates. We do not use derivative financial instruments for speculative purposes.

### **Foreign Currency Exchange Risks**

The United States dollar is the functional currency for our consolidated financial statements. The functional currency of our Spanish subsidiary is the euro. The functional currency for our China subsidiary is the yuan renminbi.

We recognize gains and losses due to the effect of exchange rate changes on foreign currency primarily due to our operations in Spain, the Netherlands, and in China. The assets and liabilities of our foreign operations are translated from their respective functional currencies into U.S. dollars at the rates in effect at the consolidated balance sheet dates, and the revenue and expense amounts are translated at the average rate during the applicable periods reflected on the consolidated statements of operations and comprehensive loss. Foreign currency translation adjustments are recorded as accumulated other comprehensive income. Gains and losses from foreign currency transactions denominated in currencies other than the U.S. dollar, both realized and unrealized, are recorded as foreign exchange gain (loss) on our consolidated statements of operations and comprehensive loss. A majority of the gain or losses recorded relates to the change in value of the euro and yuan renminbi relative to the U.S. dollar.

During the normal course of business, we are exposed to market risks associated with fluctuations in foreign currency exchange rates, primarily the euro. To reduce the impact of these risks on our earnings and to increase the predictability of cash flows, we use natural offsets in receipts and disbursements within the applicable currency as the primary means of reducing the risk.

Some of our foreign suppliers may adjust their prices (in \$US) from time to time to reflect currency exchange fluctuations, and such price changes could impact our future financial condition or results of operations. We do not currently hedge our foreign currency exposure.

### **Interest Rate Risks**

On November 11, 2010, we entered into a Credit and Security Agreement (credit facility) with Wells Fargo Bank. The credit facility provides us with a three-year revolving credit of up to \$35 million that can be used for working capital requirements, letters of credit, and other general corporate purposes. The credit facility was initially secured by the Company's accounts receivables and inventory assets and was subject to a borrowing base formula based on the Company's eligible accounts receivable and inventory accounts.

As of September 30, 2011, we had a \$17.6 million LIBOR rate loan outstanding, with an interest rate of 3.38%, and approximately \$2.6 million reserved under eight outstanding standby letters of credit under the credit facility. As of November 2, 2011, we paid off the outstanding loan with cash on hand.

On December 21, 2011, we signed an amendment to our credit facility that increased our eligible borrowing base by up to \$10 million by adding to the borrowing base formula 85% of the appraised value of the Company's equipment and 50% of the appraised value of the Company's real estate, for which the appraisals are currently in process. In addition, Wells Fargo Bank reduced our restrictions under the excess availability financial covenant requirement from \$7.5 million to \$3.5 million through December 2012. We now expect at least 70% of the total amount of credit under the credit facility to be available for use based on the revised borrowing base formula during fiscal year 2012. The interest rate on outstanding borrowings was increased to LIBOR rate plus four percent. An increase in the interest rate increases interest expense incurred on amounts borrowed by us. See [Footnote 11 - Credit Facilities](#) for additional information related to our bank credit facility.

### **Inflation Risks**

Inflationary factors, such as increases in material costs and operating expenses, may adversely affect our results of operations and cash flows. Although we do not believe that inflation has had a material impact on our financial position or results of operations to date, an increase in the rate of inflation in the future may have an adverse effect on the levels of gross profit and operating expenses as a percentage of revenue if the sales prices for our products do not proportionately increase with these increases expenses.

### **Credit Market Conditions**

Recently, the U.S. and global capital markets have been experiencing turbulent conditions, particularly in the credit markets, as evidenced by tightening of lending standards, reduced availability of credit, and reductions in certain asset values. This could impact our ability to obtain additional funding through financing or asset sales.

**ITEM 8. Financial Statements and Supplementary Data**

**EMCORE CORPORATION**  
**Consolidated Statements of Operations and Comprehensive Loss**  
**For the Fiscal Years Ended September 30, 2011, 2010, and 2009**  
(in thousands, except loss per share)

	<b>For the Fiscal Years Ended September 30,</b>		
	<b>2011</b>	<b>2010</b>	<b>2009</b>
Revenue	\$ 200,928	\$ 191,278	\$ 176,356
Cost of revenue	158,165	140,617	182,666
Gross profit (loss)	42,763	50,661	(6,310)
Operating expenses (income):			
Selling, general, and administrative	35,582	42,549	46,775
Research and development	32,853	29,538	27,100
Impairments	8,000	—	60,781
Litigation settlements, net	(1,145)	—	—
Total operating expenses	75,290	72,087	134,656
Operating loss	(32,527)	(21,426)	(140,966)
Other income (expense):			
Interest income	2	24	84
Interest expense	(642)	(439)	(542)
Foreign exchange gain (loss)	735	(1,008)	(154)
Loss from equity method investment	(1,842)	—	—
Change in fair value of financial instruments	70	(475)	—
Impairment of investment	—	—	(367)
Gain from the sale of an unconsolidated affiliate	—	—	3,144
Other expense	(15)	(370)	—
Total other income (expense)	(1,692)	(2,268)	2,165
Net loss	\$ (34,219)	\$ (23,694)	\$ (138,801)
Foreign exchange translation adjustment	135	42	186
Comprehensive loss	\$ (34,084)	\$ (23,652)	\$ (138,615)
<b>Per share data:</b>			
Net loss per basic share	\$ (0.38)	\$ (0.28)	\$ (1.75)
Net loss per diluted share	\$ (0.38)	\$ (0.28)	\$ (1.75)
Weighted-average number of basic shares outstanding	88,910	83,166	79,140
Weighted-average number of diluted shares outstanding	88,910	83,166	79,140

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

**EMCORE CORPORATION**  
**Consolidated Balance Sheets**  
**As of September 30, 2011 and 2010**  
**(in thousands, except per share data)**

	As of September 30, 2011	As of September 30, 2010
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 15,598	\$ 19,944
Restricted cash	544	1,298
Accounts receivable, net of allowance of \$3,332 and \$8,399, respectively	34,875	40,125
Inventory	33,166	32,056
Prepaid expenses and other current assets	7,168	5,312
Total current assets	91,351	98,735
Property, plant, and equipment, net	46,786	46,990
Goodwill	20,384	20,384
Other intangible assets, net	5,866	10,738
Equity method investment	2,374	—
Other non-current assets, net of allowance of \$3,641 and \$0, respectively	3,537	991
Total assets	\$ 170,298	\$ 177,838
<b>LIABILITIES and SHAREHOLDERS' EQUITY</b>		
Current liabilities:		
Borrowings from credit facility	\$ 17,557	\$ 10,573
Accounts payable	26,581	26,156
Warrant liability	601	—
Accrued expenses and other current liabilities	22,319	27,115
Total current liabilities	67,058	63,844
Warrant liability	—	475
Asset retirement obligations	4,800	—
Other long-term liabilities	4	87
Total liabilities	71,862	64,406
Commitments and contingencies (Note 14)		
Shareholders' equity:		
Preferred stock, \$0.0001 par value, 5,882 shares authorized; none issued or outstanding	—	—
Common stock, no par value, 200,000 shares authorized; 94,084 shares issued and 93,925 shares outstanding as of September 30, 2011; 85,346 shares issued and 85,187 shares outstanding as of September 30, 2010	713,063	701,997
Treasury stock, at cost; 159 shares	(2,083)	(2,083)
Accumulated other comprehensive income	912	777
Accumulated deficit	(613,456)	(587,259)
Total shareholders' equity	98,436	113,432
Total liabilities and shareholders' equity	\$ 170,298	\$ 177,838

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

**EMCORE CORPORATION**  
**Consolidated Statements of Shareholders' Equity**  
**For the Fiscal Years Ended September 30, 2011, 2010, and 2009**  
(in thousands)

	Shares of Common Stock	Value of Common Stock	Treasury Stock	Accumulated Other Comprehensive Income	Accumulated Deficit	Total Shareholders' Equity
<b>Balance as of September 30, 2008</b>	<b>77,761</b>	<b>\$ 680,020</b>	<b>\$ (2,083)</b>	<b>\$ 549</b>	<b>\$ (424,764)</b>	<b>\$ 253,722</b>
Net loss					(138,801)	(138,801)
Translation adjustment				186		186
Stock-based compensation	756	7,858				7,858
Stock option exercises	11	32				32
Issuance of common stock - ESPP	995	894				894
Issuance of common stock for acquisitions	1,300	—				—
Costs incurred related to issuance of equity line financing facility	—	40				40
<b>Balance as of September 30, 2009</b>	<b>80,823</b>	<b>688,844</b>	<b>(2,083)</b>	<b>735</b>	<b>(563,565)</b>	<b>123,931</b>
Net loss					(23,694)	(23,694)
Translation adjustment				42		42
Stock-based compensation	1,105	9,860				9,860
Stock option exercises	2	1				1
Issuance of common stock - ESPP	1,202	990				990
Issuance of common stock related to equity line financing facility	2,055	2,302				2,302
<b>Balance as of September 30, 2010</b>	<b>85,187</b>	<b>701,997</b>	<b>(2,083)</b>	<b>777</b>	<b>(587,259)</b>	<b>113,432</b>
Net loss					(34,219)	(34,219)
Translation adjustment				135		135
Stock-based compensation	2,513	7,580				7,580
Stock option exercises	231	320				320
Issuance of common stock - ESPP	1,438	1,455				1,455
Issuance of common stock - ODPP	37	80				80
Outstanding warrants valuation adjustment	—	(8,218)			8,022	(196)
Issuance of common stock from private placement transaction	4,408	9,653				9,653
Issuance of common stock related to equity line financing facility	111	196				196
<b>Balance as of September 30, 2011</b>	<b>93,925</b>	<b>\$ 713,063</b>	<b>\$ (2,083)</b>	<b>\$ 912</b>	<b>\$ (613,456)</b>	<b>\$ 98,436</b>

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

**EMCORE CORPORATION**  
**Consolidated Statements of Cash Flows**  
**For the Fiscal Years Ended September 30, 2011, 2010, and 2009**  
(in thousands)

	For the Fiscal Years Ended September 30,		
	2011	2010	2009
<b>Cash flows from operating activities:</b>			
Net loss	\$ (34,219)	\$ (23,694)	\$ (138,801)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:			
Impairments	8,000	—	60,781
Depreciation and amortization expense	11,973	12,288	16,082
Stock-based compensation expense	7,428	9,860	8,054
Provision for doubtful accounts	30	2,238	5,065
Provision for product warranty	970	1,220	2,578
Provision for losses on firm commitments	—	185	8,515
Loss from equity method investment	1,842	—	—
Change in fair value of financial instruments	(70)	475	—
Cost of financing instruments	—	322	—
Impairment of investment	—	—	367
Loss on disposal of equipment	238	89	367
Gain from the sale of an unconsolidated affiliate	—	—	(3,144)
Total non-cash adjustments	30,411	26,677	98,665
Changes in operating assets and liabilities:			
Accounts receivable	3,278	(3,309)	15,967
Inventory	(883)	(361)	32,957
Other assets	(2,519)	(904)	1,582
Accounts payable	404	1,229	(27,428)
Accrued expenses and other current liabilities	(2,761)	3,773	(12,504)
Total change in operating assets and liabilities	(2,481)	428	10,574
Net cash provided by (used in) operating activities	(6,289)	3,411	(29,562)
<b>Cash flows from investing activities:</b>			
Purchase of equipment	(7,334)	(1,403)	(1,323)
Deposits on equipment orders	(1,030)	—	—
Proceeds from disposal of equipment	—	—	106
Investment in internally-developed patents	(425)	(649)	—
Proceeds from the sale of available-for-sale securities	—	1,350	2,729
Investments in an unconsolidated affiliate	(12,000)	—	—
Consulting fees received related to an unconsolidated affiliate	5,500	—	—
Purchase of a business	(750)	—	—
Proceeds from the sale of an unconsolidated affiliate	—	—	11,017
Release of restricted cash	753	386	738
Net cash provided by (used in) investing activities	(15,286)	(316)	13,267
<b>Cash flows from financing activities:</b>			
Net proceeds from borrowings from credit facilities	6,984	241	10,332
Net proceeds (payments) on short-term debt	—	(842)	842
Net proceeds from private placement transaction	9,653	—	—
Net proceeds from equity line financing facility	—	1,980	—
Proceeds from stock plans	1,855	991	926
Payments on capital lease obligations	(605)	(5)	—
Net cash provided by financing activities	17,887	2,365	12,100
Effect of exchange rate changes on foreign currency	(658)	456	(4)
Net increase (decrease) in cash and cash equivalents	(4,346)	5,916	(4,199)
Cash and cash equivalents at beginning of period	19,944	14,028	18,227
Cash and cash equivalents at end of period	\$ 15,598	\$ 19,944	\$ 14,028

---

	For the Fiscal Years Ended September 30,		
	2011	2010	2009
<b>SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION</b>			
Cash paid during the period for interest	\$ 895	\$ 308	\$ 582
Cash paid during the period for income taxes	\$ —	\$ —	\$ —
<b>NON-CASH INVESTING AND FINANCING ACTIVITIES</b>			
Issuance of common stock under equity line financing facility	\$ 196	\$ 228	\$ —
Prior consulting fees received related to unconsolidated affiliate	\$ 3,000	\$ —	\$ —
Acquisition of equipment under capital lease	\$ 1,879	\$ —	\$ 46
Issuance of common stock for purchase of assets acquired from Intel Corporation	\$ —	\$ —	\$ 1,183

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



**EMCORE Corporation**  
**Notes to our Consolidated Financial Statements**

**NOTE 1. Description of Business**

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

Liquidity and Capital Resources

Historically, we have consumed cash from operations and incurred significant net losses. For the years ended September 30, 2011, 2010 and 2009, we incurred net losses of \$34.2 million, \$23.7 million and \$138.8 million, respectively. We have managed our liquidity position through a series of cost reduction initiatives, borrowings under our line of credit agreement, capital markets transactions, and the sale of assets.

As of September 30, 2011, cash and cash equivalents was approximately \$15.6 million and working capital totaled \$24.3 million. Working capital, calculated as current assets minus current liabilities, is a financial metric we use that represents available operating liquidity. For the fiscal years ended September 30, 2011, 2010 and 2009 net cash provided by (used in) operating activities totaled \$(6.3) million, \$3.4 million, and \$(29.6) million, respectively.

In addition, on October 24, 2011, our primary contract manufacturer announced that, as a result of the flooding in Thailand, it had suspended operations at its facility that is used to manufacture certain of our fiber optics products. Rising water penetrated the facility and submerged most of our manufacturing and test equipment as well as our inventory at the facility. We expect to write-off the carrying value of damaged equipment and inventory which is estimated to be in the range of \$10 to \$20 million.

We expect that flooding at our primary contract manufacturer in Thailand will have a significant adverse impact on our operations and our ability to meet customer demand for our fiber optics products. We are currently focused on rebuilding the manufacturing infrastructure for our impacted product lines. See [Footnote 20 - Subsequent Event](#) for further discussion associated with the impact of the floods in Thailand on our operations.

As a result of the flood, certain inventory and fixed assets were damaged or destroyed. Our contract manufacturer is required under its production agreement with us to reimburse us for losses to fixed assets and inventory incurred while at the manufacturer's facilities. We are working with our contract manufacturer (and the contract manufacturer's insurance carrier) to receive insurance proceeds to cover the direct damages to our assets that were impacted by the flood. We are not a named beneficiary of our contract manufacturer's insurance policy. The timing and amounts of the recovery from the contract manufacturer, including insurance proceeds, are uncertain at this time.

Additionally, we claimed damages under our own insurance policy relating to business interruption due to the flooding. To date, we have collected \$2.0 million from our policy and we expect to receive an additional \$3.0 million by January 2012.

With respect to measures taken to improve liquidity:

- On November 11, 2010, we entered into a Credit and Security Agreement (credit facility) with Wells Fargo Bank (Wells Fargo). The credit facility provides us with a three-year revolving credit of up to \$35 million that can be used for working capital requirements, letters of credit, and other general corporate purposes. The credit facility was initially secured by the Company's accounts receivables and inventory assets and was subject to a borrowing base formula based on the Company's eligible accounts receivable and inventory accounts.

On December 21, 2011, we signed an amendment to our credit facility that increased our eligible borrowing base by up to \$10 million by adding to the borrowing base formula 85% of the appraised value of the Company's equipment and 50% of the appraised value of the Company's real estate, for which the appraisals are currently in process. In addition, Wells Fargo reduced our restrictions under the excess availability financial covenant requirement from \$7.5 million to \$3.5 million through December 2012. The interest rate on outstanding borrowings was increased to LIBOR rate plus four percent. We now expect at least 70% of the total amount of credit under the credit facility to be available for use based on the revised borrowing base formula during fiscal year 2012, of which \$17.6 million was borrowed at September 30, 2011.

The credit facility contains customary representations and warranties, and affirmative and negative covenants, including, among other things, cash balance and excess availability requirements, minimum tangible net worth and EBITDA covenants and limitations on liens and certain additional indebtedness and guarantees. The covenants are written such that as long as we maintain the minimum cash balance and excess availability requirement of \$7.5 million prior to the amendment, and \$3.5 million following the amendment, the other covenants are not required to be met. As of September 30, 2011, we were in compliance with the financial covenants contained in the credit facility since cash on deposit and excess availability exceeded the \$7.5 million financial covenant requirement.

The credit facility also contains certain events of default, including a subjective acceleration clause. Under this clause, Wells Fargo may declare an event of default if it believes in good faith that our ability to pay all or any portion of its indebtedness with Wells Fargo or to perform any of its material obligations under the credit facility has been impaired, or if it believes in good faith that there has been a material adverse change in the business or financial condition of the Company. If an event of default is not cured within the grace period (if applicable), then Wells Fargo may, among other things, accelerate repayment of amounts borrowed under the credit facility, cease making advances under the credit facility or take possession of the Company's assets that secure its obligations under the credit facility. We do not anticipate at this time any change in the business or financial condition of the Company that could be deemed a material adverse change by Wells Fargo. Wells Fargo has confirmed that they do not consider the flooding at our contract manufacturer to be a material adverse change in the business or financial condition of the Company.

- On August 16, 2011, we entered into a committed equity line financing facility (2011 Equity Facility) with Commerce Court Small Cap Value Fund, Ltd. (Commerce Court) whereby Commerce Court has committed, upon issuance of a draw-down request by us, to purchase up to \$50 million worth of our common stock over a two-year period, subject to our common stock trading above \$1 per share during the draw down period, unless a waiver is received.
- In November 2011, we implemented various cost reduction measures, including temporary salary reduction, furlough, reduction of discretionary spending including travel, capital expenditures, and development material costs, and improve working capital management. We believe that our cost reduction activities will reduce the overall cost structure of our operations.

We also entered into an agreement with our contract manufacturer whereby our contract manufacturer will purchase equipment to rebuild our affected manufacturing lines for which we will repay our contract manufacturer from insurance proceeds received from that contract manufacturer. Additionally, we restructured our outstanding payables owed to our contract manufacturer, which delayed payments to future dates to coincide with expected timing of insurance proceeds.

- In December 2011, we signed agreements with certain customers pursuant to which they will receive an allocation of our finished goods inventory as well as a percentage of future output from our new production lines being placed into service in fiscal 2012. As consideration, we have received partial prepayments for future product shipments. These advanced payments will be used to support our working capital requirements until we receive the insurance proceeds.

We believe that our existing balances of cash and cash equivalents, the cash expected to be generated from operations, the agreement with our contract manufacturer to delay payment terms and purchase equipment, expected insurance proceeds, and amounts expected to be available under our credit facility with Wells Fargo and our 2011 Equity Facility will provide us with sufficient financial resources to meet our cash requirements for operations, working capital, and capital expenditures for the next 12 months.

However, in the event of unforeseen circumstances, unfavorable market or economic developments, unfavorable results from operations, or if Wells Fargo declares an event of default on the credit facility, we may have to raise additional funds by any one or a combination of the following: issuing equity, debt or convertible debt, or selling certain product lines and/or portions of our business. There can be no assurance that we will be able to raise additional funds on terms acceptable to us, or at all. A

significant contraction in the capital markets, particularly in the technology sector, may make it difficult for us to raise additional capital if or when it is required, especially if we experience negative operating results. If adequate capital is not available to us as required, or is not available on favorable terms, our business, financial condition, results of operations, and cash flows may be adversely affected.

## **NOTE 2. Summary of Significant Accounting Policies**

**Principles of Consolidation.** Our consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (U.S. GAAP) and include the assets, liabilities, shareholders' equity, and operating results of the Company and its wholly owned subsidiaries. All significant intercompany accounts and transactions have been eliminated in consolidation. We are not the primary beneficiary of, nor do we hold a significant variable interest in, any variable interest entity.

**Reclassifications.** Certain prior period amounts have been reclassified to conform to the current period presentation. These reclassifications had no impact on our previously reported financial position, results of operations, or cash flows.

**Use of Estimates.** The preparation of consolidated financial statements in conformity with U.S. GAAP requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities, as of the date of the financial statements, and the reported amounts of revenue and expenses during the reported period. The accounting estimates that require our most significant, difficult, and/or subjective judgments include:

- the valuation of inventory, goodwill, intangible assets, warrants, and stock-based compensation;
- assessment of recovery of long-lived assets;
- asset retirement obligations and litigation contingencies;
- revenue recognition associated with the percentage of completion method; and,
- the allowance for doubtful accounts and warranty accruals.

We develop estimates based on historical experience and on various assumptions about the future that are believed to be reasonable based on the best information available to us. Our reported financial position or results of operations may be materially different under changed conditions or when using different estimates and assumptions, particularly with respect to significant accounting policies. In the event that estimates or assumptions prove to differ from actual results, adjustments are made in subsequent periods to reflect more current information.

**Concentration of Credit Risk.** Financial instruments that may subject us to concentrations of credit risk consist primarily of cash and cash equivalents and accounts receivable. Our cash and cash equivalents are held in safekeeping primarily with Wells Fargo Bank. When necessary, we perform credit evaluations on our customers' financial condition and occasionally we request deposits or letters of credit in advance of shipping product to our customers. These financial evaluations require significant judgment and are based on a variety of factors including, but not limited to, current economic trends, historical payment patterns, bad debt write-off experience, and financial review of the particular customer.

**Cash and Cash Equivalents.** Cash and cash equivalents consists primarily of bank deposits and occasionally highly liquid short-term investments with a maturity of three months or less at the time of purchase.

**Restricted Cash.** In fiscal 2010, restricted cash represents interest-bearing investments in bank certificates of deposit or similar type money market funds which act as collateral supporting the issuance of letters of credit and performance bonds for the benefit of third parties and temporary bank controlled deposits on account. In fiscal 2011, restricted cash represents recently deposited cash that is temporary controlled by our bank.

**Accounts Receivable.** We regularly evaluate the collectability of our accounts receivable and maintain allowances for doubtful accounts for estimated losses resulting from the inability of our customers to meet their financial obligations to us. The allowance is based on the age of receivables and a specific identification of receivables considered at risk of collection. We classify charges associated with the allowance for doubtful accounts as sales, general, and administrative expense. If the financial condition of our customers were to deteriorate, impacting their ability to pay us, additional allowances may be required. See [Footnote 5 - Receivables](#) for additional disclosures related to our receivables.

## [Table of Contents](#)

**Inventory.** Inventory is stated at the lower of cost or market, with cost being determined using the standard cost method that includes material, labor, and manufacturing overhead costs, which approximates weighted average cost. We write-down inventory once it has been determined that conditions exist that may not allow the inventory to be sold for its intended purpose or the inventory is determined to be excess or obsolete based on our forecasted future revenue. The charge related to inventory write-downs is recorded as a cost of revenue. The majority of the inventory write-downs are related to estimated allowances for inventory whose carrying value is in excess of net realizable value and on excess raw material components resulting from finished product obsolescence. In most cases where we sell previously written down inventory, it is typically sold as a component part of a finished product. The finished product is sold at market price at the time resulting in higher average gross margin on such revenue. We do not track the selling price of individual raw material components that have been previously written down or written off, since such raw material components usually are only a portion of the finished products and related sales price. We evaluate inventory levels at least quarterly against sales forecasts on a significant part-by-part basis, in addition to determining its overall inventory risk. We have incurred, and may in the future incur charges to write-down our inventory. See [Footnote 6 - Inventory](#) for additional disclosures related to our inventory.

**Property, Plant, and Equipment.** Our property, plant, and equipment is recorded at cost. Plant and equipment are depreciated on a straight-line basis over the following estimated useful lives of the assets:

<b>Estimated Useful Life</b>		
Buildings and improvements	—	forty years
Equipment	—	three to five years
Furniture and fixtures	—	five years
Computer hardware and software	—	three to seven years
Leasehold improvements	—	five to seven years

Leasehold improvements are amortized over the lesser of the asset life or the life of the facility lease. Expenditures for repairs and maintenance are charged to expense as incurred. The costs for major renewals and improvements are capitalized and depreciated over their estimated useful lives of the related asset. The cost and related accumulated depreciation of the assets are removed from the accounts upon disposition and any resulting gain or loss is reflected in the consolidated statement of operations and comprehensive loss. See [Footnote 7 - Property, Plant, and Equipment](#) for additional disclosures related to our fixed assets.

**Goodwill.** The Company's goodwill of approximately \$20.4 million is associated with our Photovoltaics segment. Goodwill represents the excess of the purchase price of an acquired business over the fair value of the identifiable assets acquired and liabilities assumed. As required by ASC 350, *Intangibles - Goodwill and Other*, we evaluate our goodwill for impairment on an annual basis, or whenever events or changes in circumstances indicate whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount.

Pursuant to ASC 350, circumstances that could trigger an interim impairment test include but are not limited to:

- Macroeconomic conditions such as a deterioration in general economic conditions, limitations on accessing capital, fluctuations in foreign exchange rates, or other developments in equity and credit markets;
- Industry and market considerations such as a deterioration in the environment in which an entity operates, an increased competitive environment, a decline in market-dependent multiples or metrics (considered in both absolute terms and relative to peers), a change in the market for an entity's products or services, or a regulatory or political development;
- Cost factors such as increases in raw materials, labor, or other costs that have a negative effect on earnings and cash flows;
- Overall financial performance such as negative or declining cash flows or a decline in actual or planned revenue or earnings compared with actual and projected results of relevant prior periods;
- Other relevant entity-specific events such as changes in management, key personnel, strategy, or customers; contemplation of bankruptcy; or litigation;
- Events affecting a reporting unit such as a change in the composition or carrying amount of its net assets, a more-likely-than-not expectation of selling or disposing all, or a portion, of a reporting unit, the testing for recoverability of

## [Table of Contents](#)

a significant asset group within a reporting unit, or recognition of a goodwill impairment loss in the financial statements of a subsidiary that is a component of a reporting unit; and,

- If applicable, a sustained decrease in share price (considered in both absolute terms and relative to peers).

In performing goodwill impairment testing, we determine the fair value of each reporting unit using a weighted combination of a market-based approach and a discounted cash flow (DCF) approach. The market-based approach relies on values based on market multiples derived from comparable public companies. In applying the DCF approach, management forecasts cash flows over the remaining useful life of its primary asset using assumptions of current economic conditions and future expectations of earnings. This analysis requires the exercise of significant judgment, including judgments about appropriate discount rates based on the assessment of risks inherent in the amount and timing of projected future cash flows. The derived discount rate may fluctuate from period to period as it is based on external market conditions. All of these assumptions are critical to the estimate and can change from period to period. Updates to these assumptions in future periods, particularly changes in discount rates, could result in different results of goodwill impairment tests. See [Footnote 8 - Goodwill](#) for additional disclosures related to our goodwill.

**Other Intangible Assets.** Our intangible assets consist primarily of intellectual property that has been internally-developed or acquired. Acquired intangible assets include existing core technology, trademarks and trade names, and customer contracts. Intangible assets are amortized using the straight-line method over estimated useful lives that could range up to fifteen years. See [Footnote 9 - Intangible Assets](#) for additional disclosures related to our intangible assets.

**Valuation of Long-lived Assets.** Long-lived assets consist primarily of property, plant, and equipment and intangible assets. Because most of our long-lived assets are subject to amortization, we review these assets for impairment in accordance with the provisions of ASC 360, *Property, Plant, and Equipment*. We review long-lived assets for impairment whenever events or changes in circumstances indicate that its carrying amount may not be recoverable. Our impairment testing of long-lived assets consists of determining whether the carrying amount of the long-lived asset (asset group) is recoverable, in other words, whether the sum of the future undiscounted cash flows expected to result from the use and eventual disposition of the asset (asset group) exceeds its carrying amount. The determination of the existence of impairment involves judgments that are subjective in nature and may require the use of estimates in forecasting future results and cash flows related to an asset or group of assets. In making this determination, we use certain assumptions, including estimates of future cash flows expected to be generated by these assets, which are based on additional assumptions such as asset utilization, the length of service that assets will be used in our operations, and estimated salvage values. See [Footnote 7 - Property, Plant, and Equipment](#) and [Footnote 9 - Intangible Assets](#) for additional disclosures related to our long-lived assets.

**Asset Retirement and Environmental Obligations.** Pursuant to ASC 410, *Asset Retirement and Environmental Obligations*, an asset retirement obligation is recorded when there is a legal obligation associated with the retirement of a tangible long-lived asset and the fair value of the liability can reasonably be estimated. Upon initial recognition of an asset retirement obligation, a company increases the carrying amount of the long-lived asset by the same amount as the liability. Over time, the liabilities are accreted for the change in their present value through charges to operations costs. The initial capitalized costs are depleted over the useful lives of the related assets through charges to depreciation, depletion, and/or amortization. If the fair value of the estimated asset retirement obligation changes, an adjustment is recorded to both the asset retirement obligation and the asset retirement cost. Revisions in estimated liabilities can result from revisions of estimated inflation rates, escalating retirement costs, and changes in the estimated timing of settling asset retirement obligations.

We have known conditional asset retirement conditions, such as certain asset decommissioning and restoration of rented facilities to be performed in the future. During the three months ended September 30, 2011, we completed a review of our asset retirement and environmental obligations and we recorded an asset retirement obligation with an offset to fixed assets totaling \$4.8 million. See [Footnote 14 - Commitments and Contingencies](#) for additional disclosures related to our asset retirement obligations.

**Fair Value of Financial Instruments.** We account for our financial instruments in accordance with ASC 820, *Fair Value Measurements and Disclosures*. The carrying amounts of cash and cash equivalents, restricted cash, accounts receivable, prepaid expenses and other current assets, borrowings under our credit facility, accounts payable, accrued expenses and other current liabilities approximate fair value because of the short maturity of these instruments. See [Footnote 4 - Fair Value Accounting](#) for additional disclosures related to the fair value of our financial instruments.

**Equity investments.** We account for our equity investment in our Suncore joint venture in accordance with ASC 323, *Investments - Equity Method and Joint Ventures*. In our opinion, neither San'an nor EMCORE holds a controlling financial interest in Suncore because neither party has exclusive authority over decision-making related to significant ordinary course of business actions such as establishing a budget, compensation, and the hiring and firing of certain executive personnel. An equity investment in which we exercise significant influence but do not control and are not the primary beneficiary, is accounted for using the equity method. We regularly review our investment to determine whether a decline in fair value below the cost basis is other than temporary.

**Revenue Recognition.** Revenue is recognized upon shipment, provided persuasive evidence of a contract exists, the price is fixed, the product meets our customer's specifications, title and ownership have transferred to the customer, and there is reasonable assurance of collection of the sales proceeds. The majority of our products have shipping terms that are free on board or free carrier alongside (FCA) shipping point, which means that we fulfill our delivery obligation when the goods are handed over to the freight carrier at our shipping dock. This means the buyer bears all costs and risks of loss or damage to the goods from that point. In certain cases, we ship our products cost insurance and freight. Under this arrangement, revenue is recognized under FCA shipping point terms, but we pay (and invoice the customer) for the cost of shipping and insurance to the customer's designated location. We account for shipping and related transportation costs by recording the charges that are invoiced to customers as revenue, with the corresponding cost recorded as cost of revenue. In those instances where inventory is maintained at a consigned location, revenue is recognized only when our customer pulls product for use and after title and ownership has transferred to the customer. Revenue from time and material contracts is recognized at contractual rates as labor hours and direct expenses are incurred. Any warranty cost and remaining obligations that are inconsequential or perfunctory are accrued when the corresponding revenue is recognized.

**Distributors.** We use a number of distributors around the world and recognize revenue upon shipment of product to these distributors. Title and risk of loss pass to the distributors upon shipment, and our distributors are contractually obligated to pay us on standard commercial terms, just like our other direct customers. We do not sell to our distributors on consignment and, except in the event of product discontinuance, do not give distributors a right of return.

**Solar Panel and Solar Power Systems Contracts.** Pursuant to ASC 605-35, *Revenue Recognition - Construction-Type and Production*, we record revenue on long-term solar panel and solar power system contracts using either the percentage-of-completion method or the completed contract method. In general, the performance of these types of contracts involves the design, development, and manufacture of complex aerospace or electronic equipment to our customer's specifications. The percentage-of-completion method is used in circumstances in which all the following conditions exist:

- the contract includes enforceable rights regarding goods or services to be provided to the customer, the consideration to be exchanged, and the manner and terms of settlement;
- both the Company and the customer are expected to satisfy all of the contractual obligations; and,
- reasonably reliable estimates of total revenue, total cost, and the progress towards completion can be made.

The percentage-of-completion method recognizes estimates for contract revenue and costs in progress as work on the contract continues. Estimates are revised as additional information becomes available. If estimates of costs to complete a contract indicate a loss, a provision is made at that time for the total loss anticipated on the contract.

We use the completed contract method if reasonably dependable estimates cannot be made or for which inherent hazards make estimates doubtful. Under the completed contract method, contract revenue and costs in progress are deferred as work on the contract continues. If a loss becomes evident on the contract, a provision is made at that time for the total loss anticipated on the contract. Total contract revenue and related costs are recognized upon the completion of the contract.

**Government Research and Development Contracts.** Revenue from research and development contracts represents reimbursement by various U.S. government entities, or their contractors, to aid in the development of new technology. The applicable contracts generally provide that we may elect to retain ownership of inventions made in performing the work, subject to a non-exclusive license retained by the U.S. government to practice the inventions for governmental purposes. The research and development contract funding may be based on a cost-plus, cost reimbursement, or a firm fixed price arrangement. The amount of funding under each research and development contract is determined based on cost estimates that include both direct and indirect costs. Cost-plus funding is determined based on actual costs

## Table of Contents

plus a set margin. As we incur costs under cost reimbursement type contracts, revenue is recorded. Contract costs include material, labor, special tooling and test equipment, subcontracting costs, as well as an allocation of indirect costs. A research and development contract is considered complete when all significant costs have been incurred, milestones have been reached, and any reporting obligations to the customer have been met. These contracts may be modified or terminated at the convenience of the U.S. government and may be subject to governmental budgetary fluctuations.

We also participate in cost-sharing research and development arrangements. Under such arrangements in which the actual costs of performance are split between the U.S. government and us on a best efforts basis, no revenue is recorded and our research and development expense is reduced for the amount of the cost-sharing receipts.

*Multiple-Element Arrangements.* Contracts with our customers usually relate to either the delivery of product or the completion of technology or engineering research and development contracts. In a very limited number of cases, a research contract may involve the creation and delivery of a customer-designed product sample based upon the research and development efforts completed. Pursuant to ASC 605-25-25-5, *Revenue Recognition - Multiple-Element Arrangements*, we have concluded that product revenue should not be considered a unit of accounting separate from the service revenue for these types of research contracts.

*Contract Manufacturers.* In our Fiber Optics segment, prior to certain customers accepting product that is manufactured at one of our contract manufacturers, these customers require that they first qualify the product and manufacturing processes at our contract manufacturer. The customers' qualification process determines whether the product manufactured at our contract manufacturer achieves their quality, performance, and reliability standards. After a customer completes the initial qualification process, we receive approval to ship qualified product to that customer. As part of the manufacturing process at our contract manufacturers, the finished product is tested prior to shipment to the customer using the same criteria that our customer uses to test product it receives. Revenue is recognized upon shipment of customer-qualified product, provided persuasive evidence of a contract exists, the price is fixed, the product meets our customer's specifications, title and ownership have transferred to the customer, and there is reasonable assurance of collection of the sales proceeds.

### Product Warranty Reserves.

We provide our customers with limited rights of return for non-conforming shipments and warranty claims for certain products. Pursuant to ASC 450, *Contingencies*, we make estimates of product warranty expense using historical experience rates as a percentage of revenue and/or costs of revenue and accrue estimated warranty expense as a cost of revenue. We estimate the costs of our warranty obligations based on historical experience of known product failure rates and anticipated rates if warranty claims, use of materials to repair or replace defective products, and service delivery costs incurred in correcting product issues. In addition, from time to time, specific warranty accruals may be made if unforeseen technical problems arise. Should our actual experience relative to these factors differ from our estimates, we may be required to record additional warranty reserves. Alternatively, if we provide more reserves than needed, we may reverse a portion of such provisions in future periods. See [Footnote 10 - Accrued Expenses and Other Current Liabilities](#) for additional disclosures related to our product warranty reserves.

*Litigation Contingencies.* We are subject to various legal proceedings, claims, and litigation, either asserted or unasserted that arise in the ordinary course of business. While the outcome of these matters is currently not determinable, we do not expect the resolution of these matters will have a material adverse effect on our business, financial position, results of operations, or cash flows. However, the results of these matters cannot be predicted with certainty. Professional legal fees are expensed when incurred. We accrue for contingent losses when such losses are probable and reasonably estimable. In the event that estimates or assumptions prove to differ from actual results, adjustments are made in subsequent periods to reflect more current information. Should we fail to prevail in any legal matter or should several legal matters be resolved against the Company in the same reporting period, then the financial results of that particular reporting period could be materially affected. See [Footnote 14 - Commitments and Contingencies](#) for disclosures related to our legal proceedings.

*Research and Development.* Research and development costs, net of reimbursement from U.S. government contracts, are charged as an expense when incurred.



## [Table of Contents](#)

**Stock-Based Compensation.** Stock-based compensation expense is measured at the stock option grant date, based on the fair value of the award, and is recorded to cost of sales, sales, general, and administrative, and research and development expense based on an employee's responsibility and function over the requisite service period. We use the Black-Scholes option-pricing model and the straight-line attribution approach to determine the fair value of stock-based awards in accordance with ASC 718, *Compensation*. This option-pricing model requires the input of highly subjective assumptions, including the option's expected life, the price volatility of the underlying stock, and expected forfeitures. See [Footnote 15 - Equity](#) for additional disclosures related to our stock-based compensation.

**Foreign Exchange.** We recognize gains and losses due to the effect of exchange rate changes on foreign currency primarily due to our operations in Spain, the Netherlands, and in China. The assets and liabilities of our foreign operations are translated from their respective functional currencies into U.S. dollars at the rates in effect at the consolidated balance sheet dates, and the revenue and expense amounts are translated at the average rate during the applicable periods reflected on the consolidated statements of operations and comprehensive loss. Foreign currency translation adjustments are recorded as accumulated other comprehensive income. Gains and losses from foreign currency transactions denominated in currencies other than the U.S. dollar, both realized and unrealized, are recorded as foreign exchange gain (loss) on our consolidated statements of operations and comprehensive loss. A majority of the gain or losses recorded relates to the change in value of the euro and yuan renminbi relative to the U.S. dollar.

**Income Taxes.** In accordance with ASC 740, *Income Taxes*, deferred tax assets and liabilities are recognized for the expected tax consequences of temporary differences between the tax bases of assets and liabilities and their reported amounts. We record valuation allowances against all deferred tax assets for amounts which are considered less likely to be realized. See [Footnote 13 - Taxes](#) for additional disclosures related to income taxes.

**Comprehensive Loss.** ASC 220, *Comprehensive Income*, establishes standards for reporting and display of comprehensive income and its components in financial statements. It requires that all items that are required to be recognized under accounting standards as components of comprehensive income be reported in the financial statement that is displayed with the same prominence as other financial statements. Our comprehensive loss consists of both net loss and foreign currency translation adjustments and it is presented in the accompanying consolidated statements of operations and comprehensive loss.

**Loss Per Share.** Our loss per share amounts were calculated by dividing net loss applicable to common stock by the weighted average number of common stock shares outstanding for the period and it is presented in the accompanying consolidated statements of operations and comprehensive loss. For the fiscal years ended September 30, 2011, 2010, and 2009, stock options representing 9,036,788, 8,722,125, and 10,788,174 shares of common stock, respectively, and for the fiscal years ended September 30, 2011, 2010, and 2009, warrants representing 3,000,003, 3,000,003, and 1,400,003 shares of common stock, respectively, were excluded from the computation of diluted earnings per share since we incurred a net loss for these periods and any effect would have been anti-dilutive.

### **Correction of Prior Period Financial Statements:**

During the quarter ended June 30, 2010, we determined that approximately \$2.5 million of excess and obsolete inventory reserves related to our Fiber Optics segment and \$0.2 million of compensation expense should have been recorded in the quarter ended September 30, 2009. Accordingly, the consolidated balance sheet as of September 30, 2009 was corrected to reduce inventory by \$2.5 million, to increase accrued liabilities and other current liabilities by \$0.2 million, followed by a corresponding decrease in shareholders' equity of \$2.7 million, from amounts previously reported. The consolidated statement of operations and comprehensive loss for the quarter and year ended September 30, 2009 was corrected to increase both cost of revenue and gross loss by \$2.5 million and increase both operating loss and net loss by \$2.7 million, from amounts previously reported. The impact from correcting prior period financial statements resulted in the reduction of cost of revenue of approximately \$1.3 million and \$0.3 million from amounts previously reported in the quarters ended December 31, 2009 and March 31, 2010, respectively which improved profitability in these reporting periods. These corrections had no impact to net cash provided by (used in) operating activities or other subtotals as reported on the consolidated statements of cash flows for the years ended September 30, 2009 and 2010.



**NOTE 3. Recent Accounting Pronouncements**

There have been no recent accounting pronouncements or changes in accounting pronouncements that are of significance, or of potential significance, to us other than those discussed below:

- In June 2011, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2011-05, *Comprehensive Income (Topic 220): Presentation of Comprehensive Income*, which amended guidance on the presentation of comprehensive income. The amended guidance eliminates one of the presentation options provided by current U.S. GAAP, that is to present the components of other comprehensive income as part of the statement of shareholders' equity. Instead, it requires an entity to present total comprehensive income, the components of net income, and the components of other comprehensive income either in a single continuous statement of comprehensive income or in two separate but consecutive statements. We adopted this guidance during the three months ended September 30, 2011 and chose to present our other comprehensive loss within the accompanying statements of operations and comprehensive loss. The effect of this amended guidance has been retrospectively applied to all periods presented.
- In September 2011, the FASB issued ASU No. 2011-08, *Intangibles - Goodwill and Other (Topic 350): Testing Goodwill for Impairment*. The amended authoritative guidance provides entities with the option to perform a qualitative assessment to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. If, after assessing updated qualitative factors, an entity determines that it is not more likely than not that the fair value of a reporting unit is less than its carrying amount, it would not have to perform the current two-step goodwill impairment test. This guidance is effective beginning in fiscal year 2012 and early adoption is permitted. We adopted this guidance during the three months ended September 30, 2011.

**NOTE 4. Fair Value Accounting**

ASC 820, *Fair Value Measurements and Disclosures*, establishes a valuation hierarchy for disclosure of the inputs to valuation techniques used to measure fair value. The standard describes a fair value hierarchy based on three levels of inputs, of which the first two are considered observable and the last unobservable, that may be used to measure fair value:

- Level 1 inputs are unadjusted quoted prices in active markets for identical assets or liabilities. We classify investments within Level 1 if quoted prices are available in active markets. Level 1 assets include instruments valued based on quoted market prices in active markets which generally could include money market funds, corporate publicly traded equity securities on major exchanges, and U.S. Treasury notes with quoted prices on active markets.
- Level 2 inputs are quoted prices for similar assets and liabilities in active markets or inputs that are observable for the asset or liability, either directly or indirectly, through market corroboration, for substantially the full term of the financial instrument. We classify items in Level 2 if the investments are valued using observable inputs to quoted market prices, benchmark yields, reported trades, broker/dealer quotes or alternative pricing sources with reasonable levels of price transparency. These investments could include: government agencies, corporate bonds, commercial paper, and auction rate securities.
- Level 3 inputs are unobservable inputs based on our own assumptions used to measure assets and liabilities at fair value. A financial asset or liability's classification within the hierarchy is determined based on the lowest level input that is significant to the fair value measurement. We do not hold any financial assets or liabilities within Level 3.

[Table of Contents](#)

Valuation techniques used to measure fair value under ASC 820 must maximize the use of observable inputs and minimize the use of unobservable inputs. The following table lists our financial assets and liabilities that are measured at fair value on a recurring basis:

**Fair Value Measurement**

(in thousands)

(in thousands)	[Level 1]	[Level 2]	[Level 3]	
	Quoted Prices in Active Markets for Identical Assets	Significant Other Observable Remaining Inputs	Significant Unobservable Inputs	Total
<u>As of September 30, 2011</u>				
<b>Assets:</b>				
Cash	\$ 15,598	\$ —	\$ —	\$ 15,598
Restricted fund deposits	544	—	—	544
<b>Liabilities:</b>				
Warrants	—	601	—	601
<u>As of September 30, 2010</u>				
<b>Assets:</b>				
Cash	\$ 19,944	\$ —	\$ —	\$ 19,944
Restricted fund deposits	1,298	—	—	1,298
<b>Liabilities:</b>				
Warrants	—	475	—	475

Cash consists primarily of bank deposits and occasionally highly liquid short-term investments with a maturity of three months or less at the time of purchase.

In fiscal 2010, restricted cash represents interest-bearing investments in bank certificates of deposit or similar type money market funds which act as collateral supporting the issuance of letters of credit and performance bonds for the benefit of third parties and temporary bank controlled deposits on account. In fiscal 2011, restricted cash represents recently deposited cash that is temporary controlled by our bank.

As of September 30, 2011 and 2010, warrants representing 3,000,003 shares of our common stock were outstanding. All of our warrants are classified as a liability since the warrants meet the classification requirements for liability accounting pursuant to ASC 815, *Derivatives and Hedging*. Each quarter, we expect an impact on our statement of operations and comprehensive loss when we record the change in fair value of our outstanding warrants using the Monte Carlo option valuation model. The Monte Carlo option valuation model is used since it allows the valuation of each warrant to factor in the value associated with our right to affect a mandatory exercise of each warrant.

**Assumptions used in Monte Carlo Option Valuation Model**

	Warrants issued on February 20, 2008		Warrants issued on October 1, 2009	
	As of September 30, 2011	As of September 30, 2010	As of September 30, 2011	As of September 30, 2010
Number of warrants issued	1,400,003	1,400,003	1,600,000	1,600,000
Expiration date	2/20/2013	2/20/2013	4/1/2015	4/1/2015
Exercise price	\$15.06	\$15.06	\$1.69 - \$2.36	\$1.69 - \$2.36
Expected dividend yield	—	—	—	—
Expected stock price volatility	88.12%	117.93%	111.71%	100.11%
Risk-free interest rate	0.13%	0.42%	0.42%	1.27%
Expected term (in years)	1.39	2.39	3.50	4.50
Total warrant valuation	\$9,800	\$0 (1)	\$590,800	\$475,093

(1) Prior to January 1, 2011, these warrants were classified as equity instruments. During the quarter ended March 31, 2011, we determined that the warrants issued in February 2008 should have been accounted for as a liability since

these warrants met the definition of a derivative instrument and did not qualify for equity classification. The valuation of the warrants was based on a Monte Carlo option pricing model which resulted in a fair value of approximately \$8.2 million, \$1.8 million, \$0.4 million, \$0.1 million, and \$0.2 million as of February 20, 2008, September 30, 2008, September 30, 2009, September 30, 2010 and December 31, 2010, respectively. During the three months ended March 31, 2011, we adjusted common stock and accumulated deficit, both equity-related accounts, by \$8,218,000 and \$8,022,000, respectively, and recorded the liability related to the fair value of the warrants as of January 1, 2011 of \$196,000 to correct the initial accounting treatment of the warrants from equity to liability accounting as an out-of-period adjustment.

The carrying amounts of cash and cash equivalents, restricted cash, accounts receivable, prepaid expenses and other current assets, borrowings under our credit facility, accounts payable, accrued expenses and other current liabilities approximate fair value because of the short maturity of these instruments.

Impairment tests for our long-lived assets involves comparing fair value to carrying amount. We derive fair value using both the guideline public company valuation method, and on a lesser extent, the discounted cash flow valuation method. The guideline public company valuation method entails a comparison to publicly traded companies within similar industry, product lines, market, growth, margins and risk and is generally based on published data regarding the public companies' stock price, revenue, and earnings. The discounted cash flow valuation method is based on both undiscounted and discounted cash flow models using assumptions about revenue growth rates, appropriate discount rates relative to risk, and estimates of terminal value. See [Footnote 9 - Intangible Assets](#) for additional disclosures related to impairment of our long-lived assets.

#### NOTE 5. Receivables

The components of accounts receivable consisted of the following:

<b>Accounts Receivable</b> <i>(in thousands)</i>	<b>As of September 30, 2011</b>	<b>As of September 30, 2010</b>
Accounts receivable	\$ 33,938	\$ 37,574
Accounts receivable – unbilled	4,269	10,950
Accounts receivable, gross	38,207	48,524
Allowance for doubtful accounts	(3,332)	(8,399)
Accounts receivable, net	\$ 34,875	\$ 40,125

Unbilled accounts receivable represents revenue recognized but not yet billed as of the period ended. Billings on contracts using the percentage-of-completion method usually occur upon completion of predetermined contract milestones or other contract terms, such as customer approval. The allowance for doubtful accounts is based on the age of receivables and a specific identification of receivables considered at risk of collection.

As of September 30, 2011 and 2010, we had \$3.3 million and \$18.4 million, respectively, of accounts receivable recorded using the percentage of completion method. Of these amounts, \$1.3 million was invoiced and \$2.0 million was unbilled as of September 30, 2011; and, \$8.8 million was invoiced and \$9.6 million was unbilled as of September 30, 2010. The allowance for doubtful accounts specifically related to receivables recorded using the percentage-of-completion method totaled \$5.1 million as of September 30, 2010, and as noted below, this allowance was reclassified to a non-current receivable account in fiscal 2011.

During the three months ended March 2011, we entered into an accounts receivable settlement agreement related to a large fixed-priced international solar power system contract that was accounted for using the percentage-of-completion method. Based upon the terms of the settlement agreement, we reclassified a net accounts receivable balance of approximately \$2.0 million from a current receivable account to a long-term receivable account within other non-current assets, leaving approximately \$0.2 million as a current receivable which was paid in October 2011. The reclass consisted of a billed receivable balance of \$5.8 million, unbilled receivable balance of \$1.5 million, along with an allowance for doubtful accounts that totaled \$5.3 million. During the three months ended June 30, 2011, we wrote off \$2.9 million related to the long-term receivable that was fully reserved for.

The following table summarizes the changes in the allowance for doubtful accounts within accounts receivable:

<b>Allowance for Doubtful Accounts</b> (in thousands)	<b>For the Fiscal Years Ended September 30,</b>		
	<b>2011</b>	<b>2010</b>	<b>2009</b>
Balance at beginning of period	\$ 8,399	\$ 7,125	\$ 2,377
Provision adjustment - expense, net of recoveries	30	2,238	5,065
Reclass of amount to a long-term receivables account	(5,253)	—	—
Impact from foreign exchange translation adjustment	181	103	—
Write-offs - deductions against receivables	(25)	(1,067)	(317)
Balance at end of period	<u>\$ 3,332</u>	<u>\$ 8,399</u>	<u>\$ 7,125</u>

During fiscal 2009, we recorded \$5.1 million in bad debt expense, of which \$0.7 million related to our Fiber Optics segment and \$4.4 million related to our Photovoltaics segment, primarily related to receivables from the sale of terrestrial solar power products. During fiscal 2010, we recorded a \$2.4 million reserve on accounts receivable related to a solar power system contract that management had uncertainty with respect to its total collectability.

**NOTE 6. Inventory**

The components of inventory consisted of the following:

<b>Inventory</b> (in thousands)	<b>As of September 30, 2011</b>	<b>As of September 30, 2010</b>
Raw materials	\$ 13,799	\$ 13,632
Work in-process	7,129	6,496
Finished goods	12,238	11,928
Inventory	<u>\$ 33,166</u>	<u>\$ 32,056</u>

For the fiscal years ended September 30, 2011, 2010, and 2009, we recorded expense of approximately \$5.3 million, \$4.3 million, and \$16.1 million, respectively, for excess and obsolete inventory. In fiscal 2009, a significant portion of the excess and obsolete inventory expense was related to inventory acquired from the fiscal 2008 acquisition of Intel Corporation's Optical Platform Division.

See [Footnote 20 - Subsequent Event](#) for a discussion associated with the impact of the floods in Thailand on our inventory.

**NOTE 7. Property, Plant, and Equipment**

The components of property, plant, and equipment consisted of the following:

<b>Property, Plant, and Equipment</b> <i>(in thousands)</i>	<b>As of September 30, 2011</b>	<b>As of September 30, 2010</b>
Land	\$ 1,502	\$ 1,502
Building and improvements	31,833	34,854
Equipment	101,115	101,310
Furniture and fixtures	1,968	3,065
Computer hardware and software	3,680	3,616
Leasehold improvements	5,169	854
Construction in progress	7,001	992
Property, plant, and equipment, gross	152,268	146,193
Accumulated depreciation	(105,482)	(99,203)
Property, plant, and equipment, net	\$ 46,786	\$ 46,990

On March 28, 2011, we acquired certain assets of Soliant Energy, Inc. of Monrovia, CA for \$750,000 and we allocated \$500,000 of the total purchase price to acquired equipment.

During fiscal 2011, we disposed of approximately \$3.3 million of fixed assets, of which \$3.1 million had been depreciated.

As of September 30, 2011, we performed an impairment test of long-lived assets associated with our digital fiber optics product lines. As a result of our evaluation we determined that impairment existed and a charge of \$8.0 million was recorded to write down long-lived assets. Of the total impairment charge, \$5.3 million related to fixed assets and \$2.7 million related to intangible assets. See [Footnote 9 - Intangible Assets](#) for additional disclosures related to impairment of our property and equipment.

See [Footnote 20 - Subsequent Event](#) for a discussion associated with the impact of the floods in Thailand on our fixed assets.

**NOTE 8. Goodwill**

The Company's goodwill of approximately \$20.4 million is associated with our Photovoltaics segment.

Impairment Testing - Fiscal 2009:

We performed our annual goodwill impairment test as of December 31, 2008 and based on this analysis, we determined that goodwill related to our Fiber Optics reporting units was fully impaired. As a result, we recorded a non-cash impairment charge of \$31.8 million and our balance sheet no longer reflects any goodwill associated with our Fiber Optics reporting units. The annual impairment test also indicated that there was no impairment of goodwill for our Photovoltaics reporting unit.

As of September 30, 2009, we performed an interim goodwill impairment test on our remaining goodwill associated with our Photovoltaics reporting unit based on revised operational and cash flow forecasts. The impairment testing indicated that no impairment existed and that fair value exceeded carrying value by approximately 40%.

Impairment Testing - Fiscal 2010:

We performed our annual goodwill impairment test as of December 31, 2009 and based on this analysis, we determined that goodwill related to our Photovoltaics reporting unit was not impaired.

As of September 30, 2010, we performed an interim impairment test on our goodwill based on revised operational and cash flow forecasts and a sustained decline in our market capitalization. The impairment testing indicated that no impairment existed and that fair value exceeded carrying value by approximately 40%.

**Impairment Testing - Fiscal 2011:**

We performed our annual goodwill impairment test as of December 31, 2010 and based on this analysis, we determined that goodwill related to our Photovoltaics reporting unit was not impaired.

During the fourth quarter of fiscal 2011, we changed our method of applying an accounting principle whereby the annual impairment test of goodwill will be performed as of the last day of the Company's fiscal year instead of at December 31<sup>st</sup> of each fiscal year. The revised date better aligns with our strategic planning and budgeting process, which is an integral component of the impairment testing, and provides additional time for us to quantify the fair value of our reporting unit. Accordingly, we believe the change in the annual impairment testing date is preferable in the circumstances. The change in the annual goodwill impairment testing date is not intended to nor does it delay, accelerate, or avoid an impairment charge. This change did not result in adjustments to our consolidated financial statements when applied retrospectively.

As of September 30, 2011, we performed an annual goodwill impairment test and reviewed the qualitative factors as described in ASU 2011-08. We determined that it was not more likely than not that the fair value of our Photovoltaics reporting unit was less than its carrying amount. We will continue to monitor any changes in circumstances or triggering events that might indicate impairment of our goodwill. If there is significant erosion of the Company's market capitalization or if we determine that our Photovoltaics reporting unit is unable to achieve its projected cash flows, we may be required to perform interim period impairment tests. The outcome of these additional tests may result in the recording of goodwill impairment charges.

**NOTE 9. Intangible Assets**

The following table sets forth changes in the carrying value of intangible assets by reporting segment:

Intangible Assets (in thousands)	As of September 30, 2011			As of September 30, 2010		
	Gross Assets	Accumulated Amortization	Net Assets	Gross Assets	Accumulated Amortization	Net Assets
Fiber Optics:						
Core Technology	\$ 13,872	\$ (10,862)	\$ 3,010	\$ 15,555	\$ (9,275)	\$ 6,280
Customer Relations	3,511	(2,071)	1,440	4,381	(1,644)	2,737
Patents	4,697	(4,265)	432	4,725	(4,021)	704
	22,080	(17,198)	4,882	24,661	(14,940)	9,721
Photovoltaics:						
Patents	2,279	(1,295)	984	1,941	(924)	1,017
Total	\$ 24,359	\$ (18,493)	\$ 5,866	\$ 26,602	\$ (15,864)	\$ 10,738

Amortization expense related to intangible assets is included in sales, general, and administrative expense on our consolidated statements of operations and comprehensive loss. Based on the carrying amount of the intangible assets as of September 30, 2011, the estimated future amortization expense is as follows:

**Estimated Future Amortization Expense**

(in thousands)

Fiscal year ended September 30, 2012	\$ 1,682
Fiscal year ended September 30, 2013	1,366
Fiscal year ended September 30, 2014	1,206
Fiscal year ended September 30, 2015	790
Fiscal year ended September 30, 2016	790
Thereafter	32
Total	\$ 5,866

Impairment Testing

Impairment tests for our long-lived assets involves comparing fair value to carrying amount. We derive fair value using both the guideline public company valuation method, and on a lesser extent, the discounted cash flow valuation method. The guideline public company valuation method entails a comparison to publicly traded companies within similar industry, product lines, market, growth, margins and risk and is generally based on published data regarding the public companies' stock price, revenue, and earnings. The discounted cash flow valuation method is based on both undiscounted and discounted cash flow models using assumptions about revenue growth rates, appropriate discount rates relative to risk, and estimates of terminal value.

Fiscal 2009:

During the three months ended December 31, 2008, we recorded a non-cash impairment charge totaling \$2.0 million related to certain intangible assets that were acquired from Intel Corporation that were abandoned. As of December 31, 2008, due to changes in estimates of future operating performance and cash flows that occurred during the quarter, we tested for impairment of our long-lived assets and other intangible assets and based on that analysis, we determined that no impairment existed.

As of June 30, 2009, we performed an evaluation of our Fiber Optics segment asset group for impairment of long-lived assets. The impairment test was triggered by a determination that it was more likely than not those certain assets would be sold or otherwise disposed of before the end of their previously estimated useful lives. The adverse economic conditions had a significant negative effect on our assessment of fair value of our Fiber Optics segment asset group. The impairment charge primarily resulted from the combined effect of the slowdown in product orders and lower pricing. The determination of fair value involved estimates of future performance that reflected assumptions regarding, among other things, sales volumes and expected margins. As a result of the evaluation, we determined that impairment existed, and a charge of \$27.0 million was recorded to write down the long-lived assets to an estimated fair value. Of the total impairment charge, \$17.2 million related to plant and equipment and \$9.8 million related to intangible assets.

As of September 30, 2009, we performed impairment tests on our long-lived assets based on revised operational and cash flow forecasts. The impairment testing indicated that no impairment existed and that future undiscounted cash flows exceeded carrying value by over 7% for each of the Company's asset groups.

Fiscal 2010:

As of September 30, 2010, we performed an impairment test on certain long-lived assets related to our Fiber Optics segment. The impairment testing indicated that no impairment existed and that future undiscounted cash flows exceeded carrying value.

Fiscal 2011:

As of September 30, 2011, we performed an impairment test of long-lived assets associated with our digital fiber optics product lines. The impairment test was triggered by a change in long-term financial and cash flow forecasts. The changes in financial and cash forecasts as of September 30, 2011 were not a result of the recent flooding in Thailand. The financial impact from this natural disaster will be considered a fiscal 2012 first quarter event. As a result of our evaluation we determined that impairment existed and a charge of \$8.0 million was recorded to write down long-lived assets. Of the total impairment charge, \$5.3 million related to fixed assets and \$2.7 million related to intangible assets. As of September 30, 2011, long-lived assets associated with our digital fiber optics product lines totaled \$17.1 million.

As a result of the Thailand flooding, we will test long-lived assets associated with our Fiber Optics segment during the three months ended December 31, 2011. The outcome of this test may result in recording additional impairment expense.

**NOTE 10. Accrued Expenses and Other Current Liabilities**

The components of accrued expenses and other current liabilities consisted of the following:

<b>Accrued Expenses and Other Current Liabilities</b> <i>(in thousands)</i>	<b>As of September 30, 2011</b>	<b>As of September 30, 2010</b>
Compensation	\$ 4,222	\$ 4,001
Warranty	4,158	4,851
Termination fee	2,775	2,775
Professional fees	489	2,530
Royalty	1,627	1,772
Advanced payments	2,753	7,437
Capital lease obligations	1,279	—
Self insurance	1,048	957
Income and other taxes	1,269	747
Loss on sale contracts	480	561
Severance and restructuring accruals	405	780
Loss on purchase commitments	—	86
Litigation settlements	1,445	—
Other	369	618
Accrued expenses and other current liabilities	<u>\$ 22,319</u>	<u>\$ 27,115</u>

The following table summarizes the changes in our product warranty accrual accounts:

**Product Warranty Accruals**  
*(in thousands)*

	<b>For the Fiscal Years Ended September 30,</b>		
	<b>2011</b>	<b>2010</b>	<b>2009</b>
Balance at beginning of period	\$ 4,851	\$ 4,287	\$ 4,640
Provision for product warranty - expense	970	1,220	2,578
Adjustments and utilization of warranty accrual	(1,663)	(656)	(2,931)
Balance at end of period	<u>\$ 4,158</u>	<u>\$ 4,851</u>	<u>\$ 4,287</u>

Our restructuring-related accrual specifically relates to non-cancelable lease payments on an abandoned facility. The following table summarizes the changes in the severance and restructuring-related accrual accounts:

<b>Severance and Restructuring Accruals</b> <i>(in thousands, except percentages)</i>	<b>Severance-related accruals</b>	<b>Restructuring-related accruals</b>	<b>Total</b>
Balance as of September 30, 2009	\$ 226	\$ 395	\$ 621
Expense - charge to accrual	230		
Payments on accrual	(276)		
Balance as of September 30, 2010	180	600	780
Expense - charge to accrual	59	25	84
Payments on accrual	(234)	(225)	(459)
Balance as of September 30, 2011	<u>\$ 5</u>	<u>\$ 400</u>	<u>\$ 405</u>



**NOTE 11. Credit Facilities**

On November 11, 2010, we entered into a Credit and Security Agreement (credit facility) with Wells Fargo Bank (Wells Fargo). The credit facility provides us with a three-year revolving credit of up to \$35 million that can be used for working capital requirements, letters of credit, and other general corporate purposes. The credit facility was initially secured by the Company's accounts receivables and inventory assets and was subject to a borrowing base formula based on the Company's eligible accounts receivable and inventory accounts.

On November 12, 2010, we borrowed \$5.6 million under the credit facility and used the proceeds to repay the entire \$5.2 million debt outstanding under our Loan and Security Agreement, dated as of September 29, 2008, with Bank of America, N.A. (prior credit facility). Afterwards, we terminated the prior credit facility and wrote off \$120,000 related to unamortized financing costs associated with the prior credit facility. We did not incur any penalties from Bank of America in connection with the termination of the prior credit facility.

The credit facility contains customary representations and warranties, and affirmative and negative covenants, including, among other things, cash balance and excess availability requirements, minimum tangible net worth and EBITDA covenants and limitations on liens and certain additional indebtedness and guarantees. The covenants are written such that as long as we maintain the minimum cash balance and excess availability requirement of \$7.5 million prior to the amendment, and \$3.5 million following the amendment discussed below, the other covenants are not required to be met. As of September 30, 2011, we were in compliance with the financial covenants contained in the credit facility since cash on deposit and excess availability exceeded the \$7.5 million financial covenant requirement.

The credit facility also contains certain events of default, including a subjective acceleration clause. Under this clause, Wells Fargo may declare an event of default if it believes in good faith that our ability to pay all or any portion of its indebtedness with Wells Fargo or to perform any of its material obligations under the credit facility has been impaired, or if it believes in good faith that there has been a material adverse change in the business or financial condition of the Company. If an event of default is not cured within the grace period (if applicable), then Wells Fargo may, among other things, accelerate repayment of amounts borrowed under the credit facility, cease making advances under the credit facility or take possession of the Company's assets that secure its obligations under the credit facility. We do not anticipate at this time any change in the business or financial condition of the Company that could be deemed a material adverse change by Wells Fargo. Wells Fargo has confirmed that they do not consider the flooding at our contract manufacturer to be a material adverse change in the business or financial condition of the Company.

As of September 30, 2011, we had a \$17.6 million LIBOR rate loan outstanding, with an interest rate of 3.38%, and approximately \$2.6 million reserved for eight outstanding stand-by letters of credit under the credit facility. As of November 2, 2011, we paid off the outstanding loan with cash on hand.

On December 21, 2011, we signed an amendment to our credit facility that increased our eligible borrowing base by up to \$10 million by adding to the borrowing base formula 85% of the appraised value of the Company's equipment and 50% of the appraised value of the Company's real estate, for which the appraisals are currently in process. In addition, Wells Fargo reduced our restrictions under the excess availability financial covenant requirement from \$7.5 million to \$3.5 million through December 2012. The interest rate on outstanding borrowings was increased to LIBOR rate plus four percent. We now expect at least 70% of the total amount of credit under the credit facility to be available for use based on the revised borrowing base formula during fiscal year 2012. The credit facility will return to its full previous terms on the earlier of (i) December 31, 2012, or (ii) the date that we receive insurance proceeds of not less than \$30.0 million in the aggregate applicable to the flooding of our primary contract manufacturer in Thailand.

**NOTE 12. Equity Facilities**

2009 Equity Facility

In October 2009, we entered into a committed equity line financing facility (2009 Equity Facility) with Commerce Court Small Cap Value Fund, Ltd. (Commerce Court) pursuant to which we may, upon the terms and subject to the conditions set forth therein, require Commerce Court to purchase up to \$25.0 million in shares of our common stock over the 24-month term. In consideration for Commerce Court's execution and delivery of the 2009 Equity Facility, we issued Commerce Court 185,085 shares of our common stock, paid \$45,000 of Commerce Court's legal fees and expenses, and issued three warrants representing the right to purchase up to an aggregate of 1,600,000 shares of our common stock, as follows:

- a warrant, pursuant to which Commerce Court may purchase up to 666,667 shares of common stock at an exercise price of \$1.69;
- a warrant, pursuant to which Commerce Court may purchase from up to 666,667 shares of common stock at an exercise price of \$2.02; and,
- a warrant, pursuant to which Commerce Court may purchase up to 266,666 shares of common stock at an exercise price of \$2.36.

These warrants are still outstanding and expire on April 1, 2015. If our common stock trades at a price greater than 140% of the exercise price of any warrant for a period of 10 consecutive trading days and we meet certain equity conditions, then we have the right to affect a mandatory exercise of such warrant.

On October 1, 2009, we recorded \$0.2 million related to the issuance of the 185,185 shares of common stock. The fair value of the common stock was based on a closing price of \$1.23 per share on October 1, 2009. In March 2010, we sold 1,870,042 shares of our common stock to Commerce Court pursuant to the 2009 Equity Facility at an average price of approximately \$1.07 per share. We received \$2.0 million from the sale of common stock; with the total discount to volume weighted average price calculated on a daily basis totaling \$0.1 million, which was recorded as a non-operating expense within the consolidated statement of operations and comprehensive loss. The 2009 Equity Facility was terminated in August 2011.

2011 Equity Facility

In August 2011, we entered into a committed equity line financing facility (2011 Equity Facility) with Commerce Court pursuant to which we may, upon the terms and subject to the conditions set forth therein, require Commerce Court to purchase up to \$50.0 million in shares of our common stock over the 24-month term.

Once presented with a draw down notice, Commerce Court is required to purchase a pro-rata portion of the shares on each trading day during the trading period on which the daily volume weighted average price for our common stock exceeds a threshold price determined solely by us for such draw down. The per share purchase price for these shares will equal the daily volume weighted average price of our common stock on each date during the draw down period on which shares are purchased, less a discount of 5%. If the daily volume weighted average price of our common stock falls below the threshold price on any trading day during a draw down period, Commerce Court will not purchase the pro-rata portion of shares of common stock allocated to that day. We agreed to a placement agent fee equal to 1% of the aggregate dollar amount of common stock purchased by Commerce Court upon settlement of each such sale.

In consideration for Commerce Court's execution and delivery of the 2011 Equity Facility, we issued Commerce Court 110,947 shares of our common stock and also paid \$25,000 of Commerce Court's legal fees and expenses.

We entered into a registration rights agreement with Commerce Court, pursuant to which we granted to Commerce Court certain registration rights related to the shares of our common stock that are issuable in accordance with the 2011 Equity Facility. We filed the registration statement on Form S-1 with the SEC on September 13, 2011 and we received a Notice of Effectiveness from the SEC on September 28, 2011. As of September 30, 2011, there were no draw down transactions completed under the 2011 Equity Facility.

**NOTE 13. Taxes**

EMCORE Corporation, incorporated in the state of New Jersey, incurred minimal or no income tax expense during the fiscal years ended September 30, 2011, 2010, and 2009. A reconciliation of the provision for income taxes, with the amount computed by applying the statutory U.S. federal and state income tax rates to income before provision for income taxes is as follows:

**Provision for Income Taxes**  
*(in thousands)*

	For the Fiscal Years Ended September 30,		
	2011	2010	2009
Income tax benefit computed at U.S. federal statutory rate	\$ (11.6)	\$ (8.1)	\$ (46.3)
State tax benefits, net of U.S. federal effect	(1.1)	(0.4)	(4.5)
Other	1.3	2.3	4.5
Valuation allowance	11.4	6.3	46.3
Income tax expense - current	\$ —	\$ 0.1	\$ —
Effective tax rate	—%	—%	—%

Significant components of our deferred tax assets are as follows:

Deferred Tax Assets <i>(in thousands)</i>	As of September 30, 2011	As of September 30, 2010
Deferred tax assets (liabilities):		
Federal net operating loss carryforwards	\$ 144,732	\$ 139,539
Foreign net operating loss carryforwards	4,094	3,637
State research credit carryforwards	1,125	1,185
Inventory reserves	5,206	4,493
Accounts receivable reserves	1,248	1,254
Accrued warranty reserve	1,458	1,529
State net operating loss carryforwards	14,346	13,013
Investment write-down	5,315	5,285
Legal reserves	480	—
Stock compensation	2,369	1,226
Deferred compensation	1,667	893
Fixed assets and intangibles	19,700	20,156
Other	5,504	2,904
Total deferred tax assets	207,244	195,114
Valuation allowance	(207,244)	(195,114)
Net deferred tax assets	\$ —	\$ —

During the fiscal years ended September 30, 2011 and 2010, there were no material increases or decreases in unrecognized tax benefits and we do not anticipate any material increases or decreases in the amounts of unrecognized tax benefits over the next twelve months. For the fiscal years ended September 30, 2011, 2010, and 2009, we recorded income tax expense of approximately \$56,000, \$97,000, and \$119,000, respectively. As of September 30, 2011 and 2010, we had approximately \$198,000 and \$185,000 of interest and penalties accrued as tax liabilities on our balance sheet.

As of September 30, 2011, we had net operating loss carryforwards for U.S. federal income tax purposes of approximately \$425.7 million which begin to expire in 2021. As of September 30, 2011, we had foreign net operating loss carryforwards of \$17.6 million which begin to expire in 2012 as well as, state net operating loss carryforwards of approximately \$366.2 million which begin to expire in 2012. We also had U.S. research and development tax credits of approximately \$1.1 million. The research credits are currently expiring including the next attribute expected to expire in 2012. Utilization of our net operating loss and tax credit carryforwards may be subject to a substantial annual limitation due to the ownership change limitations set

forth in Internal Revenue Code Section 382 and similar state provisions. Such an annual limitation could result in the expiration of the net operating loss and tax credit carryforwards before utilization.

A reconciliation of the beginning and ending amount of unrecognized gross tax benefits is as follows:

<b>Unrecognized Gross Tax Benefit</b> (in thousands)	
Balance as of September 30, 2009	\$ 374
Adjustments based on tax positions related to the current year	(17)
Adjustments based on tax positions of prior years	(19)
Balance as of September 30, 2010	338
Adjustments based on tax positions related to the current year	—
Adjustments based on tax positions of prior years	—
Balance as of September 30, 2011	\$ 338

We file income tax returns in the U.S. federal, state, and local jurisdictions and, currently, no federal, state, and local income tax returns are under examination. The following tax years remain open to assessment for each of the more significant jurisdictions where we are subject to income taxes: after fiscal year 2007 for U.S. federal, after fiscal year 2006 for the state of California, and after fiscal year 2007 for the state of New Mexico.

**NOTE 14. Commitments and Contingencies**

Leases

We lease certain land, facilities, and equipment under non-cancelable operating leases. Our facility leases typically provide for rental adjustments for increases in base rent (up to specific limits), property taxes, insurance and general property maintenance that would be recorded as rent expense. Rent expense was approximately \$2.7 million, \$2.8 million, and \$2.8 million for the fiscal years ended September 30, 2011, 2010, and 2009, respectively.

Estimated future minimum lease payments under non-cancelable operating and capital leases with an initial or remaining term of one year or more as of September 30, 2011 are as follows:

<b>Estimated Future Minimum Lease Payments</b> (in thousands)	<b>Operating Leases</b>	<b>Capital Leases</b>
Fiscal year ended September 30, 2012	\$ 1,234	\$ 1,279
Fiscal year ended September 30, 2013	887	
Fiscal year ended September 30, 2014	182	
Fiscal year ended September 30, 2015	182	
Fiscal year ended September 30, 2016	120	
Thereafter	2,549	
Total minimum lease payments	\$ 5,154	\$ 1,279

In November 2011, we entered into an agreement with our contract manufacturer that was affected by the floods in Thailand whereby our contract manufacturer will purchase equipment to rebuild our affected manufacturing lines. Additionally, we restructured our outstanding payables owed to our contract manufacturer which delayed payments to future dates to coincide with expected timing of insurance proceeds. See [Footnote 20 - Subsequent Event](#) for a discussion associated with the impact of the floods in Thailand on our equipment which includes those under capital lease.

## [Table of Contents](#)

### Asset Retirement Obligations

We have known conditional asset retirement conditions, such as certain asset decommissioning and restoration of rented facilities to be performed in the future. During the three months ended September 30, 2011, we completed a review of our asset retirement and environmental obligations and we recorded a long-term liability totaling \$4.8 million. We increased the carrying amount of our long-lived assets by the same amount as the asset retirement obligation. The fair value was estimated by discounting projected cash flows over the estimated life of the related assets using credit adjusted risk-free rates which ranged from 3.25% to 5.78%. Our asset retirement obligations includes assumptions related to renewal option periods where we expect to extend facility lease terms. In future periods, the asset retirement obligation is accreted for the change in its present value and capitalized costs are depreciated over the useful life of the related assets. If the fair value of the estimated asset retirement obligation changes, an adjustment will be recorded to both the asset retirement obligation and the asset retirement capitalized cost. Revisions in estimated liabilities can result from revisions of estimated inflation rates, escalating retirement costs, and changes in the estimated timing of settling asset retirement obligations. No liabilities associated with asset retirements were settled in fiscal years 2009, 2010, and 2011. No accretion expense was incurred in fiscal years 2009, 2010, and 2011.

### Suncore Joint Venture

As of September 30, 2011, we have contributed \$12.0 million in cash as registered capital into our Suncore joint venture. We are not required by the joint venture agreement to contribute additional funds, and at this time, we do not anticipate contributing any additional funds to Suncore. The joint venture agreement provides for any working capital needs to be provided by San'an Optoelectronics Co., Ltd. See [Footnote 17 - Suncore Joint Venture](#) for additional information related to this joint venture.

### U.S. Government Contracts

Our U.S. government contracts are subject to audits by U.S. government agencies. Such audits could result in adjustments to our contract costs. We have recorded contract revenue based upon costs we expect to realize upon final audit. We have been audited in the past by the U.S. government and expect that we will be in the future. We believe that the outcome of any ongoing government audits will not have a material adverse effect on our results of operations, financial condition, or cash flow.

### Legal Proceedings

We are subject to various legal proceedings, claims, and litigation, either asserted or unasserted that arise in the ordinary course of business. While the outcome of these matters is currently not determinable, we do not expect the resolution of these matters will have a material adverse effect on our business, financial position, results of operations, or cash flows. However, the results of these matters cannot be predicted with certainty. Professional legal fees are expensed when incurred. We accrue for contingent losses when such losses are probable and reasonably estimable. During the three months ended June 30, 2011, we accrued \$1.5 million for legal settlements consider probable. In the event that estimates or assumptions prove to differ from actual results, adjustments are made in subsequent periods to reflect more current information. Should we fail to prevail in any legal matter or should several legal matters be resolved against the Company in the same reporting period, then the financial results of that particular reporting period could be materially affected.

#### a) Intellectual Property Lawsuits

We protect our proprietary technology by applying for patents where appropriate and, in other cases, by preserving the technology, related know-how and information as trade secrets. The success and competitive position of our product lines are impacted by our ability to obtain intellectual property protection for our research and development efforts.

We have, from time to time, exchanged correspondence with third parties regarding the assertion of patent or other intellectual property rights in connection with certain of our products and processes.

Additionally, on September 11, 2006, we filed a lawsuit against Optium Corporation, currently part of Finisar Corporation (Optium) in the U.S. District Court for the Western District of Pennsylvania for patent infringement of certain patents associated with our Fiber Optics segment. On March 28, 2011, we received a cash payment of approximately \$2.6 million in satisfaction of the judgment for damages that we were previously awarded, net of legal fees which were incurred on a contingency basis. The patent infringement award was recorded as a gain and included within litigation settlements on the consolidated statement of operations and comprehensive loss.

b) Avago-related Litigation

On July 15, 2008, we were served with a complaint filed by Avago Technologies and what appear to be affiliates thereof in the United States District Court for the Northern District of California, San Jose Division (Avago Technologies U.S., Inc., et al., EMCORE Corporation, et al., Case No.: C08-3248 JW) (the “Commercial Case”). In this complaint, Avago asserts claims for breach of contract and breach of express warranty against Venture Corporation Limited (one of our customers) and asserts a tort claim for negligent interference with prospective economic advantage against us. We filed a Summary Judgment Motion in the Commercial Case asking the judge to dismiss all of Avago's claims on several grounds, including, *inter alia*, that California law, which is one of a handful of jurisdictions that even recognizes negligent interference with prospective economic advantage as a claim, does not apply in this case. The parties have settled this litigation and the court has dismissed this lawsuit in accordance with the terms of the settlement agreement.

On December 5, 2008, we were also served with a complaint by Avago Technologies filed in the United States District Court for the Northern District of California, San Jose Division alleging infringement of two patents by our VCSEL products. (Avago Technologies Singapore et al., EMCORE Corporation, et al., Case No.: C08-5394 EMC) (the “N.D. CA Patent Case”). We intend to vigorously defend against the allegations in the N.D. CA Patent Case.

On March 5, 2009, we were notified that, based on a complaint filed by Avago alleging the same patent infringement that formed the basis of the complaint previously filed in the Northern District of California, the U.S. International Trade Commission (the “ITC”) had determined to begin an investigation titled “In the Matter of Certain Optoelectronic Devices, Components Thereof and Products Containing the Same”, Inv. No. 337-TA-669. This matter was tried before an administrative law judge of the ITC from November 16-20, 2009.

On July 12, 2010, the ITC issued its final determination, as well as a limited exclusion order and cease and desist order directed to our infringing products which prohibits importation of those products into the United States. Those remedial orders were reviewed by the President of the United States and his decision to approve those orders was issued on September 10, 2010, thereby prohibiting further importation of the infringing products. These remedial orders do not apply to any of the products sold by our customers that may contain infringing products.

The ITC does not have the authority to award damages for patent infringement; therefore, there was no financial penalty as a result of the final determination by the ITC. We formulated and implemented a product redesign intended to eliminate the impact of the accused infringement, the exclusion, and the cease and desist orders issued by the ITC. We continue to actively pursue its re-design strategy, including qualifying the newly re-designed products with certain of its major customers. We appealed the ITC's decision, and on November 8, 2010, we filed our notice of appeal with the United States Court of Appeals for the Federal Circuit. On May 9, 2011, Avago and the ITC filed their response briefs in this matter. On November 14, 2011, the Court of Appeals affirmed the ITC's determination.

c) Green and Gold-related litigation

On December 23, 2008, Plaintiffs Maurice Prissert and Claude Prissert filed a purported stockholder class action (the “Prissert Class Action”) pursuant to Federal Rule of Civil Procedure 23 allegedly on behalf of a class of Company shareholders against the Company and certain of its present and former directors and officers (the “Individual Defendants”) in the United States District Court for the District of New Mexico captioned, *Maurice Prissert and Claude Prissert v. EMCORE Corporation, Adam Gushard, Hong Q. Hou, Reuben F. Richards, Jr., David Danzilio and Thomas Werthan, Case No. 1:08cv1190 (D.N.M.)*. The Complaint alleges that the Company and the Individual Defendants violated certain provisions of the federal securities laws, including Section 10(b) of the Securities Exchange Act of 1934, arising out of the Company's disclosure regarding its customer Green and Gold Energy (“GGE”) and the associated backlog of GGE orders with the Company's Photovoltaics business segment. The Complaint in the Prissert Class Action seeks, among other things, an unspecified amount of compensatory damages and other costs and expenses associated with the maintenance of the action. On or about February 12, 2009, a second purported stockholder class action (*Mueller v. EMCORE Corporation et al., Case No. 1:09cv133 (D.N.M.)*) (the “Mueller Class Action”), together with the Prissert Class Action, the “Class Actions”) was filed in the United States District Court for the District of New Mexico against the same defendants named in the Prissert Class Action, based on substantially the same facts and circumstances, containing substantially the same allegations and seeking substantially the same relief.

## [Table of Contents](#)

On September 25, 2009, the court issued an order consolidating both the Prissert and Mueller actions into one consolidated proceeding, but denied plaintiffs motions for appointment of a lead plaintiff or lead plaintiff's counsel. On July 15, 2010, the court appointed IBEW Local Union No. 58 Annuity Fund to serve as lead plaintiff ("IBEW"), but denied, without prejudice, IBEW's motion to appoint lead counsel. On August 24, 2010, IBEW filed a renewed motion for appointment as lead plaintiff and for approval of its selection of counsel. IBEW filed a renewed motion for appointment of counsel on May 13, 2011 which we did not oppose. By Order dated September 30, 2011, the court appointed counsel to act on behalf of the purported class.

On January 23, 2009, Plaintiff James E. Stearns filed a purported stockholder derivative action (the "Stearns Derivative Action") on behalf of the Company against the Individual Defendants, as well as the Company as nominal defendant in the Superior Court of New Jersey, Atlantic County, Chancery Division (*James E. Stearns, derivatively on behalf of EMCORE Corporation v. Thomas J. Russell, Robert Bogomolny, Charles Scott, John Gillen, Reuben F. Richards, Jr., Hong Q. Hou, Adam Gushard, David Danzilio and Thomas Werthan, Case No. Atl-C-10-09*). This action is based on essentially the same factual contentions as the Prissert Class Action, and alleges that the Individual Defendants engaged in improprieties and violations of law in connection with the reporting of the GGE backlog. The Stearns Derivative Action seeks several forms of relief, allegedly on behalf of the Company, including, among other things, damages, equitable relief, corporate governance reforms, an accounting of, rescission of, restitution of, and costs and disbursements of the lawsuit.

On March 11, 2009, Plaintiff Gary Thomas filed a second purported shareholder derivative action (the "Thomas Derivative Action"; together with the Stearns Derivative Action, the "Derivative Actions") in the U.S. District Court for the District of New Mexico against the Company and certain of the Individual Defendants (*Gary Thomas, derivatively on behalf of EMCORE Corporation v. Thomas J. Russell, Robert Bogomolny, Charles Scott, John Gillen, Reuben F. Richards, Jr., Hong Q. Hou, and EMCORE Corporation, Case No. 1:09-cv-00236, (D.N.M.)*). The Thomas Derivative Action makes the same allegations as the Stearns Derivative Action and seeks essentially the same relief.

The Stearns Derivative Action and the Thomas Derivative action have been consolidated before a single judge in Somerset County, New Jersey, and have been stayed pending resolution of the Class Actions.

On November 14, 2011, the plaintiffs filed a Consolidated Amended Complaint, again alleging violations of the federal securities laws arising out of the Company's disclosure regarding its customer GGE and the associated backlog of GGE orders with the Company's Photovoltaics business segment (the "Amended Complaint"). The Amended Complaint seeks, among other things, an unspecified amount of compensatory damages and other costs and expenses associated with the maintenance of the action. The Amended Complaint again names the Company and the Individual Defendants, with the exception of former officer and director Thomas Werthan. EMCORE intends to file a motion to dismiss the Amended Complaint on or before January 9, 2012.

We intend to vigorously defend against the allegations of both the Class Actions and the Derivative Actions.

### **NOTE 15. Equity**

We provide long-term incentives to eligible officers, directors, and employees in the form of stock-based awards. We maintain two stock award plans: the 2000 Stock Option Plan, or the 2000 Plan, and the 2010 Equity Incentive Plan, or the 2010 Equity Plan and, together with the 2000 Plan, the Stock Plans. The 2000 Plan expired in February 2010 and no additional shares are available for grant under this plan. We issue new shares of common stock to satisfy awards issued under our Stock Plans.

On June 14, 2011, our shareholders approved an increase in the number of stock-based awards that may be granted under the 2010 Equity Plan from 4,000,000 to 7,000,000 stock-based awards.

[Table of Contents](#)

**Stock Options**

Most of our stock options vest and become exercisable over four to five years and have a contractual life of ten years. Certain stock options awarded are intended to qualify as incentive stock options pursuant to Section 422A of the Internal Revenue Code. The following tables summarize the activity related to stock options under the Stock Plans:

<b>Stock Option Activity</b>	<b>Number of Shares</b>	<b>Weighted Average Exercise Price</b>	<b>Weighted Average Remaining Contractual Life (in years)</b>
Outstanding as of September 30, 2008	8,929,453	\$6.57	
Granted	3,700,439	\$1.25	
Exercised	(10,675)	\$3.02	
Forfeited	(1,243,825)	\$6.98	
Cancelled	(587,218)	\$4.64	
Outstanding as of September 30, 2009	10,788,174	\$4.85	
Granted	76,500	\$1.07	
Exercised	(1,500)	\$0.54	
Forfeited	(856,265)	\$3.36	
Cancelled	(1,284,784)	\$6.51	
Outstanding as of September 30, 2010	8,722,125	\$4.70	
Granted	1,021,500	\$1.50	
Exercised	(231,535)	\$1.38	
Forfeited	(246,202)	\$3.00	
Cancelled	(229,100)	\$5.83	
Outstanding as of September 30, 2011	9,036,788	\$4.44	6.43
Exercisable as of September 30, 2011	5,963,545	\$5.30	5.62
Vested and expected to vest as of September 30, 2011	8,618,881	\$4.55	6.33

As of September 30, 2011, there was approximately \$4.2 million of unrecognized stock-based compensation expense, net of estimated annual forfeitures, related to non-vested stock options granted under the Stock Plans which is expected to be recognized over an estimated weighted average life of 2.2 years.

Intrinsic value for stock options represents the “in-the-money” portion or the positive variance between a stock option's exercise price and the underlying stock price. The total intrinsic value related to stock options exercised during the fiscal years ended September 30, 2011, 2010, and 2009 was approximately \$218,000, \$500, and \$11,000, respectively. The intrinsic value related to fully vested and expected to vest stock options as of September 30, 2011 and 2010 was approximately \$25,000 and \$2,000, respectively. The intrinsic value related to exercisable stock options as of September 30, 2011 and 2010 was approximately \$5,000 and \$1,000, respectively.

**Restricted Stock**

Restricted stock awards (RSAs) and restricted stock units (RSUs) granted under the 2010 Equity Plan typically vest over three years and are subject to forfeiture if employment terminates prior to the lapse of the restrictions. RSAs are considered issued and outstanding shares on the grant date and have the same dividend and voting rights as other common stock. RSUs are not considered issued or outstanding common stock. There were no vested RSAs or RSUs as of September 30, 2011.



[Table of Contents](#)

The following table summarizes the activity related to RSAs and RSUs under the 2010 Equity Plan:

Restricted Stock Awards Activity	Restricted Stock Awards		Restricted Stock Units	
	Number of Shares	Weighted Average Grant Date Fair Value	Number of Shares	Weighted Average Grant Date Fair Value
Non-vested as of September 30, 2010	—	—	—	—
Granted	1,715,900	\$1.45	1,241,940	\$1.55
Vested	—	—	—	—
Cancelled	(73,300)	\$1.42	(9,750)	\$1.55
Non-vested as of September 30, 2011	1,642,600	\$1.45	1,232,190	\$1.55

**Restricted stock awards:** As of September 30, 2011, there was approximately \$1.5 million of remaining unamortized stock-based compensation expense, net of estimated forfeitures, associated with RSAs, which will be expensed over a weighted average remaining service period of approximately 2.3 years.

**Restricted stock units:** As of September 30, 2011, there was approximately \$1.6 million of remaining unamortized stock-based compensation expense, net of estimated forfeitures, associated with RSUs, which will be expensed over a weighted average remaining service period of approximately 2.9 years. Of the 1.3 million outstanding non-vested RSUs, approximately 1.1 million RSUs are expected to vest and have an aggregate intrinsic value of approximately \$1.1 million and a weighted average remaining contractual term of 1.8 years. The 1.3 million outstanding non-vested RSUs have an aggregate intrinsic value of approximately \$1.3 million and a weighted average remaining contractual term of 1.9 years.

**Surrender of Stock Options**

On November 20, 2009, the Company's Chief Financial Officer at the time, voluntarily surrendered stock options exercisable into 475,000 shares of common stock. These stock options had an exercise price of \$5.57 and were granted on August 18, 2008. The Chief Financial Officer received no consideration in exchange for the surrender of these stock options. The surrender of his non-vested stock options resulted in an immediate non-cash charge of \$1.3 million, which was recorded as selling, general, and administrative expense during the three months ended December 31, 2009. The expense was due to the acceleration of all unrecognized stock-based compensation expense associated with that specific stock option grant.

**401(k) Plan**

We have a savings plan that qualifies as a deferred salary arrangement under Section 401(k) of the Internal Revenue Code. Under this savings plan, participating employees may defer a portion of their pretax earnings, up to the Internal Revenue Service annual contribution limit. All employer contributions are made in common stock. For the fiscal years ended September 30, 2011, 2010, and 2009, we contributed approximately \$0.9 million, \$0.9 million, and \$0.6 million, respectively, in common stock to the savings plan.

**Valuation Assumptions**

The fair value of each stock option grant is estimated on the date of grant using the Black-Scholes option valuation model and the straight-line attribution approach using the following weighted-average assumptions. The option-pricing model requires the input of highly subjective assumptions, including the option's expected life and the price volatility of the underlying stock. The weighted-average grant date fair value of stock options granted during the fiscal years ended September 30, 2011, 2010, and 2009 was \$1.11, \$0.77, and \$1.25, respectively.

Black-Scholes Weighted Average Assumptions	For the Fiscal Years Ended September 30,		
	2011	2010	2009
Expected dividend yield	—%	—%	—%
Expected stock price volatility	99.4%	97.1%	97.9%
Risk-free interest rate	1.4%	2.4%	2.4%
Expected term (in years)	4.9	4.6	4.5

*Expected Dividend Yield:* The Black-Scholes valuation model calls for a single expected dividend yield as an input. We have not issued any dividends.

*Expected Stock Price Volatility:* The fair values of stock-based payments were valued using the Black-Scholes valuation method with a volatility factor based on our historical common stock prices.

*Risk-Free Interest Rate:* The risk-free interest rate used in the Black-Scholes valuation method was based on the implied yield that was currently available on U.S. Treasury zero-coupon notes with an equivalent remaining term. Where the expected term of stock-based awards do not correspond with the terms for which interest rates are quoted, we performed a straight-line interpolation to determine the rate from the available maturities.

*Expected Term:* Expected term represents the period that our stock-based awards are expected to be outstanding and was determined based on historical experience of similar awards, giving consideration to the contractual terms of the stock-based awards, vesting schedules and expectations of future employee behavior as influenced by changes to the terms of its stock-based awards.

*Estimated Pre-vesting Forfeitures:* We are required to estimate forfeitures at the time of grant and revise those estimates in subsequent periods if actual forfeitures differ from those estimates. We use historical data to estimate pre-vesting option forfeitures and record stock-based compensation expense only for those awards that are expected to vest. If we use different assumptions for estimating stock-based compensation expense in future periods or if actual forfeitures differ materially from our estimated forfeitures, the change in our non-cash stock-based compensation expense could adversely affect our results of operations.

#### Stock-based compensation

The effect of recording stock-based compensation expense was as follows:

Stock-based Compensation Expense (in thousands, except per share data)	For the Fiscal Years Ended September 30,		
	2011	2010	2009
<b>Stock-based compensation expense by award type:</b>			
Employee stock options	\$ 5,147	\$ 8,220	\$ 6,309
Restricted stock awards and units	557	—	—
Employee stock purchase plan	600	551	708
401(k) match in common stock	935	864	614
Outside director fees	189	225	423
Total stock-based compensation expense	<u>\$ 7,428</u>	<u>\$ 9,860</u>	<u>\$ 8,054</u>
<b>Stock-based compensation expense by expense category:</b>			
Cost of revenue	\$ 1,412	\$ 2,086	\$ 2,001
Selling, general, and administrative	3,927	5,874	4,450
Research and development	2,089	1,900	1,603
Total stock-based compensation expense	<u>\$ 7,428</u>	<u>\$ 9,860</u>	<u>\$ 8,054</u>
Net effect on net loss per basic and diluted share	<u>\$ (0.08)</u>	<u>\$ (0.12)</u>	<u>\$ (0.10)</u>

## [Table of Contents](#)

For the fiscal year ended September 30, 2011, total stock-based compensation expense does not agree with the amount listed on our statement of shareholders' equity due to a timing difference, expense accrual versus issuance of common stock, related to the payment of outside director fees and issuance of common stock related to our 401(k) company match.

### Capital Stock

Our authorized capital stock consists of 200 million shares of common stock, no par value, and 5,882,352 shares of preferred stock, \$0.0001 par value. As of September 30, 2011, we had 94.1 million shares of common stock issued and 93.9 million shares of common stock outstanding. There were no shares of preferred stock issued or outstanding as of September 30, 2011.

### Warrants

As of September 30, 2011 and 2010, warrants representing 3,000,003 shares of our common stock were outstanding.

On February 20, 2008, in conjunction with a private placement transaction, we issued warrants representing the right to purchase up to an aggregate of 1,400,003 shares of common stock (2008 Warrants). On October 1, 2009, we entered into an equity line financing facility with Commerce Court Small Cap Value Fund, Ltd. wherein we issued three warrants representing the right to purchase up to an aggregate of 1,600,000 shares of common stock, (2009 Warrants, and together with the 2008 Warrants, the 2008 and 2009 Warrants).

Prior to January 1, 2011, the 2008 Warrants were classified as equity instruments. During the quarter ended March 31, 2011, we determined that the 2008 Warrants should have been accounted for as a liability since these warrants met the definition of a derivative instrument and did not qualify for equity classification. The valuation of the warrants was based on a Monte Carlo option pricing model which resulted in a fair value of approximately \$8.2 million, \$1.8 million, \$0.4 million, \$0.1 million, and \$0.2 million as of February 20, 2008, September 30, 2008, September 30, 2009, September 30, 2010 and December 31, 2010, respectively. During the three months ended March 31, 2011, we adjusted common stock and accumulated deficit, both equity-related accounts, by \$8,218,000 and \$8,022,000, respectively, and recorded the liability related to the fair value of the warrants as of January 1, 2011 of \$196,000 to correct the initial accounting treatment of the warrants from equity to liability accounting as an out-of-period adjustment. We also reclassified the 2008 and 2009 Warrants from a non-current liability to a current liability during the quarter ended March 31, 2011 since these warrant agreements include a fundamental transaction clause whereby, in the event that another person becomes the beneficial owner of 50% of the outstanding shares of the Company's common stock, and if other conditions are met, we may be required to purchase the warrants from the holders by paying cash in an amount equal to the Black-Scholes value of the remaining unexercised portion of the warrants on the date of such fundamental transaction. See [Footnote 4 - Fair Value Accounting](#) for additional information related to the valuation of our warrants.

### Private Placement

On May 31, 2011, we completed an equity private placement transaction with Shanghai Di Feng Investment Co. Ltd. pursuant to which we sold 4,407,603 shares of our common stock for approximately \$9.7 million. The common stock was offered solely to "accredited investors" as defined in Regulation D promulgated under the Securities Act of 1933, as amended, the Act, in reliance on the exemptions from registration afforded by Section 4(2) of the Act. In connection with this transaction, we also entered into a registration rights agreement pursuant to which we agreed to register the shares issued with the SEC on a Form S-1 registration statement within 60 days of the closing date of the transaction and to use commercially reasonable efforts to have the registration statement declared effective within 120 days of the closing date. We filed the registration statement on Form S-1 with the SEC on July 25, 2011 and we received a Notice of Effectiveness from the SEC on August 15, 2011. We used the proceeds from this private placement for general corporate purposes.

## [Table of Contents](#)

### Employee Stock Purchase Plan

We maintain an Employee Stock Purchase Plan (ESPP) that provides employees an opportunity to purchase common stock through payroll deductions. The ESPP is a 6-month duration plan and the purchase price is set at 85% of the average high and low market price of our common stock on either the first or last day of the participation period, whichever is lower, and contributions are limited to the lower of 10% of an employee's compensation or \$25,000. In November 2010, we changed the ESPP beginning participation dates from January 1st to February 25th and from July 1st to August 26th. In June 2011, our shareholders approved an increase in the number of shares of common stock that may be granted under the ESPP from 4,500,000 shares to 7,000,000 shares. We issue new shares of common stock to satisfy the issuance of shares under this stock-based compensation plan. Common stock issued under the ESPP during the fiscal years ended September 30, 2011, 2010, and 2009 totaled 1,437,689, 1,202,181, and 994,742 shares, respectively. The total amount of common stock issued under the ESPP totaled 4,879,240 shares.

### Officer and Director Share Purchase Plan

On January 21, 2011, the Compensation Committee of the Board of Directors approved an Officer and Director Share Purchase Plan, or ODPP, which allows executive officers and directors to purchase shares of our common stock at fair market value in lieu of salary or, in the case of directors, director fees. Eligible individuals may voluntarily participate in the ODPP by authorizing payroll deductions or, in the case of directors, deductions from director fees for the purpose of purchasing common stock. Elections to participate in the ODPP may only be made during open trading windows under our insider trading policy when the participant does not otherwise possess material non-public information concerning the Company. The Board of Directors has authorized 500,000 shares to be made available for purchase by officers and directors under the ODPP. As of September 30, 2011, 37,062 shares of common stock had been purchased under the ODPP.

### Future Issuances

As of September 30, 2011, we had common stock reserved for the following future issuances:

<b>Future Issuances</b>	<b>Number of Common Stock Shares Available for Future Issuances</b>
For future exercise of outstanding stock options	9,036,788
For future issuances to employees under the ESPP	2,120,760
For future stock-based awards under the 2010 Equity Plan	3,161,710
For future exercise of warrants	3,000,003
For future issuance under the ODPP	462,938
Total reserved	17,782,199

Subsequent event: On December 6, 2011, 2,919,465 restricted stock units were granted to executive management and certain employees under the 2010 Equity Plan with a grant date fair value of \$0.96 per unit.

### **NOTE 16. Segment Data and Related Information**

We have four operating divisions and two reporting segments.

- Fiber Optics: EMCORE Digital Fiber Optics Products and EMCORE Broadband Fiber Optics Products are aggregated as a separate reporting segment, Fiber Optics. Our Fiber Optics segment offers optical components, subsystems, and systems for high-speed data and telecommunications, cable television (CATV), and fiber-to-the-premises (FTTP) networks.

[Table of Contents](#)

- Photovoltaics: EMCORE Photovoltaics and EMCORE Solar Power are aggregated as a separate reporting segment, Photovoltaics. Our Photovoltaics segment provides products for both satellite and terrestrial applications. For satellite applications, we offer high-efficiency gallium arsenide (GaAs) multi-junction solar cells, covered interconnected cells (CICs), and solar panels. For terrestrial applications, we offer concentrating photovoltaic (CPV) power systems for commercial and utility scale solar applications as well as GaAs solar cells and integrated CPV components for use in other solar power concentrator systems.

We evaluate our reportable segments pursuant to ASC 280, *Segment Reporting*. The Company's Chief Executive Officer is the chief operating decision maker and he assesses the performance of the operating segments and allocates resources to segments based on their business prospects, competitive factors, net revenue, operating results and other non-GAAP financial ratios.

The following tables set forth the revenue and percentage of total revenue attributable to each of our reporting segments.

Segment Revenue (in thousands, expect percentages)	For the Fiscal Years Ended September 30,					
	2011		2010		2009	
	Revenue	% of Revenue	Revenue	% of Revenue	Revenue	% of Revenue
Fiber Optics revenue	\$ 125,659	62.5%	\$ 121,724	63.6%	\$ 114,134	64.7%
Photovoltaics revenue	75,269	37.5%	69,554	36.4%	62,222	35.3%
Total revenue	\$ 200,928	100.0%	\$ 191,278	100.0%	\$ 176,356	100.0%

The following table sets forth consolidated revenue by geographic region with revenue assigned to geographic regions based on our customers' billing address.

Geographic Revenue (in thousands, expect percentages)	For the Fiscal Years Ended September 30,					
	2011		2010		2009	
	Revenue	% of Revenue	Revenue	% of Revenue	Revenue	% of Revenue
United States	\$ 140,203	69.8%	\$ 115,304	60.3%	\$ 106,155	60.2%
Asia	49,417	24.6%	56,411	29.5%	54,362	30.8%
Europe	9,081	4.5%	12,712	6.6%	8,878	5.0%
Other	2,227	1.1%	6,851	3.6%	6,961	4.0%
Total revenue	\$ 200,928	100.0%	\$ 191,278	100.0%	\$ 176,356	100.0%

See [Footnote 20 - Subsequent Event](#) for a discussion associated with the impact of the floods in Thailand on our operations.

For the fiscal years ended September 30, 2011, 2010, and 2009, our top five customers accounted for 40%, 44%, and 43%, respectively, of our annual consolidated revenue. The following table sets forth our significant customers, defined as customers that represented greater than 10% of total consolidated revenue, by reporting segment.

Significant Customers	For the Fiscal Years Ended September 30,		
	2011	2010	2009
Fiber Optics - Cisco Systems	—%	13%	15%
Photovoltaics - Loral Space & Communications	11%	11%	14%

[Table of Contents](#)

The following table sets forth operating loss attributable to each of our reporting segments.

<b>Statement of Operations Data</b> <i>(in thousands)</i>	<b>For the Fiscal Years Ended September 30,</b>		
	<b>2011</b>	<b>2010</b>	<b>2009</b>
Fiber Optics operating loss	\$ (30,276)	\$ (19,888)	\$ (126,830)
Photovoltaics operating loss	(2,251)	(1,538)	(14,136)
Total operating loss	<u>\$ (32,527)</u>	<u>\$ (21,426)</u>	<u>\$ (140,966)</u>

In fiscal 2009, we recorded non-cash impairment charges totaling \$60.8 million related to goodwill, intangible assets, and fixed assets related to our Fiber Optics segment.

The following table sets forth our significant non-cash expenses attributable to each of our reporting segments.

<b>Depreciation and Amortization</b> <i>(in thousands)</i>	<b>For the Fiscal Years Ended September 30,</b>		
	<b>2011</b>	<b>2010</b>	<b>2009</b>
Fiber Optics segment	\$ 6,599	\$ 6,974	\$ 10,314
Photovoltaics segment	5,374	5,314	5,768
Total depreciation and amortization	<u>\$ 11,973</u>	<u>\$ 12,288</u>	<u>\$ 16,082</u>

Long-lived assets consist primarily of property, plant, and equipment and also goodwill and intangible assets. The following table sets forth long-lived assets for each of our reporting segments.

<b>Long-lived assets</b> <i>(in thousands)</i>	<b>As of September 30,</b> <b>2011</b>	<b>As of September 30,</b> <b>2010</b>
Fiber Optics segment	\$ 26,483	\$ 31,175
Photovoltaics segment	45,545	45,935
Corporate division (unallocated)	1,007	1,002
Long-lived assets	<u>\$ 73,035</u>	<u>\$ 78,112</u>

As of September 30, 2011 and 2010, approximately 93% and 87% of our long-lived assets were located in the United States.

**NOTE 17. Suncore Joint Venture**

On July 30, 2010, we entered into a joint venture agreement with San'an Optoelectronics Co., Ltd., or San'an, for the purpose of engaging in the development, manufacturing, and distribution of CPV receivers, modules, and systems for terrestrial solar power applications under a technology license from us. The joint venture, Suncore Photovoltaic Technology Co., Ltd., or Suncore, is a limited liability company under the laws of the People's Republic of China. The establishment of the Suncore entity occurred on January 12, 2011 after receiving Chinese regional government approval.

The total registered capital of Suncore is \$30 million, of which San'an has contributed \$18 million in cash and EMCORE has contributed \$12 million in cash. We are not required to contribute additional funds in excess of our initial \$12 million investment, and at this time, we do not anticipate contributing any additional funds to Suncore. All operational activities and business for CPV receivers, modules, and systems currently residing at both San'an and our Langfang, China manufacturing facility will eventually be transferred to Suncore.

## [Table of Contents](#)

In conjunction with this joint venture, we have agreed to grant Suncore an exclusive license to manufacture our current and future improved CPV receivers, modules and systems in China for terrestrial solar power applications. In addition, we entered into a Cooperation Agreement with an affiliate of San'an whereby we have received \$8.5 million in consulting fees in exchange for the technology license and related support and strategic consulting services to Suncore. Pursuant to the Cooperation Agreement, the San'an affiliate will provide Suncore with working capital financing in the form of loans and/or guarantees.

On December 4, 2010, we entered into an Investment and Cooperation Agreement, or IC Agreement, with San'an and the Huainan Municipal Government, or Huainan, in China. The IC Agreement provides for Suncore's primary engineering, manufacturing, and distribution operations for CPV components and systems to be established in the High-Tech Development Zone of Huainan City in exchange for subsidies and favorable tax and other incentives to be provided by Huainan. Under the terms of the IC Agreement, Huainan has committed to providing subsidies that include: reimbursement of 100% of the local portion of the business, value added and income taxes incurred during the first five years of Suncore's production activities and 50% of the amount of those taxes during the subsequent five years; reimbursement of certain administrative and utility charges within the Huainan City High-Tech Development Zone; cash rebates to Suncore of RMB 1.4 (approximately US\$0.21) for every watt of the first 1,000 megawatts of CPV systems manufactured in Huainan and sold in China; and a cash subsidy of RMB 500 million (approximately U.S. \$75 million) that may be used solely for the purchase of capital equipment for the development of Suncore's operations in Huainan. The IC Agreement was subject to and received approval from the shareholders of San'an on December 23, 2010.

### Accounting Treatment:

In our opinion, neither San'an nor EMCORE holds a controlling financial interest in Suncore because neither party has exclusive authority over decision-making related to significant ordinary course of business actions such as establishing a budget, compensation, and the hiring and firing of certain executive personnel. Therefore, we have accounted for our investment in Suncore using the equity method of accounting.

To date, we have contributed \$12.0 million to Suncore as a capital contribution and have received \$8.5 million of consulting fees from the San'an affiliate. We reviewed the substance of the consulting fee arrangement and concluded that the consulting fees are tied to the nonmonetary assets that were contributed to Suncore at formation. Therefore, we have recorded the consulting fees as a reduction to our investment in Suncore. In fiscal 2012, we will be recognizing the \$8.5 million basis difference in our equity investment related to the receipt of the consulting fees over a five-year period using the straight-line amortization method, which is based on the estimated useful life.

Pursuant to the joint venture agreement, San'an and EMCORE share the profits, losses, and risks of Suncore in proportion to and, in the event of losses, to the extent of their respective contributions to the registered capital of Suncore. As of September 30, 2011, we continued to hold a 40% registered ownership in Suncore and we recorded losses of \$1.8 million for the fiscal year ended September 30, 2011 from this equity method investment which was primarily related to start-up activities.

### Development Agreement:

In August 2011, we signed a solar rooftop CPV development agreement with our Suncore joint venture pursuant to which we will collaborate on the development and application of the current 500X and next-generation 1000X rooftop CPV systems. In summary, Suncore agreed to purchase joint ownership rights to rooftop CPV intellectual property and reimburse us 50% of all research and development costs incurred related to rooftop CPV solutions in exchange for joint ownership rights to the newly developed intellectual property. In addition, Suncore will pay us a development fee of 20% on research and development costs billed to Suncore with a maximum development fee payout of approximately \$0.2 million.

### **NOTE 18. Gain from Sale of an Unconsolidated Affiliate**

In January 2009, we completed the sale of our remaining interests in a company formerly named WorldWater & Solar Technologies Corporation, now named Entech Solar, Inc. We sold our remaining shares of Entech Solar Series D Convertible Preferred Stock and warrants to a significant shareholder of both our Company and Entech Solar, for approximately \$11.6 million, which included additional consideration of \$0.2 million as a result of the termination of certain operating agreements with Entech Solar. We recognized a gain on the sale of this investment of approximately \$3.1 million.

**NOTE 19. Selected Quarterly Financial Information (unaudited)**

The following tables present our unaudited consolidated results of operations for the eight most recently ended quarters. We believe 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 consolidated financial statements and notes included elsewhere in this Annual Report. Our results from operations 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. We have experienced and expect to continue to experience significant fluctuations in quarterly results.

**EMCORE CORPORATION**  
**Quarterly Consolidated Statements of Operations**  
**For the Fiscal Year Ended September 30, 2011**  
(in thousands, except loss per share)  
(unaudited)

	For the Three Months Ended			
	December 31, 2010	March 31, 2011	June 30, 2011	September 30, 2011
Revenue	\$ 52,107	\$ 47,218	\$ 49,480	\$ 52,123
Cost of revenue	39,427	36,638	40,010	42,090
Gross profit	12,680	10,580	9,470	10,033
Operating expenses (income):				
Selling, general, and administrative	8,264	9,380	9,657	8,281
Research and development	7,191	7,984	9,549	8,129
Impairments	—	—	—	8,000
Litigation settlements, net	—	(2,590)	1,465	(20)
Total operating expenses	15,455	14,774	20,671	24,390
Operating loss	(2,775)	(4,194)	(11,201)	(14,357)
Other income (expense):				
Interest income	—	—	—	2
Interest expense	(258)	(130)	(132)	(122)
Foreign exchange gain (loss)	(335)	749	625	(304)
Loss from equity method investment	—	(587)	(259)	(996)
Change in fair value of financial instruments	(272)	(1,038)	(107)	1,487
Other expense	(5)	(5)	(5)	—
Total other income (expense)	(870)	(1,011)	122	67
Net loss	\$ (3,645)	\$ (5,205)	\$ (11,079)	\$ (14,290)
<b>Per share data:</b>				
Net loss per basic and diluted share	\$ (0.04)	\$ (0.06)	\$ (0.12)	\$ (0.15)
Weighted-average number of basic and diluted shares outstanding	85,250	87,216	89,843	93,305



**EMCORE CORPORATION**  
**Quarterly Consolidated Statements of Operations**  
**For the Fiscal Year Ended September 30, 2010**  
**(in thousands, except loss per share)**  
**(unaudited)**

	For the Three Months Ended			
	December 31, 2009	March 31, 2010	June 30, 2010	September 30, 2010
Revenue	\$ 42,402	\$ 48,194	\$ 46,606	\$ 54,076
Cost of revenue	33,089	32,436	33,797	41,295
Gross profit	9,313	15,758	12,809	12,781
Operating expenses:				
Selling, general, and administrative	12,227	9,023	14,004	7,295
Research and development	7,513	7,596	7,147	7,282
Total operating expenses	19,740	16,619	21,151	14,577
Operating loss	(10,427)	(861)	(8,342)	(1,796)
Other income (expense):				
Interest income	2	17	3	2
Interest expense	(116)	(103)	(111)	(109)
Foreign exchange gain (loss)	(232)	(729)	(928)	881
Change in fair value of financial instruments	(1,132)	322	176	159
Other expense	(228)	(108)	(12)	(22)
Total other income (expense)	(1,706)	(601)	(872)	911
Net loss	\$ (12,133)	\$ (1,462)	\$ (9,214)	\$ (885)
<b>Per share data:</b>				
Net loss per basic and diluted share	\$ (0.15)	\$ (0.02)	\$ (0.11)	\$ (0.01)
Weighted-average number of basic and diluted shares outstanding	81,113	82,459	84,117	85,009

Significant transactions that affect the comparability of our operating results and financial condition include:

**Fiscal 2011**

- **Joint Venture:** We entered into a joint venture agreement in fiscal 2010 with San'an Optoelectronics Co., Ltd. (San'an) for the purpose of engaging in the development, manufacturing, and distribution of CPV receivers, modules, and systems for terrestrial solar power applications under a technology license from us. The joint venture, Suncore Photovoltaic Technology Co., Ltd. (Suncore) was established in January 2011. To date, we have contributed \$12.0 million in cash to Suncore as a capital contribution and have received \$8.5 million of consulting fees from an affiliate of San'an. We have accounted for our investment in Suncore using the equity method of accounting and we have recorded the consulting fees as a reduction to our investment in Suncore. During fiscal 2011, we held a 40% registered ownership in Suncore and we recorded a \$1.8 million loss from this equity method investment which was primarily related to start-up activities. See [Footnote 17 - Suncore Joint Venture](#) in the notes to the consolidated financial statements for additional information related to our Suncore joint venture.
- **Litigation Settlements:** During the three months ended March 31, 2011, we received a cash payment of approximately \$2.6 million, net of legal fees, in satisfaction of a judgment for damages awarded. During the three months ended June 30, 2011, we accrued \$1.5 million for legal settlements considered probable. See [Footnote 14 - Commitments and Contingencies](#) in the notes to the consolidated financial statements for additional information related to our litigation proceedings.

- **Impairment Charge:** During the three months ended September 30, 2011, we recorded a non-cash impairment charge of approximately \$8.0 million related to long-lived assets associated with our Fiber Optics segment. See [Footnote 9 - Intangible Assets](#) in the notes to the consolidated financial statements for additional information related to this impairment charge.
- **Asset Retirement Obligations:** We have known conditional asset retirement conditions, such as certain asset decommissioning and restoration of rented facilities to be performed in the future. During the three months ended September 30, 2011, we completed a review of our asset retirement and environmental obligations and we recorded an asset retirement obligation with an offset to fixed assets totaling \$4.8 million. See [Footnote 14 - Commitments and Contingencies](#) in the notes to the consolidated financial statements for additional information related to our asset retirement obligations.

#### **Fiscal 2010**

- **Bad Debt:** In June 2010, we recorded a \$2.4 million reserve on accounts receivable related to a solar power system contract that management had uncertainty with respect to its total collectability.
- **Termination Fee:** In June 2010, we incurred a one-time non-recurring \$2.8 million charge associated with a termination fee on our previously announced joint venture with Tangshan Caofeidian Investment Corporation.
- **Legal Expenses:** Throughout the year, we incurred \$4.7 million related to legal expenses associated with certain patent and other litigation.

#### **NOTE 20. Subsequent Event - Impact of Thailand Floods on our operations**

##### **Background**

On October 24, 2011, our primary contract manufacturer announced that, as a result of the flooding in Thailand, it had suspended operations at its facility that is used to manufacture certain of our fiber optics products. Rising water penetrated the facility and submerged most of our manufacturing and test equipment as well as our inventory at the facility.

##### **Strategic Plan**

Over the last two months, we have developed and implemented alternative manufacturing plans in our own facilities in China and in the U.S. to meet the needs of our customers. Concurrently, we have been focusing on rebuilding our high-volume manufacturing infrastructure at other Thailand locations supported by our contract manufacturer and at our own manufacturing facility in China. We have been working closely with our insurance carriers, banks, customers, and business partners to address short-term liquidity requirements and we and our manufacturing partners have placed purchase orders for long lead-time capital equipment. We expect to complete the rebuild and product qualification for our major product lines in our third quarter of fiscal 2012.

As a result of the flood, certain inventory and fixed assets were damaged or destroyed. Our contract manufacturer is required under its production agreement with us to reimburse us for losses to fixed assets and inventory incurred while at the manufacturer's facilities. We are working with our contract manufacturer (and the contract manufacturer's insurance carrier) to receive insurance proceeds to cover the direct damages to our assets that were impacted by the flood. We are not a named beneficiary of our contract manufacturer's insurance policy. The timing and amounts of the recovery from the contract manufacturer, including insurance proceeds, are uncertain at this time.

Additionally, we claimed damages under our own insurance policy relating to business interruption due to the flooding. To date, we have collected \$2.0 million from our policy and we expect to receive an additional \$3.0 million by January 2012.

With respect to measures taken to improve liquidity:

- In November 2011, we implemented various cost reduction measures, including temporary salary reduction, furlough, reduction of discretionary spending including travel, capital expenditures, and development material costs, and improve working capital management. We believe that our cost reduction activities will reduce the overall cost structure of our operations.

## [Table of Contents](#)

We also entered into an agreement with our contract manufacturer whereby our contract manufacturer will purchase equipment to rebuild our affected manufacturing lines for which we will repay our contract manufacturer from insurance proceeds received from that contract manufacturer. Additionally, we restructured our outstanding payables owed to our contract manufacturer, which delayed payments to future dates to coincide with expected timing of insurance proceeds.

- In December 2011, we signed agreements with certain customers pursuant to which they will receive an allocation of our finished goods inventory as well as a percentage of future output from our new production lines being placed into service in fiscal 2012. As consideration, we have received partial prepayments for future product shipments. These advanced payments will be used to support our working capital requirements until we receive the insurance proceeds.
- On December 21, 2011, we signed an amendment to our credit facility with Wells Fargo Bank that increased our eligible borrowing base by up to \$10 million by adding to the borrowing base formula 85% of the appraised value of the Company's equipment and 50% of the appraised value of the Company's real estate, for which the appraisals are currently in process. In addition, Wells Fargo Bank reduced our restrictions under the excess availability financial covenant requirement from \$7.5 million to \$3.5 million through December 2012. The interest rate on outstanding borrowings was increased to LIBOR rate plus four percent. We now expect at least 70% of the total amount of credit under our \$35 million credit facility to be available for use based on the revised borrowing base formula during fiscal year 2012.

## **Financial Impact**

Although we have not yet definitively quantified the possible impacts of the flooding in Thailand on our business, we expect that flooding at our primary contract manufacturer in Thailand will have a significant adverse impact on our operations and our ability to meet customer demand for our fiber optics products in the near-term. Our Thailand contract manufacturer historically supported greater than 50 percent of our total fiber optics-related revenue. Our current evaluation is that our fiber optics revenue could be \$12 to \$15 million less in our first quarter of fiscal 2012 as a result of this natural disaster. There is no assurance that the disruption in our fiscal 2012 fiber optics quarterly revenue will be limited to this range, nor can it be assured that the adverse impact will be limited to the next three fiscal quarters. It is possible that our customers may seek alternative suppliers of comparable products if we are unable to meet their needs. While we believe our insurance coverage, both property and business interruption, will mitigate a portion of the adverse impact, there can be no assurance as to the extent or timing of insurance recoveries. Our Photovoltaics segment has not been affected by the floods in Thailand.

As of December 31, 2011, we will perform an impairment test of our long-lived assets related to our Fiber Optics segment. The outcome of these tests may result in recording of impairment charges. We expect to write-off the carrying value of damaged equipment and inventory which is estimated to be in the range of \$10 to \$20 million. Insurance proceeds including recoveries from our contract manufacturer will be recorded as a gain upon receipt.

**Report of Independent Registered Public Accounting Firm**

The Board of Directors and Stockholders  
EMCORE Corporation:

We have audited the accompanying consolidated balance sheets of EMCORE Corporation and subsidiaries (the Company) as of September 30, 2011 and 2010, and the related consolidated statements of operations and comprehensive loss, shareholders' equity, and cash flows for each of the years in the two-year period ended September 30, 2011. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). 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 consolidated financial statements referred to above present fairly, in all material respects, the financial position of EMCORE Corporation and subsidiaries as of September 30, 2011 and 2010, and the results of their operations and their cash flows for each of years in the two-year period ended September 30, 2011, in conformity with U.S. generally accepted accounting principles.

As discussed in note 8 to the consolidated financial statements, the Company has elected to change the annual testing date for goodwill impairment.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of September 30, 2011, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and our report dated December 29, 2011, expressed an adverse opinion on the effectiveness of the Company's internal control over financial reporting.

**/s/ KPMG LLP**

KPMG LLP  
Albuquerque, New Mexico  
December 29, 2011

**Report of Independent Registered Public Accounting Firm**

To the Board of Directors and Shareholders of EMCORE Corporation  
Albuquerque, NM

We have audited the accompanying consolidated statements of operations and comprehensive loss, shareholders' equity, and cash flows of EMCORE Corporation and subsidiaries (the "Company") for the year ended September 30, 2009. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). 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 audit provides a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the results of operations of the Company and their cash flows for the year ended September 30, 2009, in conformity with accounting principles generally accepted in the United States of America.

**/s/ Deloitte & Touche LLP**

Deloitte & Touche LLP  
Dallas, Texas  
December 29, 2009  
(January 10, 2011 as to the effects of correcting the 2009 financial statements described in Note 2)

## **ITEM 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure**

None.

### **ITEM 9A. Controls and Procedures**

#### **a Evaluation of Disclosure Controls and Procedures**

The Company maintains disclosure controls and procedures designed to ensure that information required to be disclosed in reports filed under the Securities Exchange Act of 1934 (the “Act”) is recorded, processed, summarized, and reported within the time periods specified in the SEC’s rules and forms and that such information is accumulated and communicated to management, including its Chief Executive Officer (Principal Executive Officer) and Chief Financial Officer (Principal Financial and Accounting Officer), as appropriate, to allow timely decisions regarding required disclosure.

Management, under the supervision and with the participation of its Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of the Company’s disclosure controls and procedures (as defined in Rules 13a-15(e) or 15d-15(e) promulgated under the Act) as of the end of the period covered by this report. Based upon this evaluation, management concluded that as of September 30, 2011, the Company’s disclosure controls and procedures were not effective because of the material weaknesses described in Management’s Annual Report on Internal Control over Financial Reporting.

In light of the material weaknesses described in Management’s Annual Report on Internal Control over Financial Reporting, additional analyses and other procedures were performed to ensure that the Company’s consolidated financial statements included in this Annual Report on Form 10-K were prepared in accordance with generally accepted accounting principles in the United States of America (“GAAP”). These measures included expanded year-end closing procedures, the dedication of significant internal resources to scrutinize account analyses and reconciliations, and management’s own internal reviews. As a result of these measures, management concluded that the Company’s consolidated financial statements included in this Annual Report on Form 10-K present fairly, in all material respects, the Company’s consolidated financial position, results of operations, and cash flows as of the dates, and for the periods, presented in conformity with GAAP.

Attached as exhibits to this Annual Report on Form 10-K are certifications of the Company’s Chief Executive Officer and Chief Financial Officer, which are required in accordance with Rule 13a-14 of the Act. This Evaluation of Disclosure Controls and Procedures section includes information concerning management’s evaluation of disclosure controls and procedures referred to in those certifications and, as such, should be read in conjunction with the certifications of the Company’s Chief Executive Officer and Chief Financial Officer.

#### **b. Management’s Annual Report on Internal Control over Financial Reporting**

Management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting, as defined in Rules 13a-15(f) and 15d-15(f) of the Act, is a process designed by, or under the supervision of, the Chief Executive Officer and the Chief Financial Officer, and effected by the Board of Directors, management, and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the Company’s consolidated financial statements for external purposes in accordance with GAAP.

The Company’s internal control over financial reporting includes those policies and procedures that:

1. pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company;
2. provide reasonable assurance that transactions are recorded as necessary to permit preparation of the Company’s consolidated financial statements in accordance with GAAP, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and,

3. provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the Company's assets that could have a material effect on the Company's consolidated financial statements.

Our management, including our Chief Executive Officer and Chief Financial Officer, does not expect that our disclosure controls or our internal controls over financial reporting will prevent or detect all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Controls can also be circumvented by individual acts, by collusion of two or more people, or by management override of the controls. The design of any system of controls is based, in part, upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Over time, controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with associated policies or procedures. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

A "material weakness" is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the Company's annual or interim consolidated financial statements will not be prevented or detected on a timely basis.

In evaluating the effectiveness of the Company's internal control over financial reporting as of September 30, 2011, management used the criteria established in the Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). Based on the criteria established by COSO, management identified the following material weaknesses in the Company's internal control over financial reporting as of September 30, 2011:

**(i) Control activities related to certain inventory reserve transactions**

The Company did not maintain effective controls over certain inventory reserve transactions. Specifically, the Company did not have effectively designed controls to ensure that certain inventory reserves were taken on excess material in accordance with GAAP. These controls did not adequately substantiate forward-looking demand for certain inventory items.

**(ii) Control activities related to certain inventory held by third parties**

The Company did not maintain effective controls over certain inventory held by third parties. Specifically, a reconciliation of inventory held by third parties identified certain reconciling items that were not properly verified; therefore, controls were not designed and in place to provide reasonable assurance that the inventory held by third parties was recorded in accordance with GAAP.

As a result of these material weaknesses, there were misstatements in inventory in the preliminary consolidated financial statements that were corrected prior to issuance of the Company's consolidated financial statements. Additionally, there is a reasonable possibility that a material misstatement of the Company's annual or interim consolidated financial statements would not be prevented or detected on a timely basis.

As a result of these material weaknesses, management concluded that the Company did not maintain effective internal control over financial reporting as of September 30, 2011, based on the criteria established in Internal Control - Integrated Framework issued by COSO.

KPMG LLP, the Company's independent registered public accounting firm, has issued an [auditors' report](#) on the Company's internal control over financial reporting as of September 30, 2011.

**c. Changes in Internal Control over Financial Reporting**

There were no changes in the Company's internal control over financial reporting during the quarter ended September 30, 2011 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.



## **Report of Independent Registered Public Accounting Firm**

The Board of Directors and Stockholders  
EMCORE Corporation:

We have audited EMCORE Corporation's internal control over financial reporting as of September 30, 2011, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). EMCORE Corporation's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the company's annual or interim financial statements will not be prevented or detected on a timely basis. Material weaknesses related to control activities over certain inventory reserve transactions and certain inventory held by third parties have been identified and included in management's assessment. We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of EMCORE Corporation and subsidiaries as of September 30, 2011 and 2010, and the related consolidated statements of operations and comprehensive loss, shareholders' equity, and cash flows for each of the years in the two-year period ended September 30, 2011. These material weaknesses were considered in determining the nature, timing, and extent of audit tests applied in our audit of the 2011 consolidated financial statements, and this report does not affect our report dated December 29, 2011, which expressed an unqualified opinion on those consolidated financial statements.

In our opinion, because of the effect of the aforementioned material weaknesses on the achievement of the objectives of the control criteria, EMCORE Corporation has not maintained effective internal control over financial reporting as of September 30, 2011, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission.

**/s/ KPMG LLP**

KPMG LLP  
Albuquerque, New Mexico  
December 29, 2011

**ITEM 9B. Other Information**

Not applicable.

**PART III.**

**ITEM 10. Directors, Executive Officers and Corporate Governance**

Information regarding our executive officers and directors required by this Item is incorporated by reference to our Definitive Proxy Statement in connection with our Annual Meeting of Stockholders (Proxy Statement), which will be filed with the Securities and Exchange Commission within 120 days after the fiscal year ended September 30, 2011. Information required by Item 405 of Regulation S-K is incorporated by reference to the section entitled “Section 16(a) Beneficial Ownership Reporting Compliance” in the Proxy Statement. Information required by Items 407(c)(3), (d)(4) and (d)(5) of Regulation S-K is incorporated by reference to the Section entitled “Governance of the Company - Board Committees” in the Proxy Statement.

We have adopted a code of ethics entitled the “EMCORE Corporation Code of Business Conduct and Ethics,” which is applicable to all employees, officers, and directors of the Company. The full text of our Code of Business Conduct and Ethics is included with the Corporate Governance information available on our website (www.emcore.com). We intend to disclose any changes in or waivers from its code of ethics by posting such information on its website or by filing a Current Report on Form 8-K.

**ITEM 11. Executive Compensation**

Information required by this Item is incorporated by reference to the sections entitled “Directors Compensation for Fiscal Year 2011,” “Compensation Discussion and Analysis,” “Executive Compensation,” “Compensation Committee Report” and “Compensation Committee Interlocks and Insider Participation” in the Proxy Statement.

**ITEM 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters**

Information regarding security ownership of certain beneficial owners and management is incorporated by reference to the section entitled “Security Ownership of Certain Beneficial Owners and Management” in the Proxy Statement.

Information regarding our equity compensation plans is incorporated by reference to the section entitled “Equity Compensation Plans” in the Proxy Statement.

**ITEM 13. Certain Relationships, Related Transactions and Director Independence**

Information regarding required by this Item is incorporated by reference to the sections entitled “Governance of the Company - Related Person Transaction Approval Policy” and “Governance of the Company - Director Independence” in the Proxy Statement.

**ITEM 14. Principal Accounting Fees and Services**

Information required by this Item is incorporated by reference to the section entitled “Fiscal 2011 & 2010 Auditor Fees and Services” in the Proxy Statement.

**PART IV.**

**ITEM 15. Exhibits and Financial Statement Schedules**

**(a)(1) Financial Statements**

Included in Part II, Item 8 of this Annual Report on Form 10-K:

- Consolidated Statements of Operations and Comprehensive Loss for the fiscal years ended September 30, 2011, 2010, and 2009
- Consolidated Balance Sheets as of September 30, 2011 and 2010
- Consolidated Statements of Shareholders' Equity for the fiscal years ended September 30, 2011, 2010, and 2009
- Consolidated Statements of Cash Flows for the fiscal years ended September 30, 2011, 2010, and 2009
- Notes to Consolidated Financial Statements
- Reports of Independent Registered Public Accounting Firms

**(a)(2) Financial Statement Schedules**

The applicable financial statement schedules required under this Item 15(a)(2) are presented in our consolidated financial statements and notes thereto under Item 8 of this Annual Report on Form 10-K.

**(a)(3) Exhibits**

- 2.1 Stock Purchase Agreement, dated as of April 13, 2007, by and among the Company, Opticomm Corporation, and the persons named on Exhibit 1 thereto (incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed on April 19, 2007).
- 2.2 Asset Purchase Agreement, dated December 17, 2007, between the Company and Intel Corporation (incorporated by reference to Exhibit 2.1 to the Company's Quarterly Report on Form 10-Q filed on February 11, 2008)
- 2.3 Securities Purchase Agreement, dated February 15, 2008, between the Company and each investor identified on the signature pages thereto (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on February 20, 2008).
- 2.4 Registration Rights Agreement, dated February 15, 2008, between the Company and the investors identified on the signature pages thereto (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on February 20, 2008).
- 2.5 Warrant to Purchase Common Stock, dated February 19, 2008, between the Company and the investors identified on the signature pages thereto (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed on February 20, 2008).
- 2.6 Asset Purchase Agreement, dated April 9, 2008, between the Company and Intel Corporation (incorporated by reference to Exhibit 2.1 to the Company's Quarterly Report on Form 10-Q filed on May 12, 2008)
- 2.7 Warrant to Purchase Common Stock, dated October 1, 2009, between the Company and Commerce Court Small Cap Value Fund, Ltd. (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on October 2, 2009).
- 2.8 Warrant to Purchase Common Stock, dated October 1, 2009, between the Company and Commerce Court Small Cap Value Fund, Ltd. (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on October 2, 2009).
- 3.1 Restated Certificate of Incorporation, dated April 4, 2008 (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on April 4, 2008).
- 3.2 Amended By-Laws, as amended through August 7, 2008 (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on August 13, 2008).

[Table of Contents](#)

- 4.1 Specimen Certificate for Shares of Common Stock (incorporated by reference to Exhibit 4.1 to Amendment No. 3 to the registration statement on Form S-1 filed on February 24, 1997).
- 4.2 Registration Rights Agreement, dated April 26, 2011, by and between the Company and Shanghai Di Feng Investment Co. Ltd. (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on April 26, 2011).
- 4.3 Registration Rights Agreement, dated August 16, 2011, by and between the Company and Commerce Court Small Cap Value Fund, Ltd. (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on August 16, 2011).
- 10.1† 1995 Incentive and Non-Statutory Stock Option Plan (incorporated by reference to Exhibit 10.1 to the Amendment No. 1 to the registration statement on Form S-1 filed on February 6, 1997).
- 10.2† 1996 Amendment to Option Plan (incorporated by reference to Exhibit 10.2 to Amendment No. 1 to the registration statement on Form S-1 filed on February 6, 1997).
- 10.3† MicroOptical Devices, Inc. 1996 Stock Option Plan (incorporated by reference to Exhibit 99.1 to the registration statement on Form S-8 filed on February 6, 1998).
- 10.4† Outside Directors Cash Compensation Plan, effective October 20, 2005, as amended and restated (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed on February 17, 2006).
- 10.5 Exchange Agreement, dated as of November 10, 2005, by and between Alexandra Global Master Fund Ltd. and the Company (incorporated by reference to Exhibit 10.15 to the Company's Annual Report on Form 10-K filed on December 14, 2005).
- 10.6 Investment Agreement, dated November 29, 2006, between WorldWater and Power Corporation and the Company (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on December 5, 2006).
- 10.7 Registration Rights Agreement, dated November 29, 2006, between WorldWater and Power Corporation and the Company (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on December 5, 2006).
- 10.8 Letter Agreement, dated November 29, 2006, between WorldWater and Power Corporation and the Company (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed on December 5, 2006). Confidential treatment has been requested by the Company with respect to portions of this document. Such portions are indicated by "\*\*\*\*\*".
- 10.9† Dr. Hong Hou Offer Letter, dated December 14, 2006 (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on December 20, 2006).
- 10.10 Consents to Amendment and Waiver, dated as of April 9, 2007, by and among the Company and certain holders of the Company's convertible subordinated notes thereto (incorporated by reference to Exhibit 10.1 and 10.2 to the Company's Current Report on Form 8-K filed on April 10, 2007).
- 10.11† Executive Severance Policy, effective May 1, 2007 (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on April 19, 2007).
- 10.12 Memorandum of Understanding, dated as of September 26, 2007, between Lewis Edelstein and the Company regarding shareholder derivative litigation (incorporated by reference to Exhibit 10.10 to the Company's Annual Report on Form 10-K filed on November 1, 2007).
- 10.13 Stipulation of Compromise and Settlement, dated as of November 28, 2007, executed by the Company and the other defendants and the plaintiffs in the Federal Court Action and the State Court Actions (incorporated by reference to Exhibit 10.19 to the Company's Annual Report on Form 10-K filed on December 31, 2007).
- 10.14† 2007 Directors' Stock Award Plan (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed on February 11, 2008).

[Table of Contents](#)

- 10.15† Fiscal 2008 Executive Bonus Plan, adopted March 31, 2008 (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed on May 12, 2008).
- 10.16† Mr. John M. Markovich Offer Letter, dated August 7, 2008 (incorporated by reference to Exhibit 10.20 to the Company's Annual Report on Form 10-K filed December 30, 2008).
- 10.17 Loan and Security Agreement, dated as of September 29, 2008, between Bank of America, N.A. and the Company (incorporated by reference to Exhibit 2.5 to the Company's Annual Report on Form 10-K filed December 30, 2008).
- 10.18 First Amendment to Loan and Security Agreement, dated February 16, 2009, between Bank of America, N.A. and the Company (incorporated by reference to Exhibit 10.21 to the Company's Quarterly Report on Form 10-Q filed on February 17, 2009).
- 10.19 Third Amendment to Loan and Security Agreement, dated April 30, 2009, between Bank of America, N.A. and the Company (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed on May 6, 2009).
- 10.20 Fourth Amendment to Loan and Security Agreement, dated May 8, 2009, between Bank of America, N.A. and the Company (incorporated by reference to Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q filed on August 17, 2009).
- 10.21 Fifth Amendment to Loan and Security Agreement, dated November 30, 2009, between Bank of America, N.A. and the Company (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on December 3, 2009).
- 10.22 Sixth Amendment to Loan and Security Agreement, dated February 8, 2010, between Bank of America, N.A. and the Company (incorporated by reference to Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q filed on February 9, 2010).
- 10.23 Seventh Amendment to Loan and Security Agreement, dated May 6, 2010, between Bank of America, N.A. and the Company (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed on May 10, 2010).
- 10.24 Eighth Amendment to Loan and Security Agreement, dated August 11, 2010, between Bank of America, N.A. and the Company (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on August 17, 2010).
- 10.25† EMCORE Corporation 2000 Stock Option Plan, as amended and restated on April 30, 2009 (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on May 6, 2009).
- 10.26† EMCORE Corporation 2000 Employee Stock Purchase Plan, as amended June 14, 2011 (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on June 16, 2011).
- 10.27† Directors' Stock Award Plan (incorporated herein by reference to Exhibit 99.1 to the Company's registration statement on Form S-8 filed on November 5, 1997, as amended and incorporated herein by reference to Exhibit 99.1 by the registration statement on Form S-8 filed on June 5, 2009).
- 10.28 Share Purchase Agreement, dated February 3, 2010, by and among Tangshan Caofeidian Investment Corporation, Ltd. and the Company (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed on February 9, 2010).
- 10.29 Shareholders Agreement, dated February 3, 2010, by and among Tangshan Caofeidian Investment Corporation, Ltd. and the Company (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q filed on February 9, 2010).
- 10.30 Supplemental Agreement, dated February 3, 2010, by and among Tangshan Caofeidian Investment Corporation, Ltd. and the Company (incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q filed on February 9, 2010).
- 10.31 Credit and Security Agreement, dated November 11, 2010, between Wells Fargo Bank National Association and the Company (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed November 17, 2010).

[Table of Contents](#)

- 10.32 Joint Venture Contract, dated July 30, 2010, by and between San'an Optoelectronics Co., Ltd. and the Company (incorporated by reference to Exhibit 10.32 to the Company's Annual Report on Form 10-K filed on January 10, 2011).
- 10.33 Cooperation Agreement, dated July 30, 2010, by and between Fujian San'an Group Corporation and the Company (incorporated by reference to Exhibit 10.33 to the Company's Annual Report on Form 10-K filed on January 10, 2011).
- 10.34† Mr. Mark Weinswig Offer Letter, dated September 10, 2010 (incorporated by reference to Exhibit 10.34 to the Company's Annual Report on Form 10-K filed on January 10, 2011).
- 10.35 Investment Cooperation Agreement on the Project of Terrestrial Application of High Concentration Photovoltaic Systems and Components, dated December 4, 2010, by and among Huainan Municipal Government, San'an Optoelectronics Co., Ltd., and the Company (incorporated by reference to Exhibit 10.35 to the Company's Annual Report on Form 10-K filed on January 10, 2011).
- 10.36† Officer and Director Share Purchase Plan (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on January 27, 2011).
- 10.37 Stock Purchase Agreement, dated April 26, 2011, by and between the Company and Shanghai Di Feng Investment Co. Ltd. (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on April 26, 2011).
- 10.38† 2010 Equity Incentive Plan, as amended and restated on June 14, 2011 (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on June 16, 2011).
- 10.39 Long-Term Supply Agreement between the Company and Space Systems/Loral, Inc., dated May 5, 2011 (Confidential treatment has been requested by the Company with respect to portions of this agreement) (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q filed on August 4, 2011).
- 10.40† Employment Agreement entered into by the Company and Reuben F. Richards, Jr. as of August 2, 2011 (incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q filed on August 4, 2011).
- 10.41† Employment Agreement entered into by the Company and Dr. Hong Q. Hou as of August 2, 2011 (incorporated by reference to Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q filed on August 4, 2011).
- 10.42† Employment Agreement entered into by the Company and Mark B. Weinswig as of August 2, 2011 (incorporated by reference to Exhibit 10.5 to the Company's Quarterly Report on Form 10-Q filed on August 4, 2011).
- 10.43† Employment Agreement entered into by the Company and Mr. Christopher Larocca as of August 2, 2011 (incorporated by reference to Exhibit 10.6 to the Company's Quarterly Report on Form 10-Q filed on August 4, 2011).
- 10.44† Employment Agreement entered into by the Company and Dr. Charlie Wang as of August 2, 2011 (incorporated by reference to Exhibit 10.7 to the Company's Quarterly Report on Form 10-Q filed on August 4, 2011).
- 10.45† Employment Agreement entered into by the Company and Monica D. Van Berkel as of August 2, 2011 (incorporated by reference to Exhibit 10.8 to the Company's Quarterly Report on Form 10-Q filed on August 4, 2011).
- 10.46 Common Stock Purchase Agreement, dated as of August 16, 2011, by and between the Company and Commerce Court Small Cap Value Fund, Ltd. (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on August 16, 2011).
- 10.47 Engagement Letter, dated as of August 16, 2011, by and between the Company and Reedland Capital Partners (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on August 16, 2011).
- 21.1\*\* Subsidiaries of the Company.
- 23.1\*\* Consent of KPMG LLP.
- 23.2\*\* Consent of Deloitte & Touche LLP.

[Table of Contents](#)

24.1**	Preferability letter from KPMG LLP.
31.1**	Certificate of Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2**	Certificate of Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1**	Certificate of Chief Executive Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2**	Certificate of Chief Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

\*\* *Filed herewith*

† *Management contract or compensatory plan*

**SIGNATURES**

Pursuant to the requirements of Section 13 or 15(d) of the Securities and Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Albuquerque, State of New Mexico, on December 29, 2011.

**EMCORE CORPORATION**

By: **/s/ Hong Q. Hou, Ph.D.**  
Hong Q. Hou, Ph.D.  
President and Chief Executive Officer  
(Principal Executive Officer)

**POWER OF ATTORNEY**

Each person whose signature appears below constitutes and appoints and hereby authorizes Hong Q. Hou, Ph.D. and, severally, such person's true and lawful attorneys-in-fact, with full power of substitution or resubstitution, for such person and in his name, place and stead, in any and all capacities, to sign on such person's behalf, individually and in each capacity stated below, any and all amendments, including post-effective amendments to this Form 10-K, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Commission granting unto said attorneys-in-fact, full power and authority to do and perform each and every act and thing requisite or necessary to be done in and about the premises, as fully to all intents and purposes as such person might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact, or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant in the capacities indicated, on December 29, 2011.

<b><u>Signature</u></b>	<b><u>Title</u></b>
<b><u>/s/ Hong Q. Hou, Ph.D.</u></b> Hong Q. Hou, Ph.D.	Chief Executive Officer and Director (Principal Executive Officer)
<b><u>/s/ Mark B. Weinswig</u></b> Mark B. Weinswig	Chief Financial Officer (Principal Financial and Accounting Officer)
<b><u>/s/ Thomas J. Russell, Ph.D.</u></b> Thomas J. Russell, Ph.D.	Chairman Emeritus
<b><u>/s/ Reuben F. Richards, Jr.</u></b> Reuben F. Richards, Jr.	Executive Chairman & Chairman of the Board
<b><u>/s/ Robert L. Bogomolny</u></b> Robert L. Bogomolny	Lead Director
<b><u>/s/ John Gillen</u></b> John Gillen	Director
<b><u>/s/ Sherman McCorkle</u></b> Sherman McCorkle	Director
<b><u>/s/ Charles T. Scott</u></b> Charles T. Scott	Director
<b><u>/s/ James A. Tegnalia, Ph.D.</u></b> James A. Tegnalia, Ph.D.	Director



**EMCORE Corporation Subsidiaries\***

Corona Optical Systems, Inc., a Delaware corporation  
EMCORE Fiber Optics, Inc., a Delaware corporation  
EMCORE Hong Kong, Limited, a Hong Kong corporation  
EMCORE IRB Company, LLC, a New Mexico limited liability company  
EMCORE Netherlands B.V.  
EMCORE Solar Arizona, Inc., a Delaware corporation  
EMCORE Solar New Mexico, a New Mexico limited liability company  
EMCORE Solar Power, Inc., a Delaware corporation  
EMCORE Spain S.L.  
K2 Optronics, Inc. a Delaware corporation  
Langfang EMCORE Optoelectronics Company, Limited, a Chinese corporation  
Opticomm Corporation, a Delaware corporation

\* As of December 29, 2011

**Consent of Independent Registered Public Accounting Firm**

The Board of Directors  
EMCORE Corporation:

We consent to the incorporation by reference in the registration statement Nos. 333-160368, 333-37306, 333-60816, 333-118076, 333-132317, 333-160360, 333-132318, 333-159769, 333-27507, 333-36445, 333-118074, 333-39547, 333-45827, 333-171929, 333-175777 on Form S-8 of EMCORE Corporation, registration No. 333-160437 on Form S-3 of EMCORE Corporation, and registration Nos. 333-176797 and 333-175776 on Form S-1 of EMCORE Corporation of our report dated December 29, 2011, with respect to the consolidated balance sheets of EMCORE Corporation as of September 30, 2011 and 2010, and the related consolidated statements of operations and comprehensive loss, shareholders' equity and cash flows, for each of the years in the two-year period ended September 30, 2011, and the effectiveness of internal control over financial reporting as of September 30, 2011, which reports appear in the September 30, 2011 annual report on Form 10-K of EMCORE Corporation.

Our report dated December 29, 2011, on the effectiveness of internal control over financial reporting as of September 30, 2011, expresses our opinion that EMCORE Corporation did not maintain effective internal control over financial reporting as of September 30, 2011 because of the effect of material weaknesses on the achievement of the objectives of the control criteria and contains an explanatory paragraph that states material weaknesses related to certain inventory reserve transactions and certain inventory held by third parties have been identified and included in management's assessment.

Our report dated December 29, 2011 on the consolidated financial statements refers to a change in the annual testing date for goodwill impairment.

/s/ KPMG LLP

KPMG LLP  
Albuquerque, New Mexico  
December 29, 2011

**Consent of Independent Registered Public Accounting Firm**

The Board of Directors  
EMCORE Corporation:

We consent to the incorporation by reference in Registration Statements Nos. 333-171929, 333-175777, 333-160368, 333-37306, 333-60816, 333-118076, 333-132317, 333-160360, 333-132318, 333-159769, 333-27507, 333-36445, 333-118074, 333-39547 and 333-45827 on Form S-8, Registration Statement No. 333-160437 on Form S-3, and Registration Statements Nos. 333-176797 and 333-175776 on Form S-1 of EMCORE Corporation of our report dated December 29, 2009 (January 10, 2011 as to the effects of correcting the 2009 financial statements described in Note 2), relating to the 2009 consolidated financial statements of EMCORE Corporation and subsidiaries appearing in this Annual Report on Form 10-K of EMCORE Corporation for the year ended September 30, 2011.

**/s/ Deloitte & Touche LLP**

Deloitte & Touche LLP  
Dallas, Texas  
December 29, 2011

December 29, 2011

EMCORE Corporation  
Albuquerque, New Mexico

Ladies and Gentlemen:

We have audited the consolidated balance sheets of EMCORE Corporation and subsidiaries (the Company) as of September 30, 2011 and 2010, and the related consolidated statements of operations and comprehensive loss, shareholders' equity, and cash flows for the two years ended September 30, 2011, and have reported thereon under date of December 29, 2011. The aforementioned consolidated financial statements and our audit report thereon are included in the Company's annual report on Form 10-K for the year ended September 30, 2011. As stated in note 8 to those consolidated financial statements, the Company changed its method of applying an accounting principle for the annual goodwill impairment test by changing the impairment testing date from December 31st to the Company's fiscal year-end, which is currently September 30th. The Company states that the newly adopted accounting principle is preferable in the circumstances because the timing better aligns with the Company's strategic planning and budgeting process and provides additional time for the Company to quantify the fair value of the respective reporting unit. In accordance with your request, we have reviewed and discussed with Company officials the circumstances and business judgment and planning upon which the decision to make this change in the method of accounting was based.

With regard to the aforementioned accounting change, authoritative criteria have not been established for evaluating the preferability of one acceptable method of accounting over another acceptable method. However, for purposes of the Company's compliance with the requirements of the Securities and Exchange Commission, we are furnishing this letter.

Based on our review and discussion, with reliance on management's business judgment and planning, we concur that the newly adopted method of accounting is preferable in the Company's circumstances.

Very truly yours,

/s/ KPMG LLP

KPMG LLP  
Albuquerque, New Mexico  
December 29, 2011

**EMCORE CORPORATION**  
**CERTIFICATION PURSUANT TO SECTION 302**  
**OF THE SARBANES-OXLEY ACT OF 2002**

I, Hong Q. Hou, Ph.D. certify that:

1. I have reviewed this Annual Report on Form 10-K of EMCORE Corporation ("Report");
2. Based on my knowledge, this Report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this Report;
3. Based on my knowledge, the financial statements, and other financial information included in this Report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this Report;
4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this Report is being prepared;
  - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this Report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this Report based on such evaluation; and
  - d. Disclosed in this Report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: **December 29, 2011**

By: **/s/ Hong Hou**  
Hong Q. Hou, Ph.D.  
Chief Executive Officer  
(Principal Executive Officer)

---

**EMCORE CORPORATION  
CERTIFICATION PURSUANT TO SECTION 302  
OF THE SARBANES-OXLEY ACT OF 2002**

I, Mark B. Weinswig, certify that:

1. I have reviewed this Annual Report on Form 10-K of EMCORE Corporation ("Report");
2. Based on my knowledge, this Report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this Report;
3. Based on my knowledge, the financial statements, and other financial information included in this Report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this Report;
4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this Report is being prepared;
  - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this Report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this Report based on such evaluation; and
  - d. Disclosed in this Report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: **December 29, 2011**

By: **/s/ Mark Weinswig**  
Mark B. Weinswig  
Chief Financial Officer  
(Principal Financial and Accounting Officer)

---



**STATEMENT REQUIRED BY 18 U.S.C. §1350, AS ADOPTED  
PURSUANT TO §906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report on Form 10-K of EMCORE Corporation (the "Company") for the fiscal year ended September 30, 2011, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Hong Q. Hou, Ph.D., Chief Executive Officer (Principal Executive Officer) of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- 1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- 2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: **December 29, 2011**

By: **/s/ Hong Hou**

Hong Q. Hou, Ph.D.

Chief Executive Officer

(Principal Executive Officer)

*A signed original of this written statement required by Section 906 has been provided to EMCORE Corporation and will be retained by EMCORE Corporation and furnished to the Securities and Exchange Commission or its staff upon request. This certification has not been, and shall not be deemed to be, filed with the Securities and Exchange Commission.*



**STATEMENT REQUIRED BY 18 U.S.C. §1350, AS ADOPTED  
PURSUANT TO §906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report on Form 10-K of EMCORE Corporation (the "Company") for the fiscal year ended September 30, 2011, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Mark B. Weinswig, Chief Financial Officer (Principal Financial and Accounting Officer) of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- 1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- 2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: **December 29, 2011**

By: **/s/ Mark Weinswig**

Mark B. Weinswig

Chief Financial Officer

(Principal Financial and Accounting Officer)

*A signed original of this written statement required by Section 906 has been provided to EMCORE Corporation and will be retained by EMCORE Corporation and furnished to the Securities and Exchange Commission or its staff upon request. This certification has not been, and shall not be deemed to be, filed with the Securities and Exchange Commission.*

