

Edgar Filing: II-VI INC - Form 10-K

II-VI INC
Form 10-K
August 21, 2017

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 June 30, 2017

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: 0-16195

II-VI INCORPORATED

(Exact name of registrant as specified in its charter)

PENNSYLVANIA (State or other jurisdiction of incorporation or organization)	25-1214948 (I.R.S. Employer Identification No.)
---	---

375 Saxonburg Boulevard Saxonburg, PA (Address of principal executive offices)	16056 (Zip code)
--	---------------------

Registrant's telephone number, including area code: 724-352-4455

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

Title of Each Class	Name of Each Exchange on Which Registered
---------------------	---

Edgar Filing: II-VI INC - Form 10-K

Common Stock, no par value Nasdaq Global Select Market
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 Section 15(d) of the Exchange 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 Web site, 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 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, smaller reporting company, or an emerging growth company. See definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer

Accelerated filer

Non-accelerated filer (Do not check if a smaller reporting company) Smaller reporting company
Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act

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

Aggregate market value of outstanding Common Stock, no par value, held by non-affiliates of the Registrant at December 30, 2016, was approximately \$1,763,329,797 based on the closing sale price reported on the Nasdaq Global Select Market. For purposes of this calculation only, directors and executive officers of the Registrant and their spouses are deemed to be affiliates of the Registrant.

Number of outstanding shares of Common Stock, no par value, at August 14, 2017, was 63,279,520.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive proxy statement, which will be issued in connection with the 2017 Annual Meeting of Shareholders of II-VI Incorporated, are incorporated by reference into Part III of this Annual Report on Form 10-K.

Forward-Looking Statements

This Annual Report on Form 10-K (including certain information incorporated herein by reference) contains forward-looking statements made pursuant to Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. The statements in this Annual Report on Form 10-K that are not purely historical are forward-looking statements, including, without limitation, statements regarding our expectations, beliefs, intentions or strategies regarding the future. In some cases, these forward-looking statements can be identified by terminology such as, "may," "will," "should," "expects," "plans," "anticipates," "believes," "intends," "estimates," "predicts," "projects," "potential," or "continue" or the negative of these terms or comparable terminology. Forward-looking statements address, among other things, our expectations, our growth strategies, our efforts to increase bookings, sales and revenues, projections of our future profitability, results of operations, capital expenditures, our financial condition, our ability to integrate acquired businesses or other "forward-looking" information and include statements about revenues, earnings, spending, margins, costs or our actions, plans or strategies.

The forward-looking statements in this Annual Report on Form 10-K involve risks and uncertainties, which could cause actual results, performance or trends to differ materially from those expressed in the forward-looking statements herein or in previous disclosures. We believe that all forward-looking statements made by us have a reasonable basis, but there can be no assurance that these expectations, beliefs or projections will actually occur or prove to be correct. Actual results could materially differ from such statements. We claim the protection of the safe harbor for forward-looking statements contained in the PSLRA for our forward-looking statements.

The following factors, among others, in some cases have affected and in the future could affect our financial performance and actual results, and could cause actual results for fiscal 2018 and beyond to differ materially from those expressed or implied in any forward-looking statements included in this Annual Report on Form 10-K or otherwise made by our management:

- Investments in future markets of potential significant growth may not result in expected returns.
- Our competitive position depends on our ability to develop new products and processes.
- Our competitive position may require significant investments in strategic acquisitions, with associated integration risks, which may not be successful.
- Our future success depends on continued international sales.
- Foreign currency risk may negatively affect our revenues, cost of sales and operating margins and could result in foreign exchange losses.
- Our inability to access financial markets from time to time to raise capital, finance working capital requirements or our acquisition strategies, or otherwise to support our liquidity needs could negatively impact our ability to finance our operations, meet certain obligations or implement our growth strategy.
- We may fail to accurately estimate our customers' demands.
- We may encounter substantial competition.
- There are limitations on the protection of our intellectual property.
- A significant portion of our business depends on cyclical industries.
- Data breach incidents and breakdown of information and communication technologies could disrupt our operations and impact our financial results.

◆ Global economic downturns may adversely affect our business, operating results and financial condition.

◆ We are subject to governmental import and export regulations.

◆ Our global operations are complex to manage.

◆ We have entered into supply agreements which commit us to supply products on specified terms.

◆ We depend on highly complex manufacturing processes that require products from limited sources of supply.

2

- Our global operations are subject to complex legal and regulatory requirements.
- We use and generate hazardous substances that are subject to stringent environmental regulations.
- We may be adversely affected by climate change regulations.
- Some systems that use our products are complex in design, and our products may contain defects that are not detected until deployed which could increase our costs and reduce our revenues.
- Significant defense spending cuts and/or reductions in defense programs could adversely impact our business.
- Change in tax rates, tax liabilities or tax accounting rules could affect future results.
- Increases in commodity prices may adversely affect our results of operations and financial condition.
- Natural disasters or other global or regional catastrophic events could disrupt our operations and adversely affect our results.
- Our success depends on our ability to retain key personnel.
- We have agreements with government entities that are subject to significant compliance requirements and changes in government spending.
- Our stock price has been highly volatile in the past and may be extremely volatile in the future.
- Some anti-takeover provisions contained in our articles of incorporation and by-laws, as well as provisions of Pennsylvania law, could impair a takeover attempt, which could also reduce the market price of our common stock.
- Because we do not currently intend to pay dividends, holders of our common stock will benefit from an investment in our common stock only if it appreciates in value.

The foregoing and additional risk factors are described in more detail herein under Item 1A. "Risk Factors". All such factors, as well as factors described or referred to in other filings we make with the Securities and Exchange Commission (the "SEC") from time to time, should be considered in evaluating our business and prospectus. Many of these factors are beyond our control. In addition, we operate in a highly competitive and rapidly changing environment, and, therefore, new risk factors can arise. It is not possible for management to predict all such risk factors, assess the impact of all such risk factors on our business nor estimate the extent to which any individual risk factor, or combination of risk factors, may cause results to differ materially from those contained in any forward-looking statement. The forward-looking statements included in this Annual Report on Form 10-K speak only as of the date of this Annual Report on Form 10-K. We do not assume any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or developments, or otherwise, except as may be required by the securities laws. We caution you not to rely on them unduly.

Investors should also be aware that while II-VI Incorporated does communicate with securities analysts, from time to time, those communications are conducted in accordance with applicable securities laws. Investors should not assume that II-VI Incorporated agrees with any statement or report issued by any analyst irrespective of the content of the statement or report.

PART I

Item 1. BUSINESS

Definitions

II-VI Incorporated (“II-VI,” the “Company,” “we,” “us,” or “our”) was incorporated in Pennsylvania in 1971. Our executive offices are located at 375 Saxonburg Boulevard, Saxonburg, Pennsylvania 16056. Our telephone number is 724-352-4455. Reference to “II-VI,” the “Company,” “we,” “us,” or “our” in this Annual Report on Form 10-K, unless the context requires otherwise, refers to II-VI Incorporated and its wholly-owned subsidiaries. The Company’s name is pronounced “Two Six Incorporated.” The name II-VI refers to Groups II and VI on the Periodic Table of Elements (Zn and Se) from which II-VI originally designed and produced infrared optics for high-power CO₂ lasers used in materials processing. The majority of our revenues are attributable to the sale of engineered materials and optoelectronic components and devices for industrial laser applications, optical communications products, compound semiconductor substrate-based products and consumer products. Reference to “fiscal” or “fiscal year” means our fiscal year ended June 30 for the year referenced.

The following acronyms are defined for reference: 3 dimensional (“3D”); 4th generation (“4G”) wireless; 5th generation (“5G”) wireless; carbon monoxide (“CO”); carbon dioxide (“CO₂”); chemical vapor deposited (“CVD”) diamond; dense wavelength division multiplexing (“DWDM”); extreme ultraviolet (“EUV”) lithography; gallium arsenide (“GaAs”); gigabit per second (“Gb/s”); infrared (“IR”); light detection and ranging (“LiDAR”); near infrared (“NIR”); nanometers (“nm”); optical time domain reflectometer (“OTDR”); research, development and engineering (“RD&E”); radio frequency (“RF”); reconfigurable add/drop multiplexer (“ROADM”); silicon carbide (“SiC”); ultraviolet (“UV”); vertical cavity surface emitting laser (“VCSEL”); wavelength division multiplexing (“WDM”); zinc selenide (“ZnSe”); and zinc sulfide (“ZnS”).

General Description of Business

We develop, manufacture and market engineered materials, optoelectronic components and devices for precision use in industrial materials processing, optical communications, military, consumer electronics, semiconductor equipment, life science and automotive applications. We use advanced engineered material growth technologies coupled with proprietary high-precision fabrication, micro-assembly, thin-film coating and electronic integration to enable complex optoelectronic devices and modules. Our products are deployed in applications that we believe reduce costs and improve performance and reliability in a variety of applications, including (i) laser cutting, welding and marking operations; (ii) 3D sensing consumer applications; (iii) optical communication products; (iv) intelligence, surveillance and reconnaissance; (v) semiconductor processing and tooling; and (vi) thermoelectric cooling and power generation solutions.

Through RD&E and acquisitions, II-VI has expanded its portfolio of materials grown and fabricated in-house. We believe that the materials that we grow and fabricate are differentiated by one or a combination of unique optical, electrical, thermal and mechanical properties. II-VI’s optics are shaped by precision surfacing techniques to meet the most stringent requirements for flat or curved geometries, with smooth or structured surfaces, or with patterned metallization. Proprietary processes developed at our global optical coating centers enhance our products’ durability to high energy lasers and harsh environments. Optical coatings also provide the desired spectral characteristics ranging from the ultraviolet to the far-infrared. II-VI leverages these capabilities to deliver miniature- to large-scale precision optical assemblies, including in combination with thermal management components, integrated electronics, and/or software.

Since 2013, II-VI also has offered a broad portfolio of compound semiconductor lasers that are used in a variety of applications in most of our end markets. These compound semiconductor lasers enable several types of high power lasers for materials processing, optical signal amplification in terrestrial and submarine communications networks, high bit rate server connectivity within datacenters and 3D sensing in consumer electronics.

II-VI continues to work to perfect its operational capabilities, develop next generation products, and invest in new technology platforms. With a strategic focus on fast growing markets, II-VI pursues its vision of enabling the world to be safer, healthier, closer and more efficient.

Information Regarding Market Segments and Foreign Operations

Financial data regarding our revenues, results of operations, industry segments and international sales for the three years ended June 30, 2017 are set forth in the Consolidated Statements of Earnings and in Note 11 to the Company's Consolidated Financial Statements included in Item 8 of this Annual Report on Form 10-K and are incorporated herein by reference. We also discuss certain Risk Factors set forth in Item 1A of this Annual Report on Form 10-K related to our foreign operations, which are incorporated herein by reference.

Bookings and Backlog

We define our bookings as customer orders received that are expected to be converted to revenues over the next 12 months. For long-term customer orders, to address the inherent uncertainty of orders that extend far into the future, the Company records only those orders which are expected to be converted into revenues within 12 months from the end of the reporting period. Bookings are adjusted if changes in customer demands or production schedules cause the expected time of a delivery to extend beyond 12 months. For the year ended June 30, 2017, our bookings were approximately \$1.1 billion compared to bookings of approximately \$875 million for the year ended June 30, 2016.

We define our backlog as bookings that have not been converted to revenues by the end of the reporting period. As of June 30, 2017, our backlog was approximately \$400 million, compared to approximately \$290 million as of June 30, 2016.

Global Operations

II-VI is headquartered in Saxonburg, PA, with RD&E, manufacturing and sales facilities worldwide. Our U.S. production and research and development operations are located in Pennsylvania, California, New Jersey, Texas, Mississippi, Massachusetts, Connecticut, Delaware, New York, Florida and Illinois and our non-U.S. production operations are based in China, Singapore, Vietnam, the Philippines, Germany and Switzerland. We also utilize a contract manufacturer in Thailand. In addition to sales offices at most of our manufacturing sites, we have sales and marketing subsidiaries in Hong Kong, Japan, Germany, China, Switzerland, Belgium, the United Kingdom, Italy, South Korea, and Taiwan. Approximately 69% of our revenues for the fiscal year ended June 30, 2017 were generated from sales to customers outside of the United States.

Employees

The table below summarizes the number of our employees as of June 30, 2017. We have a long-standing practice of encouraging active employee participation in areas of operations management. We believe our relations with our employees are good. We reward our employees with incentive compensation based on achievement of performance goals. There are approximately 136 employees located in the United States and the Philippines who are covered under collective bargaining agreements. The Company's collective bargaining agreement in the Philippines expires in June 2019. The collective bargaining agreement covering certain U.S. based employees expires in January 2021. There are 849 employees of Photop in China who work under contract manufacturing arrangements for customers of the Company.

	Number of employees	Percent of total
Direct production	8,216	79%
Research, development & engineering	1,117	11%
Sales, marketing, administration, finance and supporting services	1,016	10%
Total:	10,349	100%

Manufacturing Processes

Our success in developing and manufacturing many of our products depends on our ability to manufacture and refine technically-challenging materials and components. The ability to produce, process and refine these complex materials and to control their quality and in-process yields is an expertise of the Company that is critical to the performance of our customers' instruments and systems. In the markets we serve, there are a limited number of suppliers of many of the components we manufacture and there are very few industry-standard products.

Our network of worldwide manufacturing sites allows us to manufacture our products in regions that provide cost-effective advantages. We employ numerous advanced manufacturing technologies and systems at our manufacturing facilities. These include automated Computer Numeric Control optical fabrication, high throughput thin-film coaters, micro-precision metrology and custom-engineered automated furnace controls for crystal growth processes. Manufacturing products for use across the electro-magnetic spectrum requires the capability to repeatedly produce products with high yields to atomic tolerances. II-VI continuously updates its comprehensive quality management systems that feature manufacturing quality best practices. II-VI is committed to delivering products within specification, on time and with high quality, with a goal of fully satisfying customers and continually improving.

Sources of Supply

The major raw materials we use include zinc, selenium, ZnSe, ZnS, hydrogen selenide, hydrogen sulfide, tellurium, yttrium oxide, aluminum oxide, iridium, platinum, bismuth, silicon, thorium fluoride, antimony, carbon, GaAs, copper, germanium, molybdenum, quartz, optical glass, diamond, and other materials.

The continued high-quality of and access to these materials is critical to the stability and predictability of our manufacturing yields. We test materials at the onset of the production process. Additional research and capital investment may be needed to better define future material specifications. We have not experienced significant production delays due to shortages of materials. However, we do occasionally experience problems associated with vendor-supplied materials not meeting contract specifications for quality or purity. As discussed in greater detail in Item 1A – Risk Factors, of this Annual Report on Form 10-K, significant failure of our suppliers to deliver sufficient quantities of necessary high-quality materials on a timely basis could have a materially adverse effect on our results of our operations.

Business Units

The Company's organizational structure is divided into three reporting segments for the purpose of making operational decisions and assessing financial performance: (i) II-VI Laser Solutions, (ii) II-VI Photonics, and (iii) II-VI Performance Products. These segments, and the units within the segments, are reflected in the organization chart below:

II-VI Laser Solutions designs, manufactures and markets optical and electro-optical components and materials sold under the II-VI Infrared brand name and used primarily in high-power CO₂ lasers, fiber-delivered beam delivery systems and processing tools and direct diode lasers for industrial lasers sold under the II-VI HIGHYAG and II-VI Laser Enterprise brand names. II-VI Laser Solutions also manufactures compound semiconductor epitaxial wafers for applications in optical components, wireless devices, and high-speed communication systems and manufactures 6-inch gallium arsenide wafers allowing for the production of high performance lasers and integrated circuits in high volume sold under the II-VI EpiWorks and II-VI OptoElectronic Devices Division brand names.

II-VI Photonics manufactures crystal materials, optics, microchip lasers and optoelectronic modules for use in optical communication networks and other diverse consumer and commercial applications. In addition, the segment also manufactures pump lasers, optical isolators, and optical amplifiers and micro-optics for optical amplifiers for both terrestrial and submarine applications within the optical communications market.

II-VI Performance Products designs, manufactures and markets infrared optical components and high-precision optical assemblies for military, medical and commercial laser imaging applications. In addition, the segment designs, manufactures and markets unique engineered materials for thermoelectric and silicon carbide applications servicing the semiconductor, military and medical markets.

During the fiscal year ended June 30, 2017, the Company completed the following acquisitions:

Date:	Acquired:	Amount:
October 12, 2016	DirectPhotonics Industries GmbH (“DPI”)	\$0.6 million
June 19, 2017	Integrated Photonics, Inc. (“IPI”)	\$41.7 million

DPI joined the II-VI Laser Solutions segment and IPI joined the II-VI Photonics segment. See Note 2 to the Company’s Consolidated Financial Statements included in Item 8 of this Annual Report on Form 10-K for additional information regarding the Company’s acquisitions, which information is incorporated herein by reference.

II-VI's segments are organized by business unit at the group or division level. Each of these business units develops and markets products as described below.

Segment:	Group/Division:	Our Products:
II-VI Laser Solutions	II-VI Infrared	<ul style="list-style-type: none"> • Laser optics and accessories for CQ lasers used in materials processing semiconductor and life sciences • High power fiber and direct diode laser optics • Infrared thermal imaging optics and assemblies
	II-VI HIGHYAG	<ul style="list-style-type: none"> • II-VI compound crystalline material production including ZnSe, ZnS, ZnS multispectral and CVD diamond • Laser processing heads and beam delivery systems for laser materials processing with fiber lasers, disk lasers, and diode lasers
	II-VI Laser Enterprise	<ul style="list-style-type: none"> • High-power semiconductor lasers and laser bars enabling fiber and direct diode lasers for materials processing, medical, defense, consumer and printing applications
	II-VI OptoElectronic Devices	<ul style="list-style-type: none"> • VCSELs for optical navigation, optical interconnects and 3D sensing • VCSELs for 3D sensing in consumer electronics and automotive
	II-VI EpiWorks	<ul style="list-style-type: none"> • RF wafers for optical/telecommunications • III-V epitaxial wafers to enable higher performance photonic and RF components for consumer, communications, network and mobile applications, including wireless handsets, tablets and the Internet of things
	II-VI Suwtech	<ul style="list-style-type: none"> • Diode pumped solid state lasers, green lasers and Q-switched lasers • Laser diode modules for multiple markets and applications, including aiming, leveling, range finding, machine vision, bio-medical instrumentation, Raman spectroscopy, and fluorescence spectroscopy • Fiber coupled high power diode lasers in the 8xx and 9xx nm wavelength ranges for fiber laser and solid state laser pumping, as well as for medical and other applications
	II-VI Lasertech	<ul style="list-style-type: none"> • Laser cutting and drilling machines for processing a wide variety of super hard materials such as CVD diamond, polycrystalline diamond, polycrystalline cubic boron nitride, and ceramics among others as well as for high efficiency laser cutting of non-conductive materials
	II-VI DirectPhotonics	<ul style="list-style-type: none"> • High brightness, high power direct diode laser engines for cutting, welding, and thermal processing applications, including optimized solutions for aluminum and aluminum-copper processing applications

Segment:	Group/Division:	Our Products:
II-VI Photonics	II-VI Optical Communications	<ul style="list-style-type: none"> • Products and solutions that enable high bit rate interconnects for datacenters and communication service providers, datacenter inter-connects, ROADM systems and submarine transmission
	II-VI Photop	<ul style="list-style-type: none"> • Fiber optics and precision optics used in projection and displays, crystal materials and components for optical communications, high power UV, visible and NIR optics for industrial lasers, filters and assemblies for life sciences, as well as for sensors, instrumentation and semiconductor equipment
II-VI Performance Products	II-VI Optical Systems	<ul style="list-style-type: none"> • Precision optical assemblies, objectives, infrared optics, thin film coatings and optical materials
	II-VI M Cubed	<ul style="list-style-type: none"> • Optical solutions to critical and complex designs, engineering and production challenges in defense, aerospace and commercial industries • Advanced ceramic and metal matrix composite products for semiconductor equipment, flat panel display equipment, industrial and optical equipment, as well as for defense applications
	II-VI Marlow	<ul style="list-style-type: none"> • Thermoelectric components, sub-assemblies and systems for heating, cooling, temperature tuning, thermal cycling and power generation in aerospace, defense, medical, industrial, automotive, consumer, telecommunications and power generation markets
	II-VI Advanced Materials	<ul style="list-style-type: none"> • SiC and advanced semiconductor materials for high frequency and high power electronic device applications in defense, telecommunications, automotive and industrial markets
	II-VI Performance Metals	<ul style="list-style-type: none"> • Specialty refining, recycling and materials recovery services for high purity rare metals such as Selenium and Tellurium, as well as related chemical products such as Tellurium Dioxide, for optics, photovoltaics, semiconductors, thermoelectric coolers, metallurgy, agriculture and industrial applications.

Our Markets

Our market-focused businesses are organized by technology and products. Our businesses are composed of the following primary markets: Materials Processing, Communications (“Comms”), Military and Semiconductor Equipment (“Semi Cap”). Other markets (“Other”) include: Life Sciences, Consumer Electronics and Automotive. The table below summarizes our revenue by reported segments and the distribution of that revenue by end markets.

Reported Segments	FY17					
	Revenue (\$M)	Materials Processing	Comms	Military	Semi Cap	Other
II-VI	339	69%	13%	4%	5%	9%
Laser Solutions						
II-VI Photonics	419	9%	84%	- %	3%	4%
II-VI Performance Products	214	9%	16%	42%	18%	15%
Total	972	30%	44%	11%	7%	8%

Communications Market:

II-VI’s optical communications products and technologies enable the next generation of high-speed optical transmission systems, networks, and datacenter solutions necessary to meet the accelerating global bandwidth demand. At the core of both terrestrial and undersea optical networks, our market-leading 980 nm pump lasers boost the power of the optical signal in the fiber optic cable along the way to enable a larger number of high speed signals to be transmitted over longer distances. Our latest generation of 980 nm pump lasers along with miniature tunable filters and hybrid passives are part of our ultra-compact family of components critical to a new generation of small size, long reach DWDM transmission modules operating at 100, 200 and 400 Gb/s.

Customers continue to rely on us for our industry-leading optical amplification and embedded monitoring solutions for their next generation ROADM systems to compensate for the inherent signal loss and monitor the signal integrity. Our proprietary OTDR modules allow systems to automatically detect and pinpoint issues along the transmission path in real time. The accelerating adoption of applications such as cloud computing are driving the rapid growth of datacenter buildouts. Our high-speed 25 Gb/s VCSELs enable intra-datacenter transceivers to transmit and receive signals. Our miniature WDM thin film filter assemblies are used to increase the bandwidth within many modern transceiver designs by combining wavelengths at the transmitter end and separating them out at the receiver end.

In mobile wireless applications, II-VI supplies base SiC substrates to customers who manufacture RF power amplifier devices that are embedded in remote radio heads in 4G wireless bases stations to boost the power of RF signal before it reaches the antenna. These devices are also widely expected to be embedded in next generation active antennas for 5G wireless where multiple devices per antenna will be required to enable higher bandwidth. SiC has a high number of intrinsic physical and electronic advantages such as high thermal conductivity that enables them to operate at high-power levels and still dissipate the excess heat generated.

Materials Processing Market:

Our industrial laser optics and solutions for the materials processing market remain in strong demand. There continues to be a steady global demand to support existing installations and new deployments of CO₂ and fiber laser systems, especially for our greater than 1 kilowatt high-power handling optics and beam delivery solutions. Our vertically integrated and market leading ZnSe optics and components, due to their inherent low loss at around 10 micron wavelength, have enabled high-power CO₂ laser systems for many decades and remain critical to the steady stream of new deployments as well as to the continued operation, serving as replacement optics, of the installed base of CO₂ lasers. II-VI continues to introduce products that address new and growing applications for low-power CO₂ lasers, such as cutting textiles, leather, wood and other organic materials, for which the CO₂ laser's 10 micron wavelength is ideally suited. CO₂ lasers are also at the core of EUV lithography systems which are now emerging on the market to enable a new generation of smaller and more powerful personal computing devices.

Over the past several years, fiber laser-based systems operating at one micron wavelength in pulsed or continuous mode have taken a central role in nearly all materials processing segments and especially for precision machining such as marking and micro drilling. From the laser chips that generate the input optical power to the beam delivery systems that direct the output optical power to the target, II-VI supplies a broad set of laser optics and fused fiber products that enable many functions within these systems. The same set of II-VI products is also at the core of existing and emerging direct diode laser systems. II-VI is also driving innovation with a direct-diode laser engine small enough to be mounted on a robotic arm so that the end user can apply square beams directly to the work piece at wavelengths optimized for aluminum processing.

Another emerging and fast growing application is the processing of displays for consumer electronics including those based on the OLED technology that are scribed with CO lasers and sealed with UV lasers. II-VI's broad portfolio of coated optics and crystal materials serve all of these growing laser markets.

Military Market:

Our focus in the military market is enabling lasers for targeting, night vision, navigation, as well as intelligence, surveillance and reconnaissance systems. Multiple fighter jets are equipped with our large area sapphire windows that surround advanced targeting and imaging systems. Infrared domes are used on missiles with infrared guidance systems ranging from small, man-portable designs to larger designs mounted on helicopters, fixed-wing aircraft and ground vehicles. High-precision domes are an integral component of a missile's targeting system, providing efficient tactical capability, while serving as a protective cover to its internal components.

Rotary and fixed-wing aircraft also use missile warning systems to protect against shoulder fired man-portable missiles. Our competencies in material growth for UV crystals and our optical assembly capabilities provide significant support to these missile warning systems. A key attribute to several of these systems is the ability to filter electro-magnetic interference using micro-fine conductive mesh patterns. This technology is also applied to non-optical applications for absorbing and transmitting energy from the surfaces of aircraft and missiles.

Many military systems employ laser designation and range-finding capabilities supported by our semiconductor lasers bars and yttrium-based materials and laser optics, all manufactured in-house, as well as our competency in short wave infrared and visible optics. Our thermo-electric coolers are used to increase thermal imaging sensitivity or to maintain a constant window temperature in various visible and infrared applications.

We provide a range of battlefield-ready technologies for soldier equipment or for law enforcement. Our precision patterned reticles are embedded in rifle scopes. Our reaction bonded boron carbide materials are shaped into torso plates and employed as protective body armor. Our thermo-electric coolers are used to regulate the soldier's body heat. They are also used to convert heat produced by battlefield fuel burners into electrical power, for example to extend battery life on the battlefield.

We maintain engineering and manufacturing facilities in the United States with strictly controlled access that are dedicated to our U.S. government supported contracts.

Semiconductor Equipment Market:

Semiconductor equipment requires advanced materials to meet the need for tighter tolerances, enhanced thermal stability, faster wafer transfer speeds and reduced stage settling times. Our metal matrix composites and reaction bonded ceramics enable these applications thanks to their optimum combination of light weight, strength, hardness and coefficient of thermal expansion. Our reaction bonded SiC materials are used to manufacture wafer chucks, light-wave scanning stages and high temperature, corrosion resistant wafer support systems. Our cooled SiC mirrors

and precision patterned reticles are used in the illumination systems of lithography tools.

In the emerging market of EUV lithography systems, CO₂ lasers are used to generate extreme ultraviolet radiation. These CO₂ lasers and beam delivery systems leverage our broad portfolio of CO₂ laser optics, CdTe Modulators, high power handling polycrystalline CVD diamond windows to route the powerful laser beam to a tin droplet from which EUV light will emanate. Due to their very high mechanical and thermal performance characteristics, our reaction bonded SiC are used in structural support systems that are integral to EUV optics to meet critical requirements for optical system stability.

Life Sciences Market:

Today the majority of our business in the life sciences end market is in analytical tools. Many such analytical tools found in modern biotech laboratories are based on some form of interaction with light. This applies to flow cytometry, cell sorting, confocal microscopy, genome sequencing, Raman spectroscopy, fluorescence spectroscopy and particle sizing to name a few. Our multi-colored laser engines along with our broad portfolio of application-specific optics, filters and gratings are embedded in these analytical tools. We also supply objective lenses, precision patterned reticles and assemblies for microscopes.

Genome sequencing involves temperature cycling DNA in flow cells with a high degree of temperature uniformity and precision. We believe that our thermal engines are the state of the art in chiller technology, and they achieve what we believe to be industry-leading temperature control and uniformity across large areas. Our green lasers are used to excite the fluorescence of the DNA to reveal their structure. Our flow cells are micro-machined with a high degree of precision to insure the smooth flow of sample fluids undergoing analysis. Our thermal engines are also used in a multitude of other biomedical applications, for example to measure substance concentration in complex mixtures, to protect blood supplies and to perform heating- and cooling-based physical therapy.

Clinical procedures are increasingly performed with tools that embed our lasers and optics. For example, our semiconductor laser bars are used in hair and wrinkle removal procedures and our custom designed lens assemblies are used for laser eye surgery. We continue to leverage our core lasers, optics and temperature control expertise into new applications to grow our business in life sciences.

Consumer Electronics Market:

II-VI manufactures low cost VCSELs, VCSEL arrays and low angle shift filters for the consumer electronics market. Our VCSEL products leverage our world-class 6-inch GaAs platform, comprising our epitaxial wafer growth and wafer fabrication capabilities.

Our VCSELs, unlike many on the market, have already been designed into consumer products such as the computer mouse as well as for menu navigation in smart phones and in car steering wheels. Our VCSELs are also widely deployed in datacenters and in the emerging market for HDMI optical cables. This expertise in VCSEL technology is being leveraged for the upcoming 3D sensing market. Following our acquisition in fiscal year 2016 of a 6-inch epitaxy and wafer capabilities, we invested significantly in fiscal year 2017 to complete our capacity expansion and be ready to ramp our sales significantly in the near future.

Automotive Market:

Power conversion electronics for high-efficiency electric vehicles need a combination of high-power density, high-efficiency and high temperature operation that are only afforded by advanced material systems based on SiC substrates. Our SiC substrates are available in large diameters and have what we believe to be best-in-class quality and low defect levels.

Our thermo-electric modules are used to cool the batteries to extend their operating life. They are also more efficient than resistive heaters when used in heated car seats and extend a battery's range of travel in cold environments.

To operate safely, self-driving cars will rely on control systems that are informed by a comprehensive number of sensors. One such sensor is based on LiDAR, which employs semiconductor lasers to properly identify and measure the distance to obstacles ahead. Our GaAs-based semiconductor laser platform, which already enables a broad portfolio of products in communications and materials processing, is now being scaled further for consumer electronics, and will be leveraged to deliver a highly reliable and cost-effective laser product for this emerging market.

Marketing and Sales

We market our products through a direct sales force and through representatives and distributors around the world. Our market strategy is focused on understanding our customers' requirements and building market awareness and acceptance of our products. New products are continually being produced and introduced to our new and established customers in all markets.

The Company has centralized its worldwide marketing and sales functions across the Company's business units. Sales offices have been strategically established to best serve and distribute products to our worldwide customer base. There is significant cooperation, coordination and synergies among our business units that capitalize on the most efficient and appropriate marketing channels to address diverse applications within our markets.

Our sales forces develop effective communications with our OEM and end-user customers worldwide. Products are actively marketed through targeted mailings, telemarketing, select advertising and attendance at trade shows and customer partnerships. Our sales force includes a highly-trained team of applications engineers to assist customers in designing, testing and qualifying our parts as key components of our customers' systems. As of June 30, 2017, we employed approximately 246 individuals in sales, marketing and support.

We do business with a number of customers in the defense industry, who in turn generally contract with a governmental entity, typically a U.S. governmental agency. Most governmental programs are subject to funding approval and can be modified or terminated without warning by a legislative or administrative body. For further information regarding our exposure to government markets, see the discussion set forth in Item 1A – Risk Factors of this Annual Report on Form 10-K.

Customers

The main groups of customers by segments are as follows:

Segment:	Group/Division:	Our Customers Are:	Representative Customers:
II-VI Laser Solutions	II-VI Infrared	OEM and system integrators of industrial, medical and military laser systems. Laser end-users who require replacement optics for their existing laser systems.	<ul style="list-style-type: none"> • TRUMPF GmbH + Co. KG • Bystronic Laser AG
	II-VI HIGHYAG	Automotive manufacturers, laser manufacturers and system integrators.	<ul style="list-style-type: none"> • Coherent, Inc. • Ford Motor Company
	II-VI Laser Systems	OEM and subsystem integrators of aiming, machine vision, bio-medical instruments, and fiber lasers.	<ul style="list-style-type: none"> • Laserline GmbH • BGI Complete Genomics, Shenzhen Co., Ltd.
	II-VI Opto Electronics	Manufacturers of industrial laser components, optical communication equipment and consumer technology applications.	<ul style="list-style-type: none"> • SPI Lasers Limited • Laserline GmbH • Wuhan Raycus Fiber Laser Technologies Co., Ltd
II-VI Photonics	II-VI Optical Communications & II-VI Photop	Worldwide network system and sub-system providers of telecommunications, data communications and CATV.	<ul style="list-style-type: none"> • Cisco Systems, Inc. • Fujitsu Network Communications
		Global manufacturers of industrial and medical laser optics and crystals including commercial and consumer products used in a wide array of instruments, sensors, fiber lasers, displays and projection devices.	<ul style="list-style-type: none"> • Corning Incorporated • Coherent, Inc. • Acacia Communications, Inc. • Han's Laser Technology Industry Group Co. Ltd. • Lockheed Martin Corporation
II-VI Performance Products	II-VI Optical Systems	Manufacturers of equipment and devices for aerospace, defense and commercial markets.	<ul style="list-style-type: none"> • Lockheed Martin Corporation
	II-VI M Cubed		<ul style="list-style-type: none"> • ASML Holding NV

Edgar Filing: II-VI INC - Form 10-K

	Manufacturers and developers of integrated circuit capital equipment for the semiconductor industry.	<ul style="list-style-type: none">• Carl Zeiss AG• Nikon Corporation• KLA-Tencor Corporation• Corning Incorporated
II-VI Marlow	Manufacturers and developers of products and components for various defense and industrial markets.	
II-VI Advanced Materials	Manufacturers and developers of equipment and devices for defense, space, telecommunications, medical, industrial, automotive, personal comfort and commercial markets.	<ul style="list-style-type: none">• Sumitomo Electric Device Innovations, Inc.• Showa Denko K. K.• STMicroelectronics• IQE PLC• Infineon Technologies AG
II-VI Performance Metals	Primary mineral processors, refineries and providers of specialized materials that are used in laser optics, photovoltaics, semiconductors, thermoelectric coolers, metallurgy and industrial products.	<ul style="list-style-type: none">• Aurubis AG

Competition

We believe we are a global leader in many of our product families. We compete on the basis of our reputation for offering the highly engineered nature of our products, product and technology roadmaps, IP, ability to scale, quality, delivery time, technical support and pricing. We believe that we compete favorably with respect to these factors and that our vertical integration, manufacturing facilities and equipment, experienced technical and manufacturing employees and worldwide marketing and distribution channels provide us with competitive advantages. The main groups of our competitors are as follows:

Segment:	Areas of Competition:	Competitors:
II-VI Laser Solutions	<p>Infrared laser optics</p> <p>Automated equipment and laser material processing tools to deliver high-power one-micron laser systems</p> <p>Bio-medical instruments for flow cytometry, DNA sequencing, fluoresce microscopy</p> <p>Semiconductor laser diodes for the industrial and consumer markets</p>	<ul style="list-style-type: none"> • Sumitomo Electric Industries, Ltd. • Newport Corporation • Optoskand AB • Precitece GmbH • Lumentum Operations LLC • Coherent, Inc. • BWT Beijing Ltd • Lumentum Operations LLC • Finisar Corporation • Broadcom Ltd. • Koninklijke Philips N.V • Jenoptik AG • Osram Licht AG • O-Net Communications Group Ltd. • OPLINK Communication, LLC • Axsun • Casix, Inc. (Fabrinet) • Lumentum Operations LLC • Finisar Corporation • Accelink • O-Net Communications Group, Ltd. • Casix, Inc. (Fabrinet)
II-VI Photonics	<p>Optics and optical components for networking</p> <p>Optical modules and subsystems for amplification, monitoring and wavelength management</p>	<ul style="list-style-type: none"> • O-Net Communications Group Ltd. • OPLINK Communication, LLC • Axsun • Casix, Inc. (Fabrinet) • Lumentum Operations LLC • Finisar Corporation • Accelink • O-Net Communications Group, Ltd. • Casix, Inc. (Fabrinet)

Edgar Filing: II-VI INC - Form 10-K

Optical and crystal components, thin film coatings and sub-assemblies for lasers and metrology instruments	<ul style="list-style-type: none">• Castech• REO
II-VI Performance Infrared optics for military applications Products	<ul style="list-style-type: none">• Laser Components• UTC Aerospace Systems (formerly Goodrich Corporation)• In-house fabrication and thin-film coating capabilities of major military customers
Thermoelectric components, sub-assemblies and systems	<ul style="list-style-type: none">• Komatsu, Ltd.• Laird plc
Metal Matrix Composites and reaction bonded ceramics products	<ul style="list-style-type: none">• Ferrotec Corporation• Berliner Glas• CoorsTek, Inc.
Single crystal SiC substrates	<ul style="list-style-type: none">• Japan Fine Ceramics Co. Ltd.• Cree, Inc.• Dow Corning Corporation• Nippon Steel & Sumitomo Metal
Refining and materials recovery services for high purity rare metals	<ul style="list-style-type: none">• SiCrystal AG• Vital• 5NPlus

In addition to competitors who manufacture products similar to those we produce, there are other technologies and products available that may compete with our technologies and products.

Our Strategy

Our strategy is to grow businesses with world-class engineered material capabilities to advance our current customers' strategies, penetrate new markets through innovative technologies and platforms, and enable new applications in large and growing markets. A key strategy of ours is to develop and manufacture high-performance materials that are differentiated from those produced by our competitors. We focus on providing components that are critical to the heart of our customers' assembly lines for products serving the applications mentioned above.

A substantial portion of our business is based on sales orders with market leaders, which enable our forward planning and production efficiencies. We intend to continue capitalizing and executing on this proven model, participating effectively in the growth of the markets discussed above, and continuing our focus on operational excellence as we execute business strategies in the areas of:

Key Business Strategies:	Our Plan to Execute:
Identify New Products and Markets	Identify new technologies, products and markets to meet evolving customer requirements for high performance engineered materials through our dedicated corporate R&D program to increase new product revenue and maximize return on investment.
Balanced Approach to Research and Development	Internally and externally funded R&D expenditures, targeting an overall investment of between 7 and 10 percent of revenues. We are committed to accepting the right mix of internally and externally funded research that ties closely to our long-term strategic objectives.
Leverage Vertical Integration	Combine R&D and manufacturing expertise, operating with a bias to both components and production machines, reducing cost and lead time to enhance competitiveness, time to market, and profitability.
Investment in Scalable Manufacturing	Strategically invest in, evaluate and identify opportunities to consolidate manufacturing operations worldwide to increase production capacity, capabilities and cost effectiveness.
Enhance Our Performance and Reputation as a Quality and Customer Service Leader	Continue to improve upon our established reputation as a consistent, high-quality supplier of engineered materials and optoelectrical components into our customers' products. Execute our global quality transformation process thereby eliminating costs of non-conforming materials and processes.
Identify and Complete Strategic Acquisitions and Alliances	Identify acquisition opportunities that accelerate our access to emerging high-growth segments of the markets we serve and further leverage our competencies and economies of scale.
Research, Development and Engineering	

During the fiscal year ended June 30, 2017, the Company continued to identify, invest in and focus our research and development on new products across the Company in an effort to accelerate our organic growth. This approach is managed under a disciplined innovation program that we refer to as the "II-VI Phase Gate Process".

Our research and development program includes internally and externally funded research and development expenditures targeting an overall annual investment of between 7% and 10% of product revenues. From time to time, the ratio of externally funded contract activity to internally funded contract activity varies due to the unevenness of government funded research programs and changes in the focus of our internally funded research programs. We are committed to having the right mix of internally and externally funded research that ties closely to our long-term

strategic objectives. The Company continues to believe that externally funded research and development will decrease in the near term due to governmental budget constraints.

We devote significant resources to RD&E programs directed at the continuous improvement of our existing products and processes and to the timely development of new technologies, materials and products. We believe that our RD&E activities are essential to establish and maintain a leadership position in each of the markets we serve. As of June 30, 2017, we employed 1,117 people in RD&E functions, 687 of whom are engineers or scientists. In addition, certain manufacturing personnel support or participate in our research and development efforts on an ongoing basis. We believe this interaction between the development and manufacturing functions enhances the direction of our projects and design for manufacturing, reducing costs and accelerating technology transfers.

During the fiscal year ended June 30, 2017, we focused our research and development investments in the following areas:

Segment:	Area of Development:	Our Research and Development Investments:
II-VI Laser Solutions	High Power Laser Diodes and High Volume Manufacturing	Focusing on increasing fiber coupled optical output power of multi-emitter modules. Developing high power VCSELs for consumer devices and next generation high speed VCSELs for 3D sensing and datacom applications.
	CVD Diamond Technology	Developing CVD synthetic diamond for EUV applications. Focusing on broadening our portfolio beyond infrared windows applications.
II-VI Photonics	Photonics Design	Continuing to improve photonic crystal materials, precision optical parts, and laser device components.
	Pump Lasers	Continuing to invest in next generation GaAs pump portfolio to address evolving terrestrial and undersea markets Developing indium phosphide growth and processing capability.
	Optical Amplifiers	Investing and broadening the range of semi-custom and custom amplifiers for Tier 1 customers.
	Optical Monitoring	Continuing optical channel monitor investment. Developing compact OTDRs embedded in optical system equipment to monitor the health of the fiber plant.
II-VI Performance Products	Micro-Optics Manufacturing	Shifting toward smaller, more compact platforms and packages. Investing in manufacturing equipment for computerized processes.
	Silicon Carbide Technology	Developing advanced SiC substrate growth technologies to support emerging markets in GaN RF and power electronics. Focused on continuous improvements to maintain world-class, high quality, large diameter substrates.
	Thermoelectric Materials and Devices	Continuing to develop leading bismuth telluride for thermoelectric cooling/heating. Focusing on thermoelectric power generation capability in order to introduce new products to the market.
	Metal Matrix Composites and Reaction Bonded Ceramics	Support Industrial customers in developing application specific wear and thermal management solutions.

The development of our products and manufacturing processes is largely based on proprietary technical know-how and expertise. We rely on a combination of contract provisions, trade secret laws, invention disclosures and patents to protect our proprietary rights. We have entered into selective intellectual property licensing agreements. We have in the past and expect that we will continue to assert and vigorously protect our intellectual property rights.

Internally funded research and development expenditures were \$96.8 million, \$60.4 million and \$51.3 million for the fiscal years ended June 30, 2017, 2016 and 2015, respectively. For these same periods, externally funded research and development expenditures were \$7.8 million, \$8.7 million and \$9.5 million, respectively.

Export and Import Compliance

We are required to comply with various export/import control and economic sanction laws, including:

- The International Traffic in Arms Regulations administered by the U.S. Department of State, Directorate of Defense Trade Controls, which, among other things, impose licensing requirements on the export from the United States of certain defense articles and defense services, which generally include items that are specially designed or adapted for a military application and/or listed on the U.S. Munitions List;
- The Export Administration Regulations administered by the U.S. Department of Commerce, Bureau of Industry and Security, which, among other things, impose licensing requirements on certain dual-use goods, technology and software, which are items that potentially have both commercial and military applications;
- The regulations administered by the U.S. Department of Treasury, Office of Foreign Assets Control, which implement economic sanctions imposed against designated countries, governments and persons based on U.S. foreign policy and national security considerations; and
- The import regulations administered by the U.S. Customs and Border Protection.

Foreign governments have also implemented similar export and import control regulations, which may affect our operations or transactions subject to their jurisdiction. For additional discussions regarding our import and export compliance, see the discussion set forth in Item 1A – Risk Factors of this Annual Report Form on Form 10-K.

Trade Secrets, Patents and Trademarks

Our use of trade secrets, proprietary know-how, trademarks, copyrights, patents and contractual confidentiality and IP ownership provisions help us develop and maintain our competitive position with respect to our products and manufacturing processes. We aggressively pursue process and product patents in certain areas of our businesses. We have entered into selective intellectual property licensing agreements. We have in the past and will continue to assert and vigorously protect our intellectual property rights. We have confidentiality and non-competition agreements with certain personnel. We require that our U.S. employees sign a confidentiality and noncompetition agreement upon their commencement of employment with us.

The design, processes and specialized equipment utilized in our engineered materials, advanced components and subsystems are innovative, complex and difficult to duplicate. However, there can be no assurance that others will not develop or patent similar technology or that all aspects of our proprietary technology will be protected. Others have obtained patents covering a variety of materials, devices, equipment, configurations and processes, and others could obtain patents covering technology similar to our technology. We may be required to obtain licenses under such patents, and there can be no assurance that we would be able to obtain such licenses, if required, on commercially reasonable terms, or that claims regarding rights to technology will not be asserted which may adversely affect our results of operations. In addition, our research and development contracts with agencies of the U.S. Government present a risk that project-specific technology could be disclosed to competitors as contract reporting requirements are fulfilled.

Executive Officers of the Registrant

The executive officers of the Company and their respective ages and positions as of June 30, 2017 are set forth below. Each executive officer listed has been appointed by the Board of Directors to serve until removed or until such person's successor is appointed and qualified.

Name	Age	Position
------	-----	----------

Edgar Filing: II-VI INC - Form 10-K

Vincent D. Mattera, Jr.	61	President and Chief Executive Officer; Director
Mary Jane Raymond	57	Chief Financial Officer and Treasurer and Assistant Secretary
Gary A. Kapusta	57	Chief Operating Officer
Giovanni Barbarossa	57	Chief Technology Officer and President II-VI Laser Solutions
David G. Wagner	54	Vice President, Human Resources
Jo Anne Schwendinger	62	General Counsel and Secretary

Vincent D. Mattera, Jr. Dr. Mattera initially served as a member of the II-VI Board of Directors from 2000-2002. Dr. Mattera joined the company as a Vice President in 2004 and served as Executive Vice President from January of 2010 to November of 2013, when he became the Chief Operating Officer. In November of 2014, Dr. Mattera became the President and Chief Operating Officer, and was reappointed to the Board of Directors. In November of 2015, he became the President of II-VI. In September of 2016, Dr. Mattera became the Company's third President and Chief Executive Officer in 45 years. During his career at II-VI he has assumed successively broader management roles, including as a lead architect of the Company's diversification strategy. He has provided vision, energy and dispatch to the Company's growth initiatives including overseeing the acquisition-related integration activities in the US, Europe, and Asia-especially in China-thereby establishing additional platforms. These have contributed to a new positioning of the Company into large and transformative global growth markets while increasing considerably the global reach of the Company, deepening the technology and IP portfolio, broadening the product roadmap and customer base, and increasing potential of II-VI.

Prior to joining II-VI as an executive, Dr. Mattera had a continuous 20 year career in the Optoelectronic Device Division of AT&T Bell Laboratories, Lucent Technologies and Agere Systems during which he led the development and manufacturing of semiconductor laser based materials and devices for optical and data communications networks. Dr. Mattera has 34 years of leadership experience in the compound semiconductor materials and device technology, operations and markets that are core to II-VI's business and strategy. Dr. Mattera holds a B.S. in chemistry from the University of Rhode Island (1979), and a Ph.D. degree in chemistry from Brown University (1984). He completed the Stanford University Executive Program (1996). His 14 year tenure at II-VI underpins a valuable historical knowledge about the Company's operational and strategic issues. We believe that Dr. Mattera's expertise and experience qualifies him to provide the board with continuity and a unique perspective about on the Company.

Mary Jane Raymond has been Chief Financial Officer and Treasurer of the Company since March 2014. Previously, Ms. Raymond was Executive Vice President and Chief Financial Officer of Hudson Global, Inc. (NASDAQ: HSON) from 2005 to 2013. Ms. Raymond was the Chief Risk Officer and Vice President and Corporate Controller at Dun and Bradstreet, Inc., from 2002 to 2005. Additionally, she was the Vice President, Merger Integration, at Lucent Technologies, Inc., from 1997 to 2002 and held several management positions at Cummins Engine Company from 1988 to 1997. Ms. Raymond holds a B.A. degree in Public Management from St. Joseph's University, and an MBA from Stanford University.

Gary A. Kapusta joined II-VI in February 2016 and has served as the Company's Chief Operating Officer. Prior to his employment with the Company, Mr. Kapusta served in various roles at Coca-Cola, including as President & Chief Executive Officer, Coca-Cola Bottlers' Sales & Services L.L.C., President, Customer Business Solutions and Vice President, Procurement Transformation, Coca-Cola Refreshments. He joined Coca-Cola following a 19 year career at Agere Systems, Lucent Technologies, and AT&T. Mr. Kapusta graduated from The University of Pittsburgh with B.S. and M.S. degrees in Industrial Engineering, and holds an M.B.A from Lehigh University.

Giovanni Barbarossa joined II-VI in 2012 and has been the President, Laser Solutions Segment, since 2014, and the Chief Technology Officer since 2012. Dr. Barbarossa was employed at Avanex Corporation from 2000 through 2009, serving in various executive positions in product development and general management, ultimately serving as President and Chief Executive Officer. When Avanex merged with Bookham Technology, forming Oclaro, Dr. Barbarossa became a member of the Board of Directors of Oclaro and served as such from 2009 to 2011. Previously, he had management responsibilities at British Telecom, AT&T Bell Labs, Lucent Technologies, and Hewlett-Packard. Dr. Barbarossa graduated from the University of Bari, Italy, with a B.S. in Electrical Engineering, and a Ph.D. in Photonics from the University of Glasgow, U.K.

David G. Wagner has been employed by the Company since 2008 and has been the Vice President, Human Resources since 2011. Prior to his employment with the Company, Mr. Wagner was employed with Owens Corning

(NYSE:OC) from 1985 through 2008, serving in various human resource management positions, ultimately becoming the Vice President, Human Resources, for Owen Corning's global sales force. Mr. Wagner graduated with a B.S. degree in Human Resources Management from Juniata College in 1985.

Jo Anne Schwendinger joined II-VI in March 2017 and serves as the Company's General Counsel and Secretary. Prior to her employment with the Company, Ms. Schwendinger practiced law with the law firm Blank Rome, LLP from August 2016 until February 2017. Previously, Ms. Schwendinger served in various legal roles at Deere & Company from February 2000 until August 2016, including Regional General Counsel and Assistant General Counsel. Ms. Schwendinger holds a Bachelor's degree from the Université d'Avignon et des Pays de Vaucluse, a Master's degree from the Université de Strasbourg, Maitrise and a Juris Doctor degree from the University of Pittsburgh Law School.

Availability of Information

Our Internet address is www.ii-vi.com. Information contained on our website is not part of, and should not be construed as being incorporated by reference into, this Annual Report on Form 10-K. We post the following reports on our website as soon as reasonably practical after they are electronically filed with or furnished to the Securities and Exchange Commission (the "SEC"): our Annual Reports on Form 10-K, our Quarterly Reports on Form 10-Q, our Current Reports on Form 8-K, and any amendments to those reports or statements filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act. In addition, we post our proxy statements on Schedule 14A related to our annual shareholders' meetings as well as reports filed by our directors, officers and ten-percent beneficial owners pursuant to Section 16 of the Exchange Act. In addition, all filings are available via the SEC's website (www.sec.gov). We also make our corporate governance documents available on our website, including the Company's Code of Business Conduct and Ethics, governance guidelines and the charters for various board committees. All such documents are located on the Investors page of our website and are available free of charge.

Item 1A. RISK FACTORS

We caution our investors that our performance is subject to risks and uncertainties. The following material risk factors may cause our future results to differ materially from those projected in any forward-looking statement. You should carefully consider these factors, as well as the other information contained in this Annual Report on Form 10-K when evaluating an investment in our securities.

Investments in Future Markets of Potential Significant Growth May Not Result in Expected Returns

We previously announced an investment program with the goal of gaining a greater share of end markets using semiconductor lasers, especially those used for 3D sensing. We cannot guarantee that our investments in capital and capabilities will be sufficient. The potential market, as well as our ability to gain market share in such market, may not materialize on the timeline anticipated or at all. We cannot be sure of the end market price for products incorporating our technologies. Our technologies could fail to fulfill, completely or at all, our target customers' finalized specifications. We cannot guarantee the end market customers' acceptance of our technologies. Further, we may be unable to fulfill the terms of our contracts with our target customers, which could result in penalties of a material nature, including consequential damages, loss of market share and loss of reputation.

Our Competitive Position Depends on Our Ability to Develop New Products and Processes

To meet our strategic objectives, we must develop, manufacture and market new products and continue to update our existing products and processes to keep pace with market developments to address increasingly sophisticated customer requirements. Our success in developing and selling new and enhanced products and processes depends upon a variety of factors including strategic product selection, efficient completion of product design and development, timely implementation of manufacturing and assembly processes, effective sales and marketing, and successful product performance in the market.

The introduction by our competitors of products or processes using new developments better or faster than ours could render our products or processes obsolete or unmarketable. We intend to continue to make significant investments in research and development to achieve our goals. There can be no assurance that we will be able to develop and introduce new products or enhancements to our existing products and processes in a manner which satisfies customer needs or achieves market acceptance. The failure to do so could have a material adverse effect on our ability to grow our business and maintain our competitive position and on our results of operations and/or financial condition.

Our Competitive Position May Require Significant Investments in Strategic Acquisitions, With Associated Integration Risks, Which May Not Be Successful

We continuously monitor the marketplace for strategic opportunities, and our business strategy includes expanding our product lines and markets through both internal product development and acquisitions. Consequently, we expect to continue to consider strategic acquisition of businesses, products or technologies complementary to our business. This may require significant investments of management time and financial resources. If market demand is outside our organic capabilities, if a strategic acquisition is required and we cannot identify one or execute on it, and/or if financial investments that we undertake distract management, do not result in the expected return on investment, expose us to unforeseen liabilities or jeopardize our ability to comply with our credit facility covenants due to any inability to integrate the business, retain staff, or work with the customers or otherwise we could suffer a material adverse effect on our business, results of operations or financial condition.

Our Future Success Depends on Continued International Sales

Sales to customers in countries other than the United States accounted for approximately 69%, 63% and 63% of revenues during the years ended June 30, 2017, 2016 and 2015, respectively. We anticipate that international sales will continue to account for a significant portion of our revenues for the foreseeable future. If we do not maintain our current volume of international sales, we could suffer a material adverse effect on our business, results of operations and/or financial condition.

Foreign Currency Risk May Negatively Affect our Revenues, Cost of Sales and Operating Margins and Could Result in Foreign Exchange Losses

We conduct our business and incur costs in the local currency of most countries in which we operate. Our net sales outside the United States represented a majority of our total sales in each of the last three fiscal years. We incur currency transaction risk whenever one of our operating subsidiaries enters into either a purchase or a sales transaction using a different currency from the currency in which it operates or holds assets or liabilities in a currency different than its functional currency. Changes in exchange rates can also affect our results of operations when the value of sales and expenses of foreign subsidiaries are translated to U.S. dollars. We cannot accurately predict the impact of future exchange rate fluctuations on our results of operations. Further, given the volatility of exchange rates, we may not be able to effectively manage our currency risks, and any volatility in currency exchange rates may increase the price of our products in local currency to our foreign customers or increase the manufacturing cost of our products, either of which may have an adverse effect on our financial condition, cash flows and profitability.

Any Inability to Access Financial Markets from Time to Time to Raise Capital, Finance Working Capital Requirements or Our Acquisition Strategies, or Otherwise to Support our Liquidity Needs Could Negatively Impact our Ability to Finance our Operations, Meet Certain Obligations or Implement our Growth Strategy.

We occasionally borrow under our existing credit facilities to fund operations, including working capital investments, and to finance our acquisition strategies. In the past, market disruptions experienced in the United States and abroad have materially impacted liquidity in the credit and debt markets, making financing terms for borrowers less attractive, and, in certain cases, have resulted in the unavailability of certain types of financing. Uncertainty in the financial markets may negatively impact our ability to access additional financing or to refinance our existing credit facilities or existing debt arrangements on favorable terms or at all, which could negatively affect our ability to fund current and future expansion as well as future acquisitions and development. These disruptions may include turmoil in the financial services industry, volatility in the markets where our outstanding securities trade, and general economic downturns in the areas where we do business. If we are unable to access funds at competitive rates, or if our short-term or long-term borrowing costs increase, our ability to finance our operations, meet our short-term obligations and implement our operating strategies could be adversely affected.

In the future we may be required to raise additional capital through public or private financing or other arrangements. Such financing may not be available on acceptable terms, or at all, and our failure to raise capital when needed could harm our business and prospects. Additional equity financing may be dilutive to the holders of our common stock, and debt financing, if available, may involve restrictive covenants that may limit our ability to undertake certain operational activities that we otherwise would find to be desirable. Further, debt service obligations associated with

any such debt financing could reduce our profitability. If we cannot raise funds on acceptable terms, we may not be able to grow our business or respond to competitive pressures.

We May Fail to Accurately Estimate Our Customers' Demands

We make significant decisions based on our estimates of customer requirements. We use our estimates to determine the levels of business we seek and accept, production schedules, personnel needs and other resource requirements.

Customers may require rapid increases in production on short notice. We may not be able to purchase sufficient supplies or allocate sufficient manufacturing capacity to meet such increases in demand. Rapid customer ramp-up and significant increases in demand may strain our resources or negatively affect our margins. Inability to satisfy customer demand in a timely manner may harm our reputation, reduce our other opportunities, damage our relationships with customers, reduce revenue growth, and/or incur contractual penalties.

Alternatively, downturns in the industries in which we compete may cause our customers to significantly reduce their demand. With respect to orders we initiate with our suppliers to address anticipated demand from our customers, certain suppliers may have required non-cancelable purchase commitments or advance payments from us, and those obligations and commitments could reduce our ability to adjust our inventory or expense levels to declining market demands. Unexpected decline in customer demands can result in excess or obsolete inventory and result in additional charges. Because certain of our sales, research and development and internal manufacturing overhead expenses are relatively fixed, a reduction in customer demand likely would decrease our gross margins and operating income.

We May Encounter Substantial Competition

We may encounter substantial competition from other companies in the same market, including established companies with significant resources. Some of our competitors may have financial, technical, marketing or other capabilities that are more extensive than ours. They may be able to respond more quickly than we can to new or emerging technologies and other competitive pressures. We may not be able to compete successfully against our present or future competitors. Our failure to effectively compete could have a material adverse effect on our business, results of operations or financial condition.

There Are Limitations on the Protection of Our Intellectual Property

We rely on a combination of trade secret, patent, copyright and trademark laws combined with employee confidentiality, noncompetition and nondisclosure agreements to protect our intellectual property rights. There can be no assurance that the steps taken by us will be adequate to prevent misappropriation of our technology or intellectual property. Furthermore, there can be no assurance that third-parties will not assert infringement claims against us in the future.

Asserting our intellectual property rights or defending against third-party claims could involve substantial expense. In the event a third-party were successful in a claim that one of our processes infringed its proprietary rights, we could be required to pay substantial damages or royalties, or spend substantial amounts in order to obtain a license or modify processes so that they no longer infringe such proprietary rights. Any such events could have a material adverse effect on our business, results of operations or financial condition.

A Significant Portion of Our Business is Dependent on Cyclical Industries

Our business is significantly dependent on the demand for products produced by end-users of industrial lasers and optical communication products. Many of these end-users are in industries that have historically experienced a highly cyclical demand for their products. As a result, demand for our products is subject to these cyclical fluctuations. Fluctuations in demand could have a material adverse effect on our business, results of operations or financial condition.

Data Breach Incidents and Breakdown of Information and Communication Technologies Could Disrupt our Operations and Impact Our Financial Results

In the course of our business, we collect and store sensitive data, including intellectual property (both our own and that of our customers), as well as proprietary business information. We could be subject to service outages or breaches of security systems which may result in disruption, unauthorized access, misappropriation, or corruption of this information. Security breaches of our network or data, including physical or electronic break-ins, vendor service outages, computer viruses, attacks by hackers or similar breaches can create system disruptions, shutdowns, or unauthorized disclosure of confidential information. Although we have not experienced an incident, if we are unable to prevent such security or privacy breaches, our operations would be disrupted or we could suffer legal claims, loss of reputation, financial loss, property damage, or regulatory penalties because of lost or misappropriated information.

Global Economic Downturns May Adversely Affect Our Business, Operating Results and Financial Condition

Current and future conditions in the global economy have an inherent degree of uncertainty. As a result, it is difficult to estimate the level of growth or contraction for the global economy as a whole. It is even more difficult to estimate growth or contraction in various parts, sectors and regions of the economy, including industrial, military, optical communications, telecommunications, semiconductor, and medical and life science markets in which we participate.

All aspects of our company forecast depend on estimates of growth or contraction in the markets we serve. Thus, prevailing global economic uncertainties render estimates of future income and expenditures very difficult to make.

Global economic downturns may affect industries in which our customers operate. These changes could include decreases in the rate of consumption or use of our customers' products. Such conditions could have a material adverse effect on demand for our customers' products, and in turn, on demand for our products.

Adverse changes may occur in the future as a result of declining or flat global or regional economic conditions, fluctuations in currency and commodity prices, wavering confidence, capital expenditure reductions, unemployment, decline in stock markets, contraction of credit availability or other factors affecting economic conditions. For example, factors that may affect our operating results include disruption in the credit and financial markets in the United States, Europe and elsewhere, adverse effects of ongoing stagnation in the European economy, slowdown in the Chinese economy, reductions or limited growth in consumer spending or consumer credit, and other adverse economic conditions that may be specific to the Internet, e-commerce and payments industries.

These changes may negatively affect sales of products and increase exposure to losses from bad debt and commodity prices, the cost and availability of financing, and costs associated with manufacturing and distributing products. Any economic downturn could have a material adverse effect on our business, results of operations or financial condition.

We Are Subject to Governmental Import and Export Regulations

We are subject to the passage of and changes in the interpretation of regulation by U.S. government entities at the federal, state and local levels and non-U.S. agencies, including, but not limited to, the following:

• We are required to comply with import laws and export control and economic sanctions laws, which may affect our transactions with certain customers, business partners and other persons, including dealings with or between our employees and subsidiaries. In certain circumstances, export control and economic sanctions regulations may prohibit the export of certain products, services and technologies. We may be required to obtain an export license before exporting a controlled item. Compliance with the import laws that apply to our businesses may restrict our access to, and may increase the cost of obtaining, certain products and could interrupt our supply of imported inventory.

• Exported technologies necessary to develop and manufacture certain products are subject to U.S. export control laws and similar laws of other jurisdictions. We may be subject to adverse regulatory consequences, including government oversight of facilities and export transactions, monetary penalties and other sanctions for violations of these laws. In certain instances, these regulations may prohibit the Company from developing or manufacturing certain of its products for specific end applications outside the United States.

Failure to comply with any of these laws and regulations could result in civil and criminal, monetary and non-monetary penalties, disruptions to our business, limitations on our ability to import and export products and services and damage to our reputation.

Our Global Operations are Complex to Manage

We manufacture products in the United States, China, Singapore, Vietnam, the Philippines, Germany, and Switzerland, and through contract manufacturers in Thailand and China. We also maintain direct sales offices in Hong Kong, Japan, Germany, Switzerland, the United Kingdom, Belgium, China, Singapore, Italy, South Korea, and Taiwan. Our operations vary by location and are influenced on a location-by-location basis by local customs, languages and work practices, as well as different local weather conditions, management styles and education systems. In addition, multiple complex issues may arise concurrently in different countries, potentially hampering our management's ability to respond in an effective and timely manner. Any inability to respond in an effective and timely manner to issues in our global operations could have a material adverse effect on our business, results of operations or financial condition.

We Have Entered into Supply Agreements which Commit Us to Supply Products on Specified Terms

We have supply agreements with some customers which require us to supply products and to allocate sufficient capacity to make these products. We have also agreed to pricing schedules and methodologies which could result in penalties if we fail to meet development, supply and quality commitments. Failure to do so may cause us to be unable to generate the amount of revenue or the level of profitability we expect from these arrangements. Our ability to realize a profit under some of these agreements will be subject to the level of customer demand, the cost of maintaining facilities and manufacturing capacity, and supply chain capability.

If we fail to fulfill our commitments under these supply agreements our business, after using all remedies available, financial conditions and results of operations may suffer a material adverse effect.

We Depend on Highly Complex Manufacturing Processes That Require Products from Limited Sources of Supply

Our operations are dependent upon a supply chain of difficult-to-make or difficult-to-refine products and materials. Some of our product inflow is subject to yield reductions from growth or fabrication losses, and thus the quantities we may receive are not consistently predictable. Customers may also change the specification for a product that our suppliers cannot meet.

We also make products for which the Company is one of the world's largest suppliers. We use high-quality, optical grade ZnSe in the production of many of our IR optical products. We are a leading producer of ZnSe for our internal use and for external sale. The production of ZnSe is a complex process requiring a highly controlled environment. A number of factors, including defective or contaminated materials, could adversely affect our ability to achieve acceptable manufacturing yields of high quality ZnSe. Lack of adequate availability of high quality ZnSe could have a material adverse effect upon our business. There can be no assurance that we will not experience manufacturing yield inefficiencies which could have a material adverse effect on our business, results of operations or financial condition.

We produce hydrogen selenide gas which is used in our production of ZnSe. There are risks inherent in the production and handling of such material. Our lack of proper handling of hydrogen selenide could require us to curtail our production of hydrogen selenide. Our potential inability to internally produce hydrogen selenide could have a material adverse effect on our business, results of operations or financial condition.

In addition, we produce and use other high purity and relatively uncommon materials and compounds to manufacture our products including, but not limited to, ZnS, GaAs, Yttrium Aluminum Garnet, Yttrium Lithium Fluoride, Calcium Fluoride, Germanium, Selenium, Telluride, Bismuth Telluride and SiC. A significant failure of our internal production processes or our suppliers to deliver sufficient quantities of these necessary materials on a timely basis could have a material adverse effect on our business, results of operations or financial condition.

Our Global Operations Are Subject to Complex Legal and Regulatory Requirements

We manufacture products in the United States, China, Singapore, Vietnam, the Philippines, Germany, and Switzerland, and through contract manufacturers in Thailand and China. We also maintain direct sales offices in Hong Kong, Japan, Germany, Switzerland, the United Kingdom, Belgium, China, Singapore, Italy, South Korea and Taiwan. Operations outside of the United States are subject to many legal and regulatory requirements, some of which are not aligned with others. These include tariffs, quotas, taxes and other market barriers, restrictions on the export or import of technology, potentially limited intellectual property protection, customs import and export requirements, anti-corruption and anti-bribery laws, foreign exchange controls and cash repatriation restrictions, foreign investment rules and regulations, data privacy requirements, anti-competition laws, employment and labor laws, pensions and social insurance, and environmental health, and safety laws and regulations.

Compliance with these laws and regulations can be onerous and expensive, and requirements differ among jurisdictions. New laws, changes in existing laws and abrogation of local regulations by national laws result in significant uncertainties in how they will be interpreted and enforced. Failure to comply with any of these foreign laws and regulations could have a material adverse effect on our business, results of operations or financial condition.

We Use and Generate Hazardous Substances that Are Subject to Stringent Environmental Regulations

Hazardous substances used or generated in our research and manufacturing facilities are subject to stringent environmental regulation. We believe that our handling of such substances is in material compliance with applicable local, state and federal environmental, safety and health regulations at each operating location. We invest substantially in proper protective equipment, process controls and specialized training to minimize risks to employees, surrounding communities and the environment that could result from the presence and handling of such hazardous substances. We regularly conduct employee physical examinations and workplace monitoring regarding such substances. When exposure problems or potential exposure problems have been uncovered, corrective actions have been implemented and re-occurrence has been minimal or non-existent.

We have in place an emergency response plan with respect to our generation and use of the hazardous substance Hydrogen Selenide. Special attention has been given to all procedures pertaining to this gaseous material to minimize the chances of its accidental release into the atmosphere.

With respect to the manufacturing, use, storage and disposal of the low-level radioactive material Thorium Fluoride, our facilities and procedures have been inspected and licensed by the Nuclear Regulatory Commission. Thorium-bearing by-products are collected and shipped as solid waste to a government-approved low-level radioactive waste disposal site in Clive, Utah.

The generation, use, collection, storage and disposal of all other hazardous by-products, such as suspended solids containing heavy metals or airborne particulates, are believed by us to be in material compliance with regulations. We believe that we have obtained all of the permits and licenses required for operation of our business.

We do not carry environmental impairment insurance. Although we do not know of any material environmental, safety or health problems in our properties or processes, there can be no assurance that problems will not develop in the future which could have a material adverse effect on our business, results of operations or financial condition.

We May Be Adversely Affected by Climate Change Regulations

In many of the countries in which we operate, government bodies are increasingly enacting legislation and regulations in response to potential impacts of climate change. These laws and regulations may be mandatory. They have the potential to impact our operations directly or indirectly as a result of required compliance by our customers or our supply chain. Inconsistency of regulations may also affect the costs of compliance with such laws and regulations. Assessments of the potential impact of future climate change legislation, regulation and international treaties and accords are uncertain, given the wide scope of potential regulatory change in countries in which we operate.

We may incur increased capital expenditures resulting from required compliance with revised or new legislation or regulations, added costs to purchase or lower profits from sales of our products, allowances or credits under a “cap and trade” system, increased insurance premiums and deductibles as new actuarial tables are developed to reshape coverage, a change in competitive position relative to industry peers, and changes to profit or loss arising from increased or decreased demand for goods produced by us and indirectly, from changes in costs of goods sold.

Some Systems That Use our Products Are Complex in Design and May Contain Defects that Are Not Detected Until Deployed Which Could Increase Our Costs and Reduce Our Revenues

Some systems that use our products are inherently complex in design and require ongoing maintenance. Our customers may discover defects in our products after the products have been fully deployed and operated under peak stress conditions. In addition, some of our products are combined with products from other vendors which may contain defects. Should problems occur, it may be difficult to identify the source of the problem. If we are unable to correct defects or other problems, we could experience, among other things loss of customers, increased costs of product returns and warranty expenses, damage to our brand reputation, failure to attract new customers or achieve market acceptance, diversion of development and engineering resources, or legal action by our customers.

The occurrence of any one or more of the foregoing factors could have a material adverse effect on our business, results of operations or financial condition.

Significant Defense Spending Cuts and/or Reductions in Defense Programs Could Adversely Impact Our Business

Specific to the military business within our II-VI Laser Solutions and II-VI Performance Products segments, sales to customers in the defense industry totaled approximately 11% of our revenues for the fiscal year ended June 30, 2017. These customers generally contract with a governmental entity, typically a U.S. governmental agency. Future reductions in defense spending could result from the current or future economic or political environment. For example, the ongoing sequestration of the defense budget could result in reductions in demand for defense-related products that we produce. Further, changes to existing defense procurement laws and regulations could adversely affect our results of operations. Most governmental programs are subject to funding approval and can be modified or terminated with no warning upon the determination of a legislative or administrative body. The loss of or failure to obtain certain contracts or the loss of a major government customer could have a material adverse effect on our business, results of operations or financial condition.

Changes in Tax Rates, Tax Liabilities or Tax Accounting Rules Could Affect Future Results

As a global company, we are subject to taxation in the United States and various other countries and jurisdictions. As such, we must exercise a level of judgment in determining our worldwide tax liabilities. Our future tax rates could be affected by changes in the composition of earnings in countries with differing tax rates or changes in tax laws. Changes in tax laws or tax rulings may have a significantly adverse impact on our effective tax rate. For example, proposals for fundamental U.S. international tax reform, if enacted, could have a significant adverse impact on our

effective tax rate. In addition, we are subject to regular examination of our income tax returns by the Internal Revenue Service and other tax authorities. We regularly assess the likelihood of favorable or unfavorable outcomes resulting from these examinations to determine the adequacy of our provision for income taxes. Although we believe our tax estimates are reasonable, there can be no assurance that any final determination will not be materially different than the treatment reflected in our historical income tax provision and accruals, which could materially and adversely affect our business, results of operation or financial condition.

Increases in Commodity Prices May Adversely Affect Our Results of Operations and Financial Condition

We are exposed to a variety of market risks, including the effects of increases in commodity prices. Our businesses purchase, produce and sell high-purity selenium and other raw materials based upon quoted market prices from minor metal exchanges. The negative impact from increases in commodity prices may not be recovered through our product sales which could have a material adverse effect on our net earnings and financial condition.

Natural Disasters or Other Global or Regional Catastrophic Events Could Disrupt Our Operations and Adversely Affect Our Results

We may be exposed to business interruptions due to catastrophe, natural disaster, pandemic, terrorism or acts of war that are beyond our control. Disruptions to our facilities or systems, or to those of our key suppliers, could also interrupt operational processes and adversely impact our ability to manufacture our products and provide services and support to our customers. As a result, our business, results of operations or financial condition could be materially adversely affected.

Our Success Depends on Our Ability to Retain Key Personnel

We are highly dependent upon the experience and continuing services of certain scientists, engineers, production and management personnel. Competition for the services of these personnel is intense. There can be no assurance that we will be able to retain or attract the personnel necessary for our success. The loss of the services of our key personnel could have a material adverse effect on our business, results of operations or financial condition.

We Have Agreements with Government Entities That Are Subject to Significant Compliance Requirements and Changes in Government Spending

Our agreements relating to the sale of products to government entities may be subject to termination, reduction or modification in the event of changes in government requirements, reductions in federal spending and other factors. We are also subject to investigation and audit for compliance with the requirements of government contracts, including procurement integrity, export control, employment practices, the accuracy of records and the recording of costs. Failure to comply with these requirements might result in suspension of these contracts and suspension or debarment from government contracting or subcontracting.

Our Stock Price Has Been Highly Volatile in the Past and May Be Extremely Volatile in the Future

The market price for our common stock on The NASDAQ Global Select Market varied between a high of \$41.10 and a low of \$17.76 in the fiscal year ended June 30, 2017. We expect that this volatility will continue. Factors that could cause fluctuation in our stock price include, among other things, general economic and market conditions, actual or anticipated variations in operating results, changes in financial estimates by securities analysts, our inability to meet or exceed securities analysts' estimates or expectations, conditions or trends in the industries in which our products are purchased, announcements by us or our competitors of significant acquisitions, strategic partnerships, divestitures, joint ventures or other strategic initiatives, capital commitments, additions or departures of key personnel and sales of our common stock or equity-linked securities.

Many of these factors are beyond our control. However, these factors could cause the market price of our common stock to decline, regardless of our actual operating performance. In addition, in recent years, the stock market in general, and The NASDAQ Stock Market and the securities of technology companies in particular, have experienced extreme price and volume fluctuations. These fluctuations have often been unrelated or disproportionate to the operating performance of individual companies. These broad market fluctuations have in the past, and may in the future, materially and adversely affect our stock price, regardless of our operating results. This volatility may affect the price at which our shareholders can sell our common stock.

Some Anti-takeover Provisions Contained in Our Articles of Incorporation and By-laws, as Well as Provisions of Pennsylvania Law, Could Impair a Takeover Attempt, Which Could Also Reduce the Market Price of Our Common Stock

Our articles of incorporation and by-laws contain provisions that could make us a less attractive target for a hostile takeover and could make more difficult or discourage a merger proposal, a tender offer or a proxy contest. Such provisions include:

- A requirement that shareholder-nominated director nominees be nominated in advance of the meeting at which directors are elected and that specific information be provided in connection with such nomination;
- The ability of our board of directors to issue additional shares of common stock or preferred stock without shareholder approval; and
- Certain provisions requiring supermajority approval (at least two-thirds of the votes cast by all shareholders entitled to vote thereon, voting together as a single class).

25

In addition, the Pennsylvania Business Corporation Law (the “BCL”) contains provisions that may have the effect of delaying or preventing a change in control of us or changes in our management. Many of these provisions are triggered if any person or group acquires, or discloses intent to acquire, 20% or more of a corporation’s voting power, subject to certain exceptions. These provisions:

- provide the other shareholders of the corporation with certain rights against the acquiring group or person;
- prohibit the corporation from engaging in a broad range of business combinations with the acquiring group or person;
- restrict the voting and other rights of the acquiring group or person; and
- provide that certain profits realized by the acquiring group or person from the sale of our equity securities belong to and are recoverable by us.

Regardless of the amount of a person’s holdings, if a shareholder or shareholder group (including affiliated persons) would be a party to certain proposed transactions with us or would be treated differently from other shareholders of ours in certain proposed transactions, the BCL requires approval by a majority of votes entitled to be cast by all shareholders other than the interested shareholder or affiliate group, unless the transaction is approved by independent directors or other criteria are satisfied. Furthermore, under the BCL, a “short-form” merger of II-VI cannot be implemented without the consent of our board of directors.

In addition, as permitted by Pennsylvania law, an amendment to our articles of incorporation or other corporate action that is approved by shareholders may provide mandatory special treatment for specified groups of nonconsenting shareholders of the same class. For example, an amendment to our articles of incorporation or other corporate action may provide that shares of common stock held by designated shareholders of record must be cashed out at a price determined by the corporation, subject to applicable dissenters’ rights.

Furthermore, the BCL provides that directors may, in discharging their duties, consider, to the extent they deem appropriate, the effects of any action upon shareholders, employees, suppliers, customers and the communities in which its offices are located. Directors are not required to consider the interests of shareholders to a greater degree than other constituencies’ interests. The BCL expressly provides that directors do not violate their fiduciary duties solely by relying on “poison pills” or the anti-takeover provisions of the BCL. We do not currently have a “poison pill.”

All of these provisions may limit the price that investors may be willing to pay for shares of our common stock.

Because We Do Not Currently Intend to Pay Dividends, Holders of Our Common Stock 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, and do not expect to pay cash dividends in the foreseeable future. We currently anticipate that we will retain any future earnings to support operations and to finance the development of our business. As a result, the success of an investment in our common stock will depend entirely upon future appreciation in its value. There is no guarantee that our common stock will maintain its value or appreciate in value.

Item 1B. UNRESOLVED STAFF COMMENTS

None.

Item 2. PROPERTIES

Information regarding our principal U.S. properties at June 30, 2017 is set forth below:

Location	Primary Use(s)	Primary Business Segment(s)	Approximate Square Footage	Ownership
Saxonburg, PA	Manufacturing, Corporate Headquarters and Research and Development	II-VI Laser Solutions and II-VI Performance Products	252,000	Owned and Leased
Warren, NJ	Manufacturing and Research and Development	II-VI Laser Solutions	151,000	Leased
Newark, DE	Manufacturing and Research and Development	II-VI Performance Products	90,000	Leased
Temecula, CA	Manufacturing and Research and Development	II-VI Performance Products	87,000	Leased
Dallas, TX	Manufacturing and Research and Development	II-VI Performance Products	67,000	Owned and Leased
Monroe, CT	Manufacturing and Research and Development	II-VI Performance Products	48,000	Leased
Easton, PA	Manufacturing and Research and Development	II-VI Laser Solutions	48,000	Leased
Santa Rosa, CA	Manufacturing and Research and Development	II-VI Photonics	39,000	Leased
Pine Brook, NJ	Manufacturing and Research and Development	II-VI Performance Products	36,000	Leased
Tustin, CA	Manufacturing and Research and Development	II-VI Performance Products	31,000	Leased
Philadelphia, PA	Manufacturing and Research and Development	II-VI Performance Products	30,000	Leased
Champaign, IL	Manufacturing and Research and Development	II-VI Laser Solutions	27,000	Leased
Hillsborough, NJ	Manufacturing and Research and Development	II-VI Photonics	23,000	Leased
Woburn, MA	Manufacturing and Research and Development	II-VI Photonics	20,000	Leased
Starkville, MS	Manufacturing	II-VI Performance Products	19,000	Leased
Newtown, CT	Manufacturing and Research and Development	II-VI Performance Products	13,000	Leased
Tyngsboro, MA	Research and Development	II-VI Laser Solutions	10,000	Leased

We also maintain some additional small research and development, distribution, and administrative facilities in leased space in the United States.

Information regarding our principal foreign properties at June 30, 2017 is set forth below:

Location	Primary Use(s)	Primary Business Segment(s)	Approximate Square Footage	Ownership
China	Manufacturing, Research and Development, and Distribution	II-VI Laser Solutions, II-VI Photonics and II-VI Performance Products	1,227,000	Leased
Philippines	Manufacturing	II-VI Laser Solutions and II-VI Performance Products	314,000	Leased
Vietnam	Manufacturing	II-VI Photonics and II-VI Performance Products	207,000	Leased
Switzerland	Manufacturing, Research and Development, and Distribution	II-VI Laser Solutions	134,000	Leased
Germany	Manufacturing and Distribution	II-VI Laser Solutions, II-VI Photonics and II-VI Performance Products	80,000	Owned and Leased
Singapore	Manufacturing	II-VI Laser Solutions	35,000	Leased

We also maintain some additional small distribution facilities in leased space in Belgium, Italy, Japan, South Korea, Taiwan, and the United Kingdom.

The square footage listed for each of the above properties represents facility square footage, except in the case of the Philippines location, which includes land.

Item 3. LEGAL PROCEEDINGS

The Company and its subsidiaries are involved in various claims and lawsuits incidental to its business. The resolution of each of these matters is subject to various uncertainties, and it is possible that these matters may be resolved unfavorably to the Company. Management believes, after consulting with legal counsel, that the ultimate liabilities, if any, resulting from such legal proceedings will not materially affect the Company's financial condition, liquidity or results of operation.

Item 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

Item 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

The Company's Common Stock is traded on the NASDAQ Global Select Market ("NASDAQ") under the symbol "IIVI." The following table sets forth the range of high and low trading prices per share of the Company's Common Stock for the fiscal periods indicated, as reported by NASDAQ.

	High	Low
Fiscal 2017		
First Quarter	\$24.46	\$17.76
Second Quarter	\$32.45	\$23.80
Third Quarter	\$41.10	\$29.10
Fourth Quarter	\$36.35	\$27.25

	High	Low
Fiscal 2016		
First Quarter	\$19.30	\$15.04
Second Quarter	\$19.46	\$15.69
Third Quarter	\$22.18	\$16.09
Fourth Quarter	\$23.39	\$17.91

On August 14, 2017, the last reported sale price for the Company's Common Stock was \$36.60 per share. As of such date, there were approximately 771 holders of record of our Common Stock. The Company historically has not paid cash dividends and does not presently anticipate paying cash dividends in the future.

ISSUER PURCHASES OF EQUITY SECURITIES

In August 2014, the Board of Directors authorized the Company to purchase up to \$50.0 million of its Common Stock. The repurchase program calls for shares to be purchased in the open market or in private transactions from time to time. Shares purchased by the Company are retained as treasury stock and available for general corporate purposes. During the fiscal year ended June 30, 2017, the Company did not repurchase shares of its Common Stock pursuant to the repurchase program. Since inception of the repurchase program, the Company has repurchased 1,316,587 shares of its Common Stock for approximately \$19.0 million in the aggregate.

The following table provides information with respect to purchases of the Company's equity securities during the quarter ended June 30, 2017.

Total	Dollar
Number of	Value of
Shares	Shares That
Purchased	May
as Part of	Yet be
Publicly	Purchased

Edgar Filing: II-VI INC - Form 10-K

Period	Total Number of Shares Purchased	Average Price Paid Per Share	Announced Plans or Programs (a)	Under the Plan or Program
April 1, 2017 to April 30, 2017	2,698	(1) \$ 32.50	-	\$ 30,906,904
May 1, 2017 to May 31, 2017	3,873	(2) \$ 33.25	-	\$ 30,906,904
June 1, 2017 to June 30, 2017	15,069	(3) \$ 34.05	-	\$ 30,906,904

(1) Includes 2,698 shares of our Common Stock transferred to the Company from employees in satisfaction of minimum tax withholding obligations associated with the vesting of restricted share awards.

(2) Includes 3,873 shares of our Common Stock transferred to the Company from employees in satisfaction of minimum tax withholding obligations associated with the vesting of restricted share awards.

(3) Includes 15,069 shares of our Common Stock transferred to the Company from employees in satisfaction of minimum tax withholding obligations associated with the vesting of restricted share awards.

The information incorporated by reference in Item 12 of this Annual Report on Form 10-K from our 2017 Proxy Statement under the heading "Equity Compensation Plan Information" is hereby also incorporated by reference into this Item 5.

PERFORMANCE GRAPH

The following graph compares cumulative total shareholder return on the Company's Common Stock with the cumulative total shareholder return of the Nasdaq Composite Index and with a peer group of companies constructed by the Company for the period from June 30, 2012, through June 30, 2017. The Company's current fiscal year peer group includes Cabot Microelectronics Corporation, Franklin Electric Co., Inc., MKS Instruments, Inc., Silicon Laboratories, Lumentum Holdings Inc., Finisar Corp, Coherent, Inc. and Corning Inc. The Company's prior fiscal year peer group reflected below consisted of Cabot Microelectronics Corporation, Franklin Electric Co., Inc., MKS Instruments, Inc., and Silicon Laboratories. The prior year peer group does not include Rofin-Sinar Technologies, Inc., which previously had been included in the Company's peer group, as this company was acquired during fiscal year 2017 and ceased to be publicly traded.

Item 6. SELECTED FINANCIAL DATA

Five-Year Financial Summary

The following selected financial data for the five fiscal years presented are derived from the Company's audited Consolidated Financial Statements. All periods presented have been adjusted to present this product line on a discontinued operations basis. The data should be read in conjunction with the Consolidated Financial Statements and the related notes thereto included elsewhere in this Annual Report on Form 10-K.

Year Ended June 30, (\$000 except per share data)	2017	2016	2015	2014	2013
Statement of Earnings					
Net revenues from continuing operations	\$ 972,046	\$ 827,216	\$ 741,961	\$ 683,261	\$ 551,075
Earnings from continuing operations	95,274	65,486	65,975	38,316	58,720
Earnings (loss) from discontinued operations	-	-	-	133	(6,789)
Net earnings attributable to redeemable noncontrolling interest	-	-	-	-	1,118
Net earnings attributable to II-VI Incorporated	95,274	65,486	65,975	38,449	50,813
Basic earnings (loss) per shares:					
Continuing operations	1.52	1.07	1.08	0.62	0.92
Discontinued operation	-	-	-	-	(0.11)
Consolidated	1.52	1.07	1.08	0.62	0.81
Diluted earnings (loss) per shares:					
Continuing operations	1.48	1.04	1.05	0.60	0.90
Discontinued operation	-	-	-	-	(0.11)
Consolidated	1.48	1.04	1.05	0.60	0.80
Diluted weighted average shares outstanding	64,507	62,909	62,586	63,686	63,884

Year Ended June 30,	2017	2016	2015	2014	2013
Balance Sheet					
Working capital	\$ 517,344	\$ 411,721	\$ 373,812	\$ 370,666	\$ 366,710
Total assets	1,477,297	1,211,981	1,057,273	1,070,753	863,317
Long-term debt	322,022	215,307	155,066	220,787	113,551
Total debt	342,022	235,307	175,066	240,787	113,551
Retained earnings	748,062	652,788	587,302	521,327	482,878
Shareholders' equity	900,563	782,338	729,081	675,043	636,108

Item 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Forward-Looking Statements

Certain statements contained in this Management's Discussion and Analysis of Financial Condition and Results of Operations are forward-looking statements. Forward-looking statements are also identified by words such as "expects," "anticipates," "believes," "intends," "plans," "projects" or similar expressions. Actual results could differ materially from those anticipated in these forward-looking statements for many reasons, including those potential risks set forth in Item 1A, of this Annual Report on Form 10-K, which are incorporated herein by reference.

Overview

The Company generates revenues, earnings and cash flows from developing, manufacturing and marketing engineered materials and optoelectronic components and devices for precision use in industrial materials processing, optical communications, consumer electronics, semiconductor equipment, life sciences and automotive applications. We also generate revenue, earnings and cash flows from government funded research and development contracts relating to the development and manufacture of new technologies, materials and products.

Our customer base includes OEMs, laser end-users, system integrators of high-power lasers, manufacturers of equipment and devices for the industrial, optical communications, military, semiconductor, medical and life science markets, consumer, U.S. government prime contractors, various U.S. Government agencies and thermoelectric integrators.

Critical Accounting Estimates

The preparation of financial statements and related disclosures in conformity with accounting principles generally accepted in the United States of America (“U.S. GAAP”) and the Company’s discussion and analysis of its financial condition and results of operations requires the Company’s management to make judgments, assumptions and estimates that affect the amounts reported in its Consolidated Financial Statements and accompanying notes. Note 1 of the Notes to our Consolidated Financial Statements contained in Item 8 of this Annual Report on Form 10-K describes the significant accounting policies and accounting methods used in the preparation of the Company’s Consolidated Financial Statements. Management bases its estimates on historical experience and on various other assumptions that it believes to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities. Actual results may differ from these estimates.

Management believes the Company’s critical accounting estimates are those related to revenue recognition, allowance for doubtful accounts, warranty reserves, inventory valuation, business combinations, valuation of long-lived assets including acquired intangibles and goodwill, accrual of bonus and profit sharing estimates, accrual of income tax liability estimates and accounting for share-based compensation. Management believes these estimates to be critical because they are both important to the portrayal of the Company’s financial condition and results of operations, and they require management to make judgments and estimates about matters that are inherently uncertain.

Management has discussed the development and selection of these critical accounting estimates with the Audit Committee of the Board of Directors and the Audit Committee has reviewed the related disclosure. In addition, there are other items within our financial statements that require estimation, but are not deemed critical as described above. Changes in estimates used in these and other items could have a material impact on the financial statements.

Revenue Recognition

Revenues for product shipments are realizable when we have persuasive evidence of a sales arrangement, the product has been shipped or delivered, the sales price is fixed or determinable and collectability is reasonably assured. Title and risk of loss passes from the Company to its customer at the time of shipment in most cases, with the exception of certain customers for whom customer’s title does not pass and revenue is not recognized until the customer has received the product at its physical location.

The Company’s revenue recognition policy is consistently applied across the Company’s segments, product lines and geographical locations. Further for the periods covered herein, we did not have post shipment obligations such as training or installation, customer acceptance provisions, credits and discounts, rebates and price protection or other similar privileges. Our distributors and agents are not granted price protection. Our distributors and agents, who comprise less than 10% of consolidated revenue, have no additional product return rights beyond the right to return defective products covered by our warranty policy. We believe our revenue recognition practices are consistent with Staff Accounting Bulletin 104 and that we have adequately considered the requirements of Accounting Standards Codification 605 Revenue Recognition. Revenues generated from transactions other than product shipments are contract-related and have historically accounted for less than 1% of the Company’s consolidated revenues.

Allowance for Doubtful Accounts

The Company establishes an allowance for doubtful accounts based on historical experience and believes the collection of revenues, net of this reserve, is reasonably assured. The allowance for doubtful accounts is an estimate for potential non-collection of accounts receivable based on historical experience. The Company did not experience a non-collection of accounts receivable materially affecting its financial condition or results of operations as of and for each of the fiscal years ended June 30, 2017, 2016 and 2015. If the financial condition of the Company's customers were to deteriorate, causing an impairment of their ability to make payments, additional provisions for bad debts could be required in future periods. The Company's allowance for doubtful accounts reserve estimates have historically been proven to be materially correct based upon actual charges incurred.

Warranty Reserve

The Company records a warranty reserve as a charge against earnings based on a historical percentage of revenues utilizing actual returns over a period that approximates historical warranty experience. If actual returns in the future are not consistent with the historical data used to calculate these estimates, additional warranty reserves could be required. The Company's warranty reserve estimates have historically been proven to be materially correct based upon actual charges incurred.

Inventory Reserves

The Company generally records an inventory reserve as a charge against earnings for all products on hand for more than 12 to 24 months, depending on the products that have not been sold to customers or cannot be further manufactured for sale to alternative customers. An additional reserve may be recorded for products on hand that are in excess of product sold to customers over the same periods noted above. If actual market conditions are less favorable than projected, additional inventory reserves may be required. The Company's inventory reserve estimates have historically been proven to be materially correct based upon actual write-offs incurred.

Business Acquisitions

The Company accounts for business acquisitions by establishing the acquisition-date fair value as the measurement for all assets acquired and liabilities assumed. Certain provisions of U.S. GAAP prescribe, among other things, the determination of acquisition-date fair value of consideration paid in a business combination (including contingent consideration) and the exclusion of transaction and acquisition-related restructuring costs from acquisition accounting.

Goodwill and Indefinite-Lived Intangibles

The Company tests goodwill and indefinite-lived intangible assets on an annual basis for impairment or when events or changes in circumstances indicate that goodwill or indefinite-lived intangible assets might be impaired. Other intangible assets are amortized over their estimated useful lives. The determination of the estimated useful lives of other intangible assets and whether goodwill or indefinite-lived intangibles are impaired requires us to make judgments based upon long-term projections of future performance. Estimates of fair value are based on our projection of revenues, operating costs and cash flows of each reporting unit considering historical and anticipated results and general economic and market conditions. The fair values of the reporting units are determined using a discounted cash flow analysis based on historical and projected financial information as well as market analysis. The annual goodwill impairment analysis considers the financial projections of the reporting unit based on our most recently completed long-term strategic planning processes and also considers the current financial performance compared to our prior projections of the reporting unit. Changes in our internal structuring, financial performance, judgments and projections could result in an impairment of goodwill or indefinite-lived intangible assets. As of June 30, 2017, no reporting units are at risk for impairment as the fair value of the reporting units substantially exceed the carrying value.

The Company has the option to perform a qualitative assessment of goodwill prior to completing the two-step process described above to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount, including goodwill and other intangible assets. If the Company concludes that this is the case, it must perform the two-step process. Otherwise, the Company will forego the two-step process and does not need to perform any further testing.

As a result of the purchase price allocations from our acquisitions, and due to our decentralized structure, our goodwill is included in multiple reporting units which are the same as the Company's operating segments. Due to the cyclical nature of our business, and the other factors described in the section on Risk Factors set forth in Item 1A, of this Annual Report on Form 10-K, the profitability of our individual reporting units may periodically suffer from downturns in customer demand, operational challenges and other factors. These factors may have a relatively more pronounced impact on the individual reporting units as compared to the Company as a whole, and might adversely affect the fair value of the individual reporting units. If material adverse conditions occur that impact one or more of our reporting units, our determination of future fair value may not support the carrying amount of one or more of our reporting units, and the related goodwill would need to be impaired. Based upon our annual quantitative goodwill and indefinite-lived intangible assets impairment tests, the Company did not record any impairments of goodwill or indefinite-lived intangible assets for the fiscal year ended June 30, 2017.

Bonus and Profit Sharing

The Company records certain bonus and profit sharing estimates as a charge against earnings. These estimates are adjusted to actual based on final results of operations achieved during the fiscal year. Certain partial bonus amounts are paid quarterly based on interim company performance, and the remainder is paid after the fiscal year end. Other bonuses are paid annually.

Income Taxes

The Company prepares and files tax returns based on its interpretation of tax laws and regulations and records estimates based on these judgments and interpretations. In the normal course of business, the Company's tax returns are subject to examination by various taxing authorities, which may result in future tax, interest and penalty assessments by these authorities. Inherent uncertainties exist in estimates of many tax positions due to changes in tax law resulting from legislation, regulation and/or as concluded through the various jurisdictions' tax court systems. The Company recognizes the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities, based on the technical merits of the

position. The tax benefits recognized in the financial statements from such a position are measured based on the largest benefit that has a greater than 50% likelihood of being realized upon ultimate resolution. The amount of unrecognized tax benefits is adjusted for changes in facts and circumstances. For example, adjustments could result from significant amendments to existing tax law and the issuance of regulations or interpretations by the taxing authorities, new information obtained during a tax examination, or resolution of an examination. The Company believes that its estimates for uncertain tax positions are appropriate and sufficient to pay assessments that may result from examinations of its tax returns. The Company recognizes both accrued interest and penalties related to unrecognized tax benefits in income tax expense.

The Company has recorded valuation allowances against certain of its deferred tax assets, primarily those that have been generated from net operating losses in certain foreign taxing jurisdictions and acquired U.S. carryforwards. The Company adopted an accounting policy to apply acquired deferred tax liabilities to pre-existing deferred tax assets before evaluating the need for a valuation allowance for acquired deferred tax assets. In evaluating whether the Company would more likely than not recover these deferred tax assets, it has not assumed any future taxable income or tax planning strategies in the jurisdictions associated with these carry-forwards where history does not support such an assumption. Implementation of tax planning strategies to recover these deferred tax assets or future income generation in these jurisdictions could lead to the reversal of these valuation allowances and a reduction of income tax expense.

Share-Based Compensation

The Company recognizes share-based compensation expense over the requisite service period of the individual grantees, which generally equals the vesting period. The Company utilizes the Black-Scholes valuation model for estimating the fair value of share-based equity expense using assumptions such as the risk-free interest rate, expected stock price volatility, expected stock option life and expected dividend yield. The risk-free interest rate is derived from the average U.S. Treasury Note rate during the period, which approximates the rate in effect at the time of grant related to the expected life of the options. Expected volatility is based on the historical volatility of the Company's Common Stock over the period commensurate with the expected life of the options. The expected life calculation is based on the observed time to post-vesting exercise and/or forfeitures of options by our employees. The dividend yield is zero, based on the fact the Company has never paid cash dividends and has no current intention to pay cash dividends in the future.

Fiscal Year 2017 Compared to Fiscal Year 2016

The Company aligns its organizational structure into the following three reporting segments for the purpose of making operational decisions and assessing financial performance: (i) II-VI Laser Solutions, (ii) II-VI Photonics, and (iii) II-VI Performance Products. The Company is reporting financial information (revenue through operating income) for these reporting segments in this Annual Report on Form 10-K.

The following table sets forth bookings and select items from our Consolidated Statements of Earnings for the years ended June 30, 2017 and June 30, 2016 (\$ in millions except per share information):

	Year Ended June 30, 2017	Year Ended June 30, 2016
Bookings	\$1,072.2	\$875.3
	% of	% of

Edgar Filing: II-VI INC - Form 10-K

	Revenues			Revenues		
Total revenues	\$972.0	100.0	%	\$827.2	100.0	%
Cost of goods sold	583.7	60.1		514.4	62.2	
Gross margin	388.3	39.9		312.8	37.8	
Operating expenses:						
Internal research and development	96.8	10.0		60.4	7.3	
Selling, general and administrative	176.0	18.1		160.6	19.4	
Interest and other, net	(3.3)	(0.3)		1.9	0.2	
Earnings before income tax	118.8	12.2		89.9	10.9	
Income taxes	23.5	2.4		24.5	3.0	
Net earnings	\$95.3	9.8	%	\$65.5	7.9	%
Diluted earnings per share	\$1.48			\$1.04		

Executive Summary

Net earnings for fiscal year 2017 were \$95.3 million (\$1.48 per-share diluted), compared to \$65.5 million (\$1.04 per-share diluted) for the same period last fiscal year. The increase in net earnings for the fiscal year ended June 30, 2017 compared to the same period last year was primarily the result of increased revenues, favorable product mix at the II-VI Photonics segment and improved operational performance from all three segments. In particular, the Company has seen continued increased demand from the optical communications customer base as a result of continuation of the China broadband initiative, datacenter and U.S. metro upgrade cycles (including cable television). The Company's II-VI Laser Solutions segment realized increased demand for its carbon dioxide ("CO₂"), one-micron laser and diamond optics product lines. Net earnings were also favorably impacted by the earnout and technology transfer income received as part of the sale of the RF business of ANADIGICS last fiscal year recorded in Other expense (income), net. The Company recorded \$7.0 million or \$0.09 per share diluted of other income related to these transactions. In addition, the Company benefitted from lower income tax expenses as a result of reversing certain U.S. valuation allowances in conjunction with the acquisition of IPI. Partially offsetting the increase in net earnings were increased internal research and development expenses incurred in the II-VI Laser Solutions segment for the Company's investment in the high-volume VCSELs platform.

Consolidated

Bookings. Bookings are defined as customer orders received that are expected to be converted to revenues over the next 12 months. For long-term customer orders, the Company does not include in bookings the portion of the customer order that is beyond 12 months, due to the inherent uncertainty of such an order that far out in the future. Bookings for the year ended June 30, 2017 increased 22% to \$1.1 billion, compared to \$875.3 million for the same period last fiscal year. The Company's II-VI Photonics segment realized increased bookings of \$81.3 million, or 22%, over the same period last fiscal year due to increased orders from the ongoing Chinese broadband initiative, U.S. Metro, datacenter communications, and the continued investment in undersea fiber optic networks. The Company's II-VI Laser Solutions segment realized increased bookings of \$60.8 million, or 20%, over the same period last fiscal year. The increase was driven by higher demand for high and low power laser optics, fiber laser and direct diode laser components and optics and components supporting semiconductor photolithography. Additionally, the Company's II-VI Performance Products segment realized increased bookings of \$54.8 million, or 28% driven by increased demand for silicon carbide ("SiC") substrates supporting radio frequency ("RF") development and also power device products in automotive and industrial markets.

Revenues. Revenues for the year ended June 30, 2017 increased 18% to \$972.0 million, compared to \$827.2 million for the prior fiscal year. The Company has seen continued increased demand from the optical communications customer base as a result of continuation of the China broadband initiative, datacenter and U.S. metro upgrade cycles (including cable television). In addition, the Company's II-VI Laser Solutions segment saw increased demand for its products addressing CO₂, one-micron laser and diamond optic products.

Gross margin. Gross margin for the year ended June 30, 2017 was \$388.3 million, or 39.9%, of total revenues, compared to \$312.8 million, or 37.8%, of total revenues for the same period last fiscal year. The improvement in gross margin was primarily driven by incremental margins realized on the Company's higher revenue levels which increased approximately \$145.0 million from the prior year as well as favorable product mix primarily in the II-VI Photonics segment.

Internal research and development. Company-funded internal research and development expenses for the fiscal year ended June 30, 2017 were \$96.8 million, or 10.0% of revenues, compared to \$60.4 million, or 7.3% of revenues, last fiscal year. The increase in internal research and development expense for fiscal year 2017 is the result of the Company's continued investments in the development of the technology required to produce new optoelectronic

devices in large volume for future applications as well as new product introductions across the Company's segments. The Company anticipates the internal research and development expenses as a percentage of revenues to approximate the current run rate as the Company continues to invest in its growth strategies across its segments.

Selling, general and administrative. Selling, general and administrative ("SG&A") expenses for the year ended June 30, 2017 were \$176.0 million, or 18.1% of revenues, compared to \$160.6 million, or 19.4% of revenues, last fiscal year. The increase in SG&A in absolute dollars is the result of a higher revenue base requiring more level of SG&A support. The Company experienced favorable leverage as a result of capitalizing on synergies created from the Company's recent acquisitions over the past several years.

Interest and other, net. Interest and other, net for the year ended June 30, 2017 was income of \$3.3 million compared to expense of \$1.9 million last fiscal year. Included in interest and other, net were interest expense on borrowings, interest income on excess cash reserves, foreign currency gains and losses and contingent earnout and technology transfer income from the sale of the ANADIGICS RF business that occurred in June 2016. In particular, for the fiscal year ended June 30, 2017, other income consisted primarily of foreign currency gains of \$1.3 million, income from the residual agreements on the sale of the RF business noted above of \$7.0 million, and interest income of \$0.9 million on the Company's excess cash reserves offset by interest expense of \$6.8 million on outstanding borrowings. The prior year's expense of \$1.9 million included \$3.1 million of interest expense on the Company's

outstanding borrowings offset by \$1.2 million of interest income on the Company's excess cash reserves. The increase in interest expense in the current fiscal year is the result of higher levels of outstanding borrowings during the current fiscal year.

Income taxes. The Company's year-to-date effective income tax rate at June 30, 2017 was 19.8%, compared to an effective tax rate of 27.3% last fiscal year. The variation between the Company's effective tax rate and the U.S. statutory rate of 35% was primarily due to the Company's foreign operations, which are subject to income taxes at lower statutory rates. The lower year-to-date effective tax rate was primarily driven by the reversal of certain valuation allowances triggered by the acquisition of IPI which generated deferred tax liabilities which offset the previously reserved deferred tax asset.

Segment Reporting

Bookings, revenues and operating income for each of the Company's reportable segments are discussed below. Operating income differs from income from operations in that operating income excludes certain operational expenses included in other expense (income) – net as reported. Management believes operating income to be a useful measure for investors, as it reflects the results of segment performance over which management has direct control and is used by management in its evaluation of segment performance. See "Note 11. Segment and Geographic Reporting," to the Consolidated Financial Statements included in this Annual Report on Form 10-K for further information on the Company's reportable segments and for the reconciliation of operating income to net earnings, which is incorporated herein by reference.

II-VI Laser Solutions (\$ in millions)

	Year Ended		%	
	June 30,		Increase	
	2017	2016	(Decrease)	
Bookings	\$366.8	\$306.0	20	%
Revenues	\$339.3	\$303.0	12	%
Operating income	\$30.9	\$36.2	(15	%)

The Company's II-VI Laser Solutions segment includes the combined operations of II-VI Infrared Optics, II-VI HIGHYAG, II-VI Laser Enterprise, II-VI Laser Systems Group, II-VI OED, and II-VI EpiWorks. The Company acquired II-VI EpiWorks on February 1, 2016 and II-VI OptoElectronic Devices Division, on March 15, 2016.

Bookings for the fiscal year ended June 30, 2017 for II-VI Laser Solutions increased 20% to \$366.8 million, compared to \$306.0 million last fiscal year. Bookings included \$27.2 million for fiscal year 2017 and \$14.3 million for fiscal year 2016, respectively, attributed to the acquisitions of II-VI EpiWorks and II-VI OED. Exclusive of acquisitions, the increase in bookings for the current fiscal year was driven by higher demand for CO₂ and fiber laser and direct diode laser components and photolithography related products, including diamond product optics.

Revenues for the fiscal year ended June 30, 2017 for II-VI Laser Solutions increased 12% to \$339.3 million, compared to revenues of \$303.0 million last fiscal year. Revenues included \$24.0 million for fiscal 2017 and \$13.9 million for fiscal year 2016, respectively, attributed to the recent acquisitions. Exclusive of acquisitions, the increase in revenues for the fiscal year ended June 30, 2017 was the result of higher demand for high and low power laser

optics, one-micron laser applications and semiconductor photolithography tools and precision optics in laser applications up to 1 kilowatt for marking and engraving.

Operating income for the fiscal year ended June 30, 2017 for II-VI Laser Solutions decreased 15% to \$30.9 million, compared to \$36.2 million last fiscal year. Operating income was impacted by the segment's ongoing internal research and development investments for its new optoelectronic laser platform. During the current year, this expense increased approximately \$30.2 million over the prior year.

II-VI Photonics (\$ in millions)

	Year Ended		% Increase	
	June 30,	2016		
	2017			
Bookings	\$453.5	\$372.2	22	%
Revenues	\$418.5	\$325.9	28	%
Operating income	\$63.0	\$37.8	67	%

The Company's II-VI Photonics segment includes the combined operations of II-VI Photop and II-VI Optical Communications.

Bookings for the year ended June 30, 2017 for II-VI Photonics increased 22% to \$453.5 million, compared to \$372.2 million for the prior fiscal year. The increase in bookings during the current fiscal year was the result of increased orders from the ongoing Chinese broadband initiative, U.S. Metro, datacenter communications, and the continued investment in undersea fiber optic networks. The broadband China initiative continued to increase demand for the segment's transport and amplification component products, particularly 980nm pumps, optical channel monitors and integrated passive components used in optical communications. In addition, the segment saw increased demand for its infrared optics and industrial filters.

Revenues for the year ended June 30, 2017 for II-VI Photonics increased 28% to \$418.5 million, compared to \$325.9 million for last fiscal year. The Company continued to realize increased revenues from the broadband China initiative as China continues to expand its geographical broadband networks. In addition, increased market share gains in the datacenter communications market and undersea fiber optic networks and new product introductions fueled the higher revenues during the fiscal year ended June 30, 2017.

Operating income for the year ended June 30, 2017 for II-VI Photonics increased 67% to \$63.0 million, compared to an operating income of \$37.8 million last fiscal year. The increase in operating income was primarily due to incremental margin realized on the higher revenue volume as well as higher margin product mix, including terrestrial and submarine 980nm pumps and amplifiers, and new product introductions which have higher margin profiles.

II-VI Performance Products (\$ in millions)

	Year Ended		% Increase	
	June 30,	June 30,		
	2017	2016		
Bookings	\$251.9	\$197.1	28	%
Revenues	\$214.2	\$198.3	8	%
Operating income	\$21.6	\$17.8	21	%

The Company's II-VI Performance Products segment includes the business units of II-VI Marlow, II-VI M Cubed, II-VI Advanced Materials, II-VI Optical Systems and II-VI Performance Metals.

Bookings for the year ended June 30, 2017 for II-VI Performance Products increased 28% to \$251.9 million, compared to \$197.1 million for last fiscal year. The increase in bookings for the year ended June 30, 2017 were driven by increasing demand for SiC substrates for RF and power applications supporting growth in the 4G base station market, and supporting development of power device products in automotive and industrial markets as well as increased demand for EUV lithography wafer handling components for the segment's reaction bonded SiC material.

Revenues for the year ended June 30, 2017 for II-VI Performance Products increased 8% to \$214.2 million, compared to \$198.3 million for last fiscal year. The increase in revenues for the year ended June 30, 2017 was driven by continued growth in the 4G base station market which is expanding geographically. Revenue growth was also driven by increasing demand for 150mm power device products as the market enters the manufacturing phase in the transition from 100mm to 150mm SiC substrates. In addition, the segment's semiconductor product offerings experienced increased demands as EUV lithography begins to ramp as part of its anticipated adoption.

Operating income for the year ended June 30, 2017 for II-VI Performance Products increased 21% to \$21.6 million, compared to \$17.8 million for last fiscal year. Incremental margins on higher segment revenues led by SiC substrate revenues contributed to the increased operating income.

Fiscal Year 2016 Compared to Fiscal Year 2015

The following table sets forth bookings and select items from our Consolidated Statements of Earnings for the years ended June 30, 2016 and 2015. (\$ millions, except per share information):

	Year Ended June 30, 2016		Year Ended June 30, 2015	
Bookings	\$875.3		\$761.7	
		% of Revenues		% of Revenues
Total revenues	\$827.2	100.0 %	\$742.0	100.0 %
Cost of goods sold	514.4	62.2	470.4	63.4
Gross margin	312.8	37.8	271.5	36.6
Operating expenses:				
Internal research and development	60.4	7.3	51.3	6.9
Selling, general and administrative	160.6	19.4	143.5	19.3
Interest and other, net	1.9	0.2	(2.3)	(0.3)
Earnings before income tax	89.9	10.9	79.1	10.7
Income taxes	24.5	3.0	13.1	1.8
Net earnings	\$65.5	7.9 %	\$66.0	8.9 %
Diluted earnings per shares	\$1.04		\$1.05	

Consolidated

Bookings. Bookings for the year ended June 30, 2016 increased 15% to \$875.3 million, compared to \$761.7 million for the 2015 fiscal year. All of the Company's operating segments experienced stronger booking volumes in fiscal year ended June 30, 2016 compared to fiscal year ended June 30, 2015. The increased bookings were primarily lead by II-VI Photonics which realized increased bookings of \$89.3 million or 32% over fiscal year ended June 30, 2015. This segment experienced strong orders from the China broadband buildout program as well as increased demand for 100G metro deployments in the United States and demand for products that served the datacenter expansion.

Revenues. Revenues for the year ended June 30, 2016 increased 11% to \$827.2 million, compared to \$742.0 million for the fiscal year ended June 30, 2015. The increase in revenues during fiscal year 2016 as compared to fiscal year 2015 was driven by optical and data communication markets which experienced a cycle of investment and expansion. The Company's II-VI Photonics segment capitalized on these markets dynamics and realized increased revenues of \$65.1 million for fiscal year 2016.

Gross margin. Gross margin as a percentage of revenues for the year ended June 30, 2016 was 37.8%, compared to 36.6% for the fiscal year ended June 30, 2015. Improvement in gross margin for fiscal year 2016 was primarily driven by incremental margins realized on the Company's higher revenue levels as well as product mix at II-VI Photonics towards higher margin products relating to 980 nm pumps and undersea network deployments. The inclusion of the fiscal year 2016 acquisitions did not have a material impact to the year's gross margin.

Internal research and development. Company-funded internal research and development expenses for the year ended June 30, 2016 were \$60.4 million, or 7.3% of revenues, compared to \$51.3 million, or 6.9% of revenues, for the fiscal year ended June 30, 2015. The increase in internal research and development expense is the result of the Company's

continued investments in the development of the technology required to fabricate VCSELs in large volume for future applications as well as new product introductions across the Company's business units.

Selling, general and administrative. SG&A expenses for the fiscal year ended June 30, 2016 were \$160.6 million, or 19.4% of revenues, compared to \$143.5 million, or 19.3% of revenues, for the fiscal year ended June 30, 2015. The increase in SG&A expense in absolute dollars was primarily due to the fiscal year 2016 acquisitions' transaction expenses and severance totaling approximately \$11.3 million. The remaining increase in relative dollars was to support the higher revenue base in fiscal year 2016.

Interest and other, net. Interest and other, net for the year ended June 30, 2016 was expense of \$1.9 million compared to income of \$2.3 million for the prior fiscal year. Included in interest and other, net for the year ended June 30, 2016 were earnings on the Company's equity interest in Guangdong Fuxin Electronic Technology, interest expense on borrowings, interest income on excess cash reserves, and unrealized gains and losses on the Company's deferred compensation plan and foreign currency gains and losses. In, the fiscal year ended June 30, 2016 expense of \$1.9 million included \$3.1 million of interest expense on the Company's outstanding

borrowings, offset by \$1.2 million of interest income on the Company's excess cash reserves. In the fiscal year ended June 30, 2015, income of \$2.3 million primarily included a one-time settlement gain of \$7.7 million related to certain payment obligations from prior year acquisitions offset by foreign currency losses of \$2.2 million and \$2.0 million impairment charge on certain tradenames in the II-VI Photonics segment.

Income taxes. The Company's year-to-date effective income tax rate at June 30, 2016 was 27.3%, compared to an effective tax rate of 16.6% in fiscal year 2015. The variation between the Company's effective tax rate from continuing operations and the U.S. statutory rate of 35% was primarily due to the Company's foreign operations, which are subject to income taxes at lower statutory rates. The higher effective tax rate during the fiscal year ended June 30, 2016 is due to an \$8.5 million valuation allowance against certain U.S. based deferred tax assets.

II-VI Laser Solutions (\$ in millions)

	Year Ended		%	
	June 30,		Increase	
	2016	2015	(Decrease)	
Bookings	\$306.0	\$284.8	7	%
Revenues	\$303.0	\$287.9	5	%
Operating income	\$36.2	\$55.0	(34)	%

Bookings for the year ended June 30, 2016 for II-VI Laser Solutions increased 7% to \$306.0 million, compared to \$284.8 million for fiscal year June 30, 2015. Included in the bookings amounts was \$14.3 million of bookings attributed to the fiscal year 2016 acquisitions. Exclusive of this amount, bookings increased approximately \$6.9 million driven by demand for one-micron components for the industrial materials processing market as well higher aftermarket demand for the segment's CQ laser optics.

Revenues for the year ended June 30, 2016 for II-VI Laser Solutions increased 5% to \$303.0 million, compared to \$287.9 million for fiscal year ended June 30, 2015. Included in the revenue amount was \$13.9 million of revenue attributed to the fiscal year 2016 acquisitions. Exclusive of this amount, revenues were consistent with fiscal year 2015.

Operating income for the year ended June 30, 2016 for II-VI Laser Solutions decreased 34% to \$36.2 million, compared to \$55.0 million for fiscal year June 30, 2015. The decrease in operating income was primarily due to the inclusion of the operating results of the fiscal year 2016 acquisitions. Operating income was also negatively impacted by acquisition related transaction and severance expenses of \$11.3 million.

II-VI Photonics (\$ in millions)

	Year Ended		%	
	June 30,		Increase	
	2016	2015		
Bookings	\$372.2	\$282.9	32	%
Revenues	\$325.9	\$260.8	25	%
Operating income	\$37.8	\$7.2	425	%

Bookings for the year ended June 30, 2016 for II-VI Photonics increased 32% to \$372.2 million, compared to \$282.9 million for the fiscal year ended June 30, 2015. The increase in bookings was the result of market demand from the China broadband build-out, 100G metro deployments in the United States and undersea 980 nm pumps and high performance optical amplifiers.

Revenues for the year ended June 30, 2016 for II-VI Photonics increased 25% to \$325.9 million, compared to \$260.8 million for the fiscal year ended June 30, 2015. The increase in revenues was mainly attributable to increased customer demand for optical components and modules for the new deployment of CATV optical networks, the continued strength of the China broadband program by the government to extend the fiber to the home deployment, 4G wireless deployment, and accelerated 5G wireless development.

Operating income for the year ended June 30, 2016 for II-VI Photonics increased 425% to \$37.8 million, compared to an operating income of \$7.2 million for the fiscal year ended June 30, 2015. The increase in operating income was primarily due to incremental margins realized on the higher revenue levels as well as product mix to higher margin products including 980 nm pumps and optical amplifiers.

II-VI Performance Products (\$ in millions)

	Year Ended June 30,		% Increase	
	2016	2015		
Bookings	\$ 197.1	\$ 194.0	2	%
Revenues	\$ 198.3	\$ 193.3	3	%
Operating income	\$ 17.8	\$ 14.6	22	%

Bookings for the year ended June 30, 2016 for II-VI Performance Products increased 2% to \$197.1 million, compared to \$194.0 million for fiscal year June 30, 2015. The moderate increase in bookings was driven by increased demand of silicon carbide substrates used in RF applications.

Revenues for the year ended June 30, 2016 for II-VI Performance Products increased 3% to \$198.3 million, compared to \$193.3 million for fiscal year June 30, 2015. The increase in revenues was due to increased shipments of military and personal comfort related products.

Operating income for the year ended June 30, 2016 for II-VI Performance Products increased 22% to \$17.8 million, compared to \$14.6 million for fiscal year June 30, 2015. The increase in operating income was a combination of higher revenue levels as well as a shift in product mix to higher margin products primarily serving the segment's military markets.

LIQUIDITY AND CAPITAL RESOURCES

Historically, our primary sources of cash have been provided through operations and long-term borrowings. Other sources of cash include proceeds received from the exercise of stock options and sales of equity investments and businesses. Our historical uses of cash have been for capital expenditures, investments in research and development, business acquisitions, payments of principal and interest on outstanding debt obligations payments in satisfaction of employees' minimum tax obligations and purchases of treasury stock. Supplemental information pertaining to our sources and uses of cash is presented as follows:

Sources (uses) of Cash (millions):

Year Ended June 30,	2017	2016	2015
Net cash provided by operating activities	\$ 118.6	\$ 123.0	\$ 129.4
Additions to property, plant & equipment	(138.5)	(58.2)	(52.3)
Net proceeds (payments) on long-term borrowings	104.0	59.5	(65.5)
Purchases of businesses, net of cash acquired	(40.0)	(122.2)	-
Proceeds from exercises of stock options	15.1	9.7	5.2
Payments in satisfaction of employees' minimum tax obligations	(4.1)	(2.0)	(1.1)
Payment on earnout consideration	(2.0)	-	-
Purchases of treasury stock	-	(6.3)	(12.7)
Proceeds from the sale of business	-	45.0	-
Payments on holdback arrangements	-	-	(2.4)
Other financing activities	-	0.6	0.4
Effect of exchange rate changes on cash and cash equivalents and other	0.3	(4.3)	(2.1)

Net cash provided by operating activities:

Net cash provided by operating activities was \$118.6 million and \$123.0 million for the fiscal years ended June 30, 2017 and 2016, respectively. The decrease in cash provided by operating activities during the current fiscal year was due to increased working capital requirements to support higher revenue growth mainly relating to increased inventory build to address product demand as well as higher levels of accounts receivable from the revenue growth.

Net cash provided by operating activities was \$123.0 million and \$129.4 million for the fiscal years ended June 30, 2016 and 2015, respectively. The decrease in cash flows from operating activities in fiscal year 2016 compared to the fiscal year 2015 was mostly due to higher working capital requirements to accommodate the Company's increased business activities.

40

Net cash (used in) investing activities:

Net cash used in investing activities was \$177.2 million and \$135.2 million for the fiscal years ended June 30, 2017 and 2016, respectively. The increase in cash used in investing activities was the result of increased levels of capital expenditures of \$138.5 million in fiscal year 2017 compared to \$58.2 million in fiscal year 2016 was primarily driven by additional capital expenditures to increase the Company's capability to produce new optoelectronic devices as it accelerates its new technology investment platform. Additionally, during fiscal year 2017, the Company purchased Integrated Photonics Inc., located in Hillsborough, New Jersey, for \$39.4 million net of cash acquired and certain assets of DirectPhotonics Industries GmbH, located in Berlin, Germany, for \$0.6 million.

Net cash used in investing activities was \$135.2 million and \$52.2 million for the fiscal years ended June 30, 2016 and 2015, respectively. Net cash used in investing activities during the year ended June 30, 2016 consisted of \$122.2 million paid for purchases of businesses, net of cash acquired, capital expenditures of \$58.2 million offset by cash received for the sale of the RF business in the amount of \$45.0 million. Net cash used in investing activities for fiscal year 2015 consisted entirely of capital expenditures.

Net cash provided by (used in) financing activities:

Net cash provided by financing activities was \$111.6 million for the year ended June 30, 2017 compared to net cash provided by financing activities of \$61.5 million for the year ended June 30, 2016. During fiscal year 2017, the Company borrowed \$129.0 million to finance its current year acquisitions and investments in capital expenditures for its new VCSEL investment platform and other growth platforms. The Company also received \$15.1 million of proceeds from stock option exercises. Offsetting the increase in cash were payments made on outstanding borrowings of \$25.0 million, \$4.1 million of minimum tax withholding obligations on the vesting of employees' restricted and performance shares, \$2.0 million of payments on contingent earnout arrangements and \$1.4 million of debt issuance costs associated with the Amended Credit Facility (as defined below) entered into on July 28, 2016.

Company Credit Facilities

On July 28, 2016, the Company amended and restated its existing credit agreement. The Third Amended and Restated Credit Agreement (the "Amended Credit Facility") provides for a revolving credit facility of \$325 million, as well as a \$100 million term loan. The term loan is being repaid in consecutive quarterly principal payments on the first business day of each January, April, July and October, with the first payment having commenced on October 1, 2016, as follows: (i) twenty consecutive quarterly installments of \$5 million and (ii) a final installment of all remaining principal due and payable on the maturity date of July 2021. Amounts borrowed under the revolving credit facility are due and payable on the maturity date. The Amended Credit Facility is unsecured, but is guaranteed by each existing and subsequently acquired or organized wholly-owned domestic subsidiary of the Company. The Company has the option to request an increase to the size of the revolving credit facility in an aggregate additional amount not to exceed \$100 million. The Amended Credit Facility has a five-year term through July 28, 2021 and has an interest rate of either a Base Rate Option or a Euro-Rate Option, plus an Applicable Margin, as defined in the agreement governing the Amended Credit Facility. If the Base Rate option is selected for a borrowing, the Applicable Margin is 0.00% to 1.25% and if the Euro-Rate Option is selected for a borrowing, the Applicable Margin is 1.00% to 2.25%. The Applicable Margin is based on the Company's ratio of consolidated indebtedness to consolidated EBITDA. Additionally, the Amended Credit Facility is subject to certain covenants, including those relating to minimum interest coverage and maximum leverage ratios. As of June 30, 2017, the Company was in compliance with all covenants under its Amended Credit Facility.

In conjunction with the Company's Amended Credit Facility, the Company incurred approximately \$1.4 million of debt issuance costs which are being amortized over the term of the agreement.

The Company's yen denominated line of credit is a 500 million Yen (\$4.5 million) facility. The Yen line of credit matures in August 2020. The interest rate equal to the Euro-Rate, as defined in the loan agreement, plus 1.00% to 2.25%. At June 30, 2017 and 2016, the Company had 300 million yen outstanding under the line of credit. Additionally, the facility is subject to certain covenants, including those relating to minimum interest coverage and maximum leverage ratios. As of June 30, 2017, the Company had \$2.7 million outstanding and was in compliance with all covenants under its Yen facility.

The Company had aggregate availability of \$73.5 million and \$37.7 million under its lines of credit as of June 30, 2017 and 2016, respectively. The amounts available under the Company's lines of credit are reduced by outstanding letters of credit. As of June 30, 2017 and 2016, total outstanding letters of credit supported by the credit facilities were \$1.3 million and \$1.2 million respectively.

The weighted average interest rate of total borrowings was 2.2% and 1.6% for the years ended June 30, 2017 and 2016, respectively. The weighted-average of total borrowings for the fiscal years ended June 30, 2017 and 2016 was \$272.1 million and \$193.7 million, respectively.

In August 2014, the Board of Directors authorized the Company to purchase up to \$50.0 million of its Common Stock. The repurchase program has no expiration date and provides for shares to be purchased in the open market or in private transactions from time to time. Shares purchased by the Company are retained as treasury stock and are available for general corporate purposes. Since inception of the repurchase program the Company has repurchased 1,316,587 shares of its Common Stock for approximately \$19.0 million in the aggregate.

Our cash position, borrowing capacity and debt obligations are as follows (in millions):

	June 30, 2017	June 30, 2016
Cash and cash equivalents	\$271.9	\$218.4
Available borrowing capacity	73.5	37.7
Total debt obligation	343.5	235.9

The Company believes cash flow from operations, existing cash reserves and additional available borrowing capacity from its Amended Credit Facility will be sufficient to fund its working capital needs, capital expenditures and internal and external growth at least through fiscal year 2018. The Company's cash and cash equivalent balances are generated and held in numerous locations throughout the world, including amounts held outside the United States. As of June 30, 2017, the Company held approximately \$245 million of cash and cash equivalents outside of the United States. Cash balances held outside the United States could be repatriated to the United States, but, under current law, would potentially be subject to United States federal income taxes, less applicable foreign tax credits. The Company has not recorded deferred income taxes related to the majority of its undistributed earnings outside of the United States, as the majority of the earnings of the Company's foreign subsidiaries are indefinitely reinvested.

Off-Balance Sheet Arrangements

The Company's off-balance sheet arrangements include the operating lease obligations and the purchase obligations disclosed in the contractual obligations table below as well as letters of credit as discussed in Note 6 to the Company's Consolidated Financial Statements included in Item 8 of this Annual Report on Form 10-K. The Company enters into these off-balance sheet arrangements to acquire goods and services used in its business.

Tabular Disclosure of Contractual Obligations

	Payments Due By Period				
	Total	Less Than 1 Year	1-3 Years	3-5 Years	More Than 5 Years
Contractual Obligations (\$000)					
Long-term debt obligations	\$343,513	\$20,000	\$43,834	\$279,679	\$-
Interest payments ⁽¹⁾	47,381	10,058	18,375	12,854	6,094
Capital lease obligation	24,489	1,069	2,349	2,664	18,407
Operating lease obligations ⁽²⁾	66,600	14,400	22,900	11,400	17,900
Purchase obligations ⁽³⁾⁽⁴⁾	29,227	25,918	3,309	-	-
	-	-	-	-	-

Other long-term liabilities reflected on the balance sheet under GAAP

Total	\$511,210	\$71,445	\$90,767	\$306,597	\$42,401
-------	-----------	----------	----------	-----------	----------

- (1) Interest payments represent variable rate interest obligations based on the interest rate in place at June 30, 2017 relating to the Amended Credit Facility and interest relating to the Company's capital lease obligation.
- (2) Includes an obligation for the use of two parcels of land related to II-VI Performance Metals. The lease obligations extend through years 2039 and 2061, respectively.
- (3) A purchase obligation is defined as an agreement to purchase goods or services that is enforceable and legally binding on the Company and that specifies all significant terms, including fixed or minimum quantities to be purchased; minimum or variable price provisions, and the approximate timing of the transaction. These amounts are primarily comprised of open purchase order commitments to vendors for the purchase of supplies and materials.
- (4) Includes cash earnout opportunities based upon II-VI EpiWorks and IPI for the achievement of certain agreed upon financial and operational targets.

42

Pension obligations are not included in the table above. The Company expects defined benefit plan employer contributions to be \$2.6 million in 2018. Estimated funding obligations are determined by asset performance, workforce and retiree demographics, tax and employment laws and other actuarial assumptions which may change the annual funding obligations. The funded status of our defined benefit plans is disclosed in Note 14 to the Company's Consolidated Financial Statements.

The gross unrecognized income tax benefits at June 30, 2017, which are excluded from the above table, were \$7.6 million. The Company is not able to reasonably estimate the amount by which the liability will increase or decrease over time; however, at this time, the Company does not expect a significant payment related to these obligations within the next fiscal year.

Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK MARKET RISKS

The Company is exposed to market risks arising from adverse changes in foreign currency exchange rates and interest rates. In the normal course of business, the Company uses certain techniques and derivative financial instruments as part of its overall risk management strategy, primarily focused on its exposure to the Japanese Yen, Chinese Renminbi and the Euro. The Company also has transactions denominated in Euros, British Pounds Sterling, Chinese Renminbi and Swiss Francs. The Company commenced certain techniques to limit its exposure to the Renminbi and Euro during fiscal year 2017.

Foreign Exchange Risks

In the normal course of business, the Company enters into foreign currency forward exchange contracts with its financial institutions. The purpose of these contracts is to hedge ordinary business risks regarding foreign currencies on product sales. Foreign currency exchange contracts are used to limit transactional exposure to changes in currency rates.

Japanese Yen

The Company enters into foreign currency forward contracts that permit it to sell specified amounts of Japanese Yen expected to be received from its export sales for pre-established U.S. dollar amounts at specified dates. The forward contracts are denominated in the same foreign currencies in which export sales are denominated. These contracts provide the Company with an economic hedge in which settlement will occur in future periods, thereby limiting the Company's exposure. These contracts had a total notional amount of \$12.7 million and \$9.2 million at June 30, 2017 and 2016, respectively.

A 10% change in the yen to U.S. dollar exchange rate would have changed revenues in the range from a decrease of approximately \$6.9 million to an increase of approximately \$8.5 million for the year ended June 30, 2017.

Chinese Renminbi

During June 2017, the Company entered into a \$50.0 million month-to-month forward contract that matured on June 30, 2017, to limit exposure to the Chinese Renminbi. Upon expiration of this contract, the Company recorded \$1.1 million gain in the Consolidated Statement of Earnings.

Euro

During June 2017, the Company entered into a \$25.0 million month-to-month forward contract that matured on June 30, 2017, to limit exposure to the Euro. Upon expiration of this contract, the Company recorded an immaterial gain in the Consolidated Statement of Earnings.

The Company has short-term intercompany notes that are denominated in U.S. dollars with certain European subsidiaries. A 10% change in the euro to dollar exchange rate would have changed net earnings in the range from a decrease of \$1.7 million to an increase of \$2.0 million for the year ended June 30, 2017.

The Company monitors its positions and the credit ratings of the parties to these contracts. While the Company may be exposed to potential losses due to risk in the event of non-performance by the counterparties to these financial instruments, it does not currently anticipate such losses.

Assets and liabilities of foreign operations are translated into U.S. dollars using the period-end exchange rate, while income and expenses are translated using the average exchange rates for the reporting period. Translation adjustments are recorded as accumulated other comprehensive income within shareholders' equity.

Interest Rate Risks

As of June 30, 2017, the Company's total borrowings of \$343.5 million were from a line of credit borrowing of \$252.0 million denominated in U.S. dollars, a term loan denominated in U.S. dollars of \$85.0 million, a line of credit borrowing of \$2.7 million denominated in Japanese yen and a non-interest bearing note payable assumed in the acquisition of IPI of \$3.8 million. As such, the Company is exposed to changes in interest rates. A change in the interest rate of 100 basis points on these borrowings would have changed net earnings by \$1.3 million, or \$0.02 per-share diluted, for the fiscal year ended June 30, 2017.

Discount Rate Risks

As of June 30, 2017, a 10% change in the Company's discount rate used to determine the pension benefit obligation of the Switzerland Defined Benefit Plan would have had an immaterial impact on the Consolidated Financial Statements.

Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA
MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Management's Responsibility for Preparation of the Financial Statements

Management is responsible for the preparation of the financial statements included in this Annual Report on Form 10-K. The financial statements were prepared in accordance with the accounting principles generally accepted in the United States of America and include amounts that are based on the best estimates and judgments of management. The other financial information contained in this Annual Report on Form 10-K is consistent with the financial statements.

Management's Report on Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting. The Company's internal control system is designed to provide reasonable assurance concerning the reliability of the financial data used in the preparation of the Company's financial statements, as well as reasonable assurance with respect to safeguarding the Company's assets from unauthorized use or disposition.

All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement presentation and other results of such systems.

Management conducted an evaluation of the effectiveness of the Company's internal control over financial reporting as of June 30, 2017. In making this evaluation, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control – Integrated Framework (2013). Management's evaluation included reviewing the documentation of its controls, evaluating the design effectiveness of controls and testing their operating effectiveness. Management excluded from the scope of its assessment of internal control over financial reporting the operations and related assets of Integrated Photonics, Inc. which was acquired on June 19, 2017. The recent acquisition excluded from management's assessment of internal controls over financial reporting represented approximately \$59.8 million and \$45.3 million of total assets and net assets, respectively, as of June 30, 2017 and approximately \$1.3 million and \$0.1 million of total revenues and net income, respectively, for the fiscal year then ended. Based on the evaluation, management concluded that as of June 30, 2017, the Company's internal controls over financial reporting were effective.

Ernst & Young LLP, an independent registered public accounting firm, has issued its report on the effectiveness of our internal control over financial reporting as of June 30, 2017. Its report is included herein.

Report of Independent Registered Public Accounting Firm

The Board of Directors and Shareholders of II-VI Incorporated and Subsidiaries

We have audited II-VI Incorporated and Subsidiaries' internal control over financial reporting as of June 30, 2017, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). II-VI Incorporated and Subsidiaries' 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 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, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and 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.

As indicated in the accompanying Management's Report on Internal Control Over Financial Reporting, management's assessment of and conclusion on the effectiveness of internal control over financial reporting did not include the internal controls of Integrated Photonics, Inc., which is included in the 2017 consolidated financial statements of II-VI Incorporated and Subsidiaries and constituted \$59.8 million and \$45.3 million of total and net assets, respectively, as of June 30, 2017 and approximately \$1.3 million and \$0.1 million of total revenues and net income, respectively, for the fiscal year then ended. Our audit of internal control over financial reporting of II-VI Incorporated and Subsidiaries also did not include an evaluation of the internal control over financial reporting of Integrated Photonics

In our opinion, II-VI Incorporated and Subsidiaries maintained, in all material respects, effective internal control over financial reporting as of June 30, 2017, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of II-VI Incorporated and Subsidiaries as of June 30, 2017 and 2016, and the

related consolidated statements of earnings, comprehensive income, shareholders' equity and cash flows for each of the three years in the period ended June 30, 2017 of II-VI Incorporated and Subsidiaries and our report dated August 21, 2017 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

Pittsburgh, PA

August 21, 2017

46

Report of Independent Registered Public Accounting Firm

The Board of Directors and Shareholders of II-VI Incorporated and Subsidiaries

We have audited the accompanying consolidated balance sheets of II-VI Incorporated and Subsidiaries as of June 30, 2017 and 2016, and the related consolidated statements of earnings, comprehensive income, shareholders' equity and cash flows for each of the three years in the period ended June 30, 2017. Our audits also included the financial statement schedule listed in the Index at Item 15(a)(2). These financial statements and schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and schedule 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 financial statements referred to above present fairly, in all material respects, the consolidated financial position of II-VI Incorporated and Subsidiaries at June 30, 2017 and 2016, and the consolidated results of their operations and their cash flows for each of the three years in the period ended June 30, 2017, in conformity with U.S. generally accepted accounting principles. Also, in our opinion, the related financial statement schedule, when considered in relation to the basic financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), II-VI Incorporated and Subsidiaries' internal control over financial reporting as of June 30, 2017, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated August 21, 2017 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

Pittsburgh, PA

August 21, 2017

II-VI Incorporated and Subsidiaries

Consolidated Balance Sheets

(\$000)

June 30,	2017	2016
Assets		
Current Assets		
Cash and cash equivalents	\$271,888	\$218,445
Accounts receivable - less allowance for doubtful accounts of \$1,314 at June 30, 2017 and \$2,016 at June 30, 2016	193,379	164,817
Inventories	203,695	175,133
Prepaid and refundable income taxes	6,732	6,535
Prepaid and other current assets	26,602	18,033
Total Current Assets	702,296	582,963
Property, plant & equipment, net	367,728	242,857
Goodwill	250,342	233,755
Other intangible assets, net	133,957	124,590
Investment	11,727	11,354
Deferred income taxes	3,023	7,848
Other assets	8,224	8,614
Total Assets	\$1,477,297	\$1,211,981
Liabilities and Shareholders' Equity		
Current Liabilities		
Current portion of long-term debt	\$20,000	\$20,000
Accounts payable	65,540	53,796
Accrued compensation and benefits	58,178	59,012
Accrued income taxes payable	12,178	12,588
Other accrued liabilities	29,056	25,846
Total Current Liabilities	184,952	171,242
Long-term debt	322,022	215,307
Capital lease obligation	23,415	-
Deferred income taxes	15,345	11,103
Other liabilities	31,000	31,991
Total Liabilities	576,734	429,643
Shareholders' Equity		
Preferred stock, no par value; authorized - 5,000,000 shares; none issued	-	-
Common stock, no par value; authorized - 300,000,000 shares; issued - 74,081,451 shares at June 30, 2017; 72,840,257 shares at June 30, 2016	269,638	243,812
Accumulated other comprehensive income (loss)	(13,778)	(14,017)
Retained earnings	748,062	652,788
	1,003,922	882,583
Treasury stock, at cost - 10,940,062 shares at June 30, 2017 and 10,965,925 shares at June 30, 2016	(103,359)	(100,245)
Total Shareholders' Equity	900,563	782,338

Total Liabilities and Shareholders' Equity	\$1,477,297	\$1,211,981
See Notes to Consolidated Financial Statements.		

II-VI Incorporated and Subsidiaries

Consolidated Statements of Earnings

Year Ended June 30, (\$000, except per share data)	2017	2016	2015
Revenues	\$972,046	\$827,216	\$741,961
Costs, Expenses and Other Expense (Income)			
Cost of goods sold	583,693	514,403	470,363
Internal research and development	96,810	60,354	51,260
Selling, general and administrative	176,002	160,646	143,539
Interest expense	6,809	3,081	3,863
Other expense (income), net	(10,056)	(1,223)	(6,176)
Total Costs, Expenses and Other Expense (Income)	853,258	737,261	662,849
Earnings Before Income Taxes	118,788	89,955	79,112
Income Taxes	23,514	24,469	13,137
Net Earnings	\$95,274	\$65,486	\$65,975
Basic Earnings Per Share	\$1.52	\$1.07	\$1.08
Diluted Earnings Per Share	\$1.48	\$1.04	\$1.05

See Notes to Consolidated Financial Statements.

II-VI Incorporated and Subsidiaries

Consolidated Statements of Comprehensive Income

Year Ended June 30, (\$000)	2017	2016	2015
Net earnings	\$95,274	\$65,486	\$65,975
Other comprehensive income (loss):			
Foreign currency translation adjustments	(2,275)	(15,651)	(8,497)
Pension adjustment, net of taxes of \$674, (\$1,886), and \$(602) for the years ended June 30, 2017, 2016, and 2015, respectively	2,514	(7,031)	(2,244)
Other comprehensive income (loss)	239	(22,682)	(10,741)
Comprehensive income	\$95,513	\$42,804	\$55,234

See Notes to Consolidated Financial Statements.

II-VI Incorporated and Subsidiaries

Consolidated Statements of Shareholders' Equity

	Common Stock		Accumulated Other Comprehensive Income (Loss)	Retained Earnings	Treasury Stock		Total
(000)	Shares	Amount			Shares	Amount	
Balance - June 30, 2014	70,935	\$ 213,573	\$ 19,406	\$ 521,327	(9,482)	\$ (79,263)	\$ 675,043
Shares issued under share-based compensation plans	773	5,196	-	-	(75)	(1,085)	4,111
Net earnings	-	-	-	65,975	-	-	65,975
Purchases of treasury stock	-	-	-	-	(936)	(12,729)	(12,729)
Treasury stock under deferred compensation arrangements	72	418	-	-	(72)	(418)	-
Foreign currency translation adjustments	-	-	(8,497)	-	-	-	(8,497)
Share-based compensation expense	-	11,340	-	-	-	-	11,340
Pension adjustment, net of taxes of (\$602)	-	-	(2,244)	-	-	-	(2,244)
APIC pool reclassification	-	(3,812)	-	-	-	-	(3,812)
Tax deficiency from share-based compensation expense	-	(106)	-	-	-	-	(106)
Balance - June 30, 2015	71,780	\$ 226,609	\$ 8,665	\$ 587,302	(10,565)	\$ (93,495)	\$ 729,081
Shares issued under share-based compensation plans	1,046	9,653	-	-	(112)	(2,004)	7,649
Net earnings	-	-	-	65,486	-	-	65,486
Purchases of treasury stock	-	-	-	-	(381)	(6,284)	(6,284)
Treasury stock under deferred compensation arrangements	14	(1,538)	-	-	92	1,538	-
Foreign currency translation adjustments	-	-	(15,651)	-	-	-	(15,651)
Share-based compensation expense	-	9,675	-	-	-	-	9,675
Pension adjustment, net of taxes of (\$1,886)	-	-	(7,031)	-	-	-	(7,031)
Tax deficiency from share-based compensation expense	-	(587)	-	-	-	-	(587)
Balance - June 30, 2016	72,840	\$ 243,812	\$ (14,017)	\$ 652,788	(10,966)	\$ (100,245)	\$ 782,338
Shares issued under share-based compensation	1,204	15,092	-	-	(159)	(4,136)	10,956

Edgar Filing: II-VI INC - Form 10-K

plans							
Net earnings	-	-	-	95,274	-	-	95,274
Treasury stock under deferred compensation arrangements	37	(1,022)	-	-	185	1,022	-
Foreign currency translation adjustments	-	-	(2,275)	-	-	-	(2,275)
Share-based compensation expense	-	11,756	-	-	-	-	11,756
Pension adjustment, net of taxes of \$674	-	-	2,514	-	-	-	2,514
Balance - June 30, 2017	74,081	\$ 269,638	\$ (13,778)	\$ 748,062	(10,940)	\$ (103,359)	\$ 900,563

See Notes to Consolidated Financial Statements.

II-VI Incorporated and Subsidiaries

Consolidated Statements of Cash Flows

Year Ended June 30, (\$000)	2017	2016	2015
Cash Flows from Operating Activities			
Net earnings	\$95,274	\$65,486	\$65,975
Adjustments to reconcile net earnings to net cash provided by operating activities:			
Depreciation	50,894	44,324	41,114
Amortization	12,743	12,339	11,969
Share-based compensation expense	11,756	9,675	11,340
Impairment of intangible assets	-	-	1,964
(Gains) losses on foreign currency remeasurements and transactions	(1,275)	(51)	2,178
Earnings from equity investment	(744)	(29)	(948)
Deferred income taxes	(1,184)	977	(3,781)
Excess tax benefits from share-based compensation expense	-	(589)	(335)
Increase (decrease) in cash from changes in (net of effects of acquisitions and dispositions):			
Accounts receivable	(26,247)	(20,770)	(10,742)
Inventories	(24,992)	(8,650)	(4,207)
Accounts payable	6,704	5,715	61
Income taxes	735	13,416	7,589
Other operating net assets	(5,048)	1,127	7,189
Net cash provided by operating activities	118,616	122,970	129,366
Cash Flows from Investing Activities			
Additions to property, plant & equipment	(138,517)	(58,170)	(52,313)
Proceeds from the sale of business	-	45,000	-
Purchases of businesses, net of cash acquired	(40,015)	(122,157)	-
Other investing activities	1,291	161	67
Net cash used in investing activities	(177,241)	(135,166)	(52,246)
Cash Flows from Financing Activities			
Proceeds from borrowings	129,000	125,200	3,000
Payments on borrowings	(25,000)	(65,700)	(68,500)
Payment on earnout consideration	(2,000)	-	-
Proceeds from exercises of stock options	15,092	9,653	5,196
Payments in satisfaction of employees' minimum tax obligations	(4,136)	(2,004)	(1,089)
Debt issuance costs	(1,384)	-	-
Purchases of treasury stock	-	(6,284)	(12,729)
Payments on holdback arrangements	-	-	(2,350)
Other financing activities	-	587	408
Net cash provided by (used in) financing activities	111,572	61,452	(76,064)
Effect of exchange rate changes on cash and cash equivalents	496	(4,445)	(2,082)
Net increase (decrease) in cash and cash equivalents	53,443	44,811	(1,026)
Cash and Cash Equivalents at Beginning of Period	218,445	173,634	174,660
Cash and Cash Equivalents at End of Period	\$271,888	\$218,445	\$173,634

Non cash transactions:

Purchases of business - earnout consideration recorded in Other liabilities	\$-	\$2,417	\$-
Purchases of business - earnout consideration recorded in Other accrued liabilities	\$2,250	\$1,935	\$-
Capital lease obligation incurred on facility lease	\$25,000	\$-	\$-
Additions to property, plant & equipment included in accounts payable	\$4,428	\$-	\$-

See Notes to Consolidated Financial Statements.

II-VI Incorporated and Subsidiaries

Notes to the Consolidated Financial Statements

Note 1. Nature of Business and Summary of Significant Accounting Policies

Nature of Business. II-VI Incorporated and its subsidiaries (the “Company,” “we,” “us,” or “our”), a global leader in engineered materials and optoelectronic components and devices, is a vertically-integrated manufacturing company that develops, manufactures and markets engineered materials and optoelectronic components and devices for precision use in industrial materials processing, optical communications, military, consumer electronics, semiconductor equipment, life sciences and automotive applications. The Company markets its products through its direct sales force and through distributors and agents.

The Company uses certain uncommon materials and compounds to manufacture its products. Some of these materials are available from only one proven outside source. The continued high quality of these materials is critical to the stability of the Company’s manufacturing yields. The Company has not experienced significant production delays due to a shortage of materials. However, the Company does occasionally experience problems associated with vendor-supplied materials not meeting specifications for quality or purity. A significant failure of the Company’s suppliers to deliver sufficient quantities of necessary high-quality materials on a timely basis could have a material adverse effect on the Company’s results of operations.

Principles of Consolidation. The Consolidated Financial Statements include the accounts of the Company. All intercompany transactions and balances have been eliminated.

Estimates. The preparation of financial statements in conformity with accounting principles generally accepted in the United States (“U.S. GAAP”) requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Foreign Currency Translation. For II-VI Singapore Pte., Ltd. and its subsidiaries, II-VI Laser Enterprise of the II-VI Laser Solutions segment, II-VI Network Solutions Division of the II-VI Photonics segment, and II-VI Performance Metals of the II-VI Performance Products segment the functional currency is the United States (U.S.) dollar. The determination of the functional currency is made based on the appropriate economic and management indicators.

For all other foreign subsidiaries, the functional currency is the local currency. Assets and liabilities of those operations are translated into U.S. dollars using period-end exchange rates while income and expenses are translated using the average exchange rates for the reporting period. Translation adjustments are recorded as accumulated other comprehensive income within shareholders’ equity in the accompanying Consolidated Balance Sheets.

Cash and Cash Equivalents. The Company considers highly liquid investment instruments with an original maturity of three months or less to be cash equivalents. We place our cash and cash equivalents with high credit quality financial institutions and to date have not experienced credit losses in these instruments. Cash of foreign subsidiaries is on deposit at banks in China, Vietnam, Singapore, Japan, Switzerland, the Netherlands, Germany, the Philippines, Belgium, Italy, Hong Kong, the United Kingdom, South Korea and Taiwan.

Accounts Receivable. The Company establishes an allowance for doubtful accounts based on historical experience and believes the collection of revenues, net of this allowance, is reasonably assured.

The Company factored a portion of the accounts receivable of its Japan subsidiary during each of the years ended June 30, 2017 and 2016. Factoring is done with high credit quality financial institutions in Japan. During the years ended June 30, 2017 and 2016, \$23.1 million and \$20.5 million, respectively, of accounts receivable had been factored. As of June 30, 2017 and 2016, the amount included in Other accrued liabilities representing the Company's obligation to the bank for these receivables factored with recourse was immaterial.

Inventories. Inventories are valued at the lower of cost or market ("LCM"), with cost determined on the first-in, first-out basis. Inventory costs include material, labor and manufacturing overhead. Market cannot exceed the net realizable value (i.e., estimated selling price in the ordinary course of business less reasonably predicted costs of completion and disposal) and market shall not be less than net realizable value reduced by an allowance for an approximately normal profit margin. In evaluating LCM, management also considers, if applicable, other factors as well, including known trends, market conditions, currency exchange rates and other such issues. The Company generally records an inventory reserve as a charge against earnings for all products on hand more than 12 to 24 months depending on the products that have not been sold to customers or cannot be further manufactured for sale to alternative customers. An additional reserve may be recorded for product on hand that is in excess of product sold to customers over the same periods noted above. Inventories are presented net of reserves. The reserves totaled \$18.5 million and \$17.7 million at June 30, 2017 and 2016, respectively.

Property, Plant and Equipment. Property, plant and equipment are carried at cost or fair market value upon acquisition. Major improvements are capitalized, while maintenance and repairs are generally expensed as incurred. The Company reviews its property, plant and equipment and other long-lived assets for impairment whenever events or circumstances indicate that the carrying amounts may not be recoverable. Depreciation for financial reporting purposes is computed primarily by the straight-line method over the estimated useful lives for building, building improvements and land improvements of 10 to 20 years and three to 20 years for machinery and equipment.

Business Combinations. The Company accounts for business acquisitions by establishing the acquisition-date fair value as the measurement for all assets acquired and liabilities assumed. Certain provisions of U.S. GAAP prescribe, among other things, the determination of acquisition-date fair value of consideration paid in a business combination (including contingent consideration) and the exclusion of transaction and acquisition-related restructuring costs from acquisition accounting. The Company accounts for contingent consideration received in accordance with the “Loss Recovery Approach” under U.S. GAAP. Contingent consideration is accounted for as a gain contingency and not recognized in other expense (income), net until all contingencies have been satisfied.

Goodwill. The excess purchase price over the fair market value allocated to identifiable tangible and intangible net assets of businesses acquired is reported as goodwill in the accompanying Consolidated Balance Sheets. The Company tests goodwill for impairment at least annually as of April 1, or when events or changes in circumstances indicate that goodwill might be impaired. The evaluation of impairment involves comparing the current fair value of the Company’s reporting units to the recorded value (including goodwill). The Company uses a discounted cash flow (“DCF”) model and a market analysis to determine the current fair value of its reporting units. A number of significant assumptions and estimates are involved in estimating the forecasted cash flows used in the DCF model, including markets and market shares, sales volume and pricing, costs to produce, working capital changes and income tax rates. Management considers historical experience and all available information at the time the fair values of the reporting units are estimated.

The Company has the option to perform a qualitative assessment of goodwill prior to completing the two-step process described above to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount, including goodwill and other intangible assets. If the Company concludes that this is the case, it must perform the two-step process. Otherwise, the Company will forego the two-step process and does not need to perform any further testing.

Intangibles. Intangible assets are initially recorded at their cost or fair market value upon acquisition. Finite-lived intangible assets are amortized for financial reporting purposes using the straight-line method over the estimated useful lives of the assets ranging from five to 20 years. Indefinite-lived intangible assets are not amortized but tested annually for impairment at April 1, or when events or changes in circumstances indicate that indefinite-lived intangible assets might be impaired.

Equity Method Investments. The Company has an equity investment in Guangdong Fuxin Electronic Technology based in Guangdong Province, China of 20.2%, which is accounted for under the equity method of accounting. The total carrying value of the investment recorded at June 30, 2017 and June 30, 2016 was \$11.7 million and \$11.4 million, respectively. During the years ended June 30, 2017, 2016 and 2015, the Company’s pro-rata share of earnings from this investment was \$0.7 million, \$0.1 million and \$0.9 million, respectively, and was recorded in other expense (income), net in the Consolidated Statements of Earnings. During the years ended June 30, 2017, 2016 and 2015, the Company received dividends from this equity investment of \$0.4 million, \$0.6 million and \$0.6 million, respectively.

Commitments and Contingencies. Liabilities for loss contingencies arising from claims, assessments, litigation, fines, and penalties and other sources are recorded when it is probable that a liability has been incurred and the amount of the assessment and/or remediation can be reasonably estimated. Legal costs incurred in connection with loss

contingencies are expensed as incurred. Such accruals are adjusted as further information develops or circumstances change. The Company had no material loss contingency liabilities at June 30, 2017 related to commitments and contingencies.

Accrued Bonus Compensation and Benefits. The Company records bonus and profit sharing estimates as a charge against earnings. These estimates are adjusted to actual based on final results of operations achieved during the fiscal year. Certain partial bonus amounts are paid on an interim basis, and the remainder is paid after the fiscal year end after the final determination of the applicable percentage or amounts. Other bonuses are paid annually.

Warranty Reserve. The Company records a warranty reserve as a charge against earnings based on a percentage of revenues utilizing actual returns over a period that approximates historical warranty experience with adjustments possible for changes in product lines or unusual conditions that come to the Company's attention.

Income Taxes. Deferred income tax assets and liabilities are determined based on the differences between the consolidated financial statement and tax basis of assets and liabilities using enacted tax rates in effect in the years in which the differences are expected to reverse. Valuation allowances are established when necessary to reduce deferred income tax assets to the amount more likely than not to be realized. The Company adopted an accounting policy to apply acquired deferred tax liabilities to pre-existing deferred tax assets before evaluating the need for a valuation allowance for acquired deferred tax assets.

The Company recognizes the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities, based on the technical merits of the position. The tax benefits recognized in the financial statements from such a position are measured based on the largest benefit that has a greater than 50% likelihood of being realized upon ultimate resolution. The amount of unrecognized tax benefits is adjusted for changes in facts and circumstances. For example, adjustments could result from significant amendments to existing tax law and the issuance of regulations or interpretations by the taxing authorities, new information obtained during a tax examination, or resolution of an examination. The Company believes that its estimates for uncertain tax positions are appropriate and sufficient to pay assessments that may result from examinations of its tax returns. The Company recognizes both accrued interest and penalties related to unrecognized tax benefits in income tax expense.

Revenue Recognition. The Company recognizes revenues for product shipments when persuasive evidence of a sales arrangement exists, the product has been shipped or delivered, the sale price is fixed or determinable and collectability is reasonably assured. Title and risk of loss passes from the Company to its customer at the time of shipment in most cases with the exception of certain customers. For these customers, title does not pass and revenue is not recognized until the customer has received the product at its physical location.

We establish an allowance for doubtful accounts based on historical experience and believe the collection of revenues, net of this reserve, is reasonably assured. Our reserve estimate has historically been proven to be materially correct based upon actual charges incurred.

The Company's revenue recognition policy is consistently applied across the Company's segments, product lines and geographical locations. Further for the periods covered herein, we did not have post shipment obligations such as training or installation, customer acceptance provisions, credits and discounts, rebates and price protection, or other similar privileges. Our distributors and agents are not granted price protection. Our distributors and agents, which comprise less than 10% of consolidated revenues, have no additional product return rights beyond the right to return defective products covered by our warranty policy. Revenues generated from transactions other than product shipments are contract related and have historically accounted for less than 1% of consolidated revenues. We believe our revenue recognition practices have adequately considered the requirements under U.S. GAAP.

Shipping and Handling Costs. Shipping and handling costs billed to customers are included in revenues. Shipping and handling costs incurred by the Company are included in selling, general and administrative expenses in the accompanying Consolidated Statements of Earnings. Total shipping and handling revenue and costs included in revenues and in selling, general and administrative expenses were not significant for the fiscal years ended June 30, 2017, 2016 and 2015.

Research and Development. Internal research and development costs and costs not related to customer and government funded research and development contracts are expensed as incurred.

Share-Based Compensation. Share-based compensation arrangements require the recognition of the grant-date fair value of stock compensation in net earnings. The Company recognizes the share-based compensation expense over the requisite service period of the individual grantees, which generally equals the vesting period.

Workers' Compensation. The Company is self-insured for certain losses related to workers' compensation for the majority of its U.S. employees. When estimating the self-insurance liability, the Company considers a number of factors, including historical claims experience, demographic and severity factors and valuations provided by independent third-party consultants. At least annually, management reviews its assumptions and valuations to determine the adequacy of the self-insurance liability.

Accumulated Other Comprehensive Income. Accumulated other comprehensive income is a measure of all changes in shareholders' equity that result from transactions and other economic events in the period other than transactions with owners. Accumulated other comprehensive income is a component of shareholders' equity and consists of accumulated foreign currency translation adjustments of (\$8.4) million and (\$6.2) million as of June 30, 2017 and 2016, respectively, and pension adjustments of (\$5.4) million and (\$7.8) million as of June 30, 2017 and 2016, respectively.

Fair Value Measurements. The Company applies fair value accounting for all financial assets and liabilities that are required to be recognized or disclosed at fair value in the financial statements. Fair value is defined as the price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. When determining the fair value measurements for assets and liabilities, the Company considers the principal or most advantageous market in which the Company would transact, and the market-based risk measurements or assumptions that market participants would use in pricing the asset or liability, such as inherent risk, transfer restrictions and credit risk.

Operating Leases. The Company classifies operating leases in accordance with the provisions of lease accounting. Rent expense under noncancelable operating leases with scheduled rent increases or rent holidays is accounted for on a straight-line basis over the lease term, beginning on the date of initial possession or the effective date of the lease agreement. The amount of the excess straight-line rent expense over scheduled payments is recorded as a deferred liability. The current portion of unamortized deferred lease costs is included in other accrued liabilities and the long-term portion is included in other liabilities in the Consolidated Balance Sheets.

Capital Leases. The Company accounts for capital leases at the lesser of the estimated fair market value of the leased property or the net present value of the aggregate future minimum lease payments. The current and long-term portion of the capital lease obligation is recorded in Other accrued liabilities and Capital lease obligations, respectively, in the Consolidated Balance Sheet. Capital lease assets are included in property, plant & equipment and are generally depreciated over the term of the lease. Interest expense on capital leases are included in interest expense in the Consolidated Statement of Earnings.

Recently Issued Financial Accounting Standards

Adopted Pronouncements

In April 2015, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) 2015-03, Interest – Imputation of Interest (Subtopic 835-30): Simplifying the Presentation of Debt Issuance Costs. This ASU requires entities to present debt issuance costs in the balance sheet as a direct deduction from the carrying amount of the corresponding debt liability, consistent with debt discounts. The Company adopted ASU 2015-03, as clarified by ASU 2015-15, which did not have a material impact on the Company’s Consolidated Financial Statements other than corresponding reductions to total assets and total liabilities on the Condensed Consolidated Balance Sheets. Prior to adoption, the Company recorded deferred financing costs as Other assets. Upon adoption, the Company reclassified these costs as a reduction to long term debt and retrospectively reclassified \$0.6 million that were previously presented as deferred financing costs, an asset on the Consolidated Balance Sheets as of June 30, 2016. There was no effect on the Consolidated Statements of Earnings as a result of the adoption.

In September 2015, the FASB issued ASU 2015-16, Business Combinations (Topic 805): Simplifying the Accounting for Measurement-Period Adjustments. This update requires that an acquirer recognize adjustments to provisional amounts that are identified during the measurement period in the reporting period in which the adjustment amounts are determined. The adoption of this standard did not have a material effect on the Company’s Consolidated Financial Statements.

In April 2015, the FASB issued ASU 2015-05, Intangibles - Goodwill and Other - Internal-Use Software (Subtopic 350-40): Customer’s Accounting for Fees Paid in a Cloud Computing Arrangement. This update provides guidance about whether a cloud computing arrangement includes a software license. The adoption of this standard did not have a material effect on the Company’s Consolidated Financial Statements.

In February 2015, the FASB issued ASU 2015-02, Consolidation (Topic 810): Amendments to the Consolidation Analysis. This update affects reporting organizations that are required to evaluate whether they should consolidate certain legal entities. The adoption of this standard did not have a material effect on the Company's Consolidated Financial Statements.

In August 2014, the FASB issued ASU 2014-15, Presentation of Financial Statements-Going Concern. This update provides U.S. GAAP guidance on management's responsibility in evaluating whether there is substantial doubt about a company's ability to continue as a going concern and about related footnote disclosures. For each reporting period, management will be required to evaluate whether there are conditions or events that raise substantial doubt about a company's ability to continue as a going concern within one year from the date the financial statements are issued. The adoption of this ASU did not have a material effect on the Company's Consolidated Financial Statements.

Revenue Recognition Pronouncement Currently Under Evaluation

In May 2014, the FASB issued ASU 2014-09: Revenue from Contracts with Customers (Topic 606) which supersedes virtually all existing revenue recognition guidance under U.S. GAAP. The update's core principle is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The update allows for the use of either the retrospective or modified retrospective approach of adoption. On July 9, 2015, the FASB approved a one year deferral of the effective date of the update. The update will be effective for the Company's 2019 fiscal year (July 1, 2018). In May 2016, the FASB issued an amendment which did not change the core principles of the guidance in Topic 606. Rather, the amendments in this update affect only narrow aspects of Topic 606.

We commenced our evaluation of the impact of the ASU in fiscal 2017 by evaluating its impact on selected contracts at each of our business segments. As the ASU will supersede all existing revenue guidance affecting U.S. GAAP, it could impact revenue and cost recognition on our contracts across all our business segments, as well as our business processes and our information technology. As a result, our evaluation of the effect of the ASU will extend through fiscal year 2018. To date, the Company has completed its assessment of its military related contracts that comprise approximately 10% of consolidated revenues and have tentatively concluded that the Company will accelerate the recognition of revenue under the ASU for these contracts as the customer obtains control of the goods or service promised in the contract. For the commercial portion of the Company's business, we will complete our assessment in fiscal year 2018. Based upon our evaluation to date, we cannot currently estimate the impacts of adopting the ASU. We have periodically updated our Audit Committee on our progress made towards this adoption. The Company will adopt this ASU using the modified retrospective method whereby the cumulative effect of applying the ASU would be recognized at the beginning of the year of adoption.

Other Pronouncements Currently Under Evaluation

In May 2017, the FASB issued ASU 2017-09, Compensation-Stock Compensation (Topic 718): Scope of Modification Accounting. ASU 2017-09 provides clarification on when modification accounting should be used for changes to the terms or conditions of a share-based payment award. This ASU does not change the accounting for modifications but clarifies that modification accounting guidance should only be applied if there is a change to the value, vesting conditions, or award classification and would not be required if the changes are considered non-substantive. The new guidance will be applied prospectively to awards modified on or after the adoption date. The guidance is effective for annual periods, and interim periods within those annual periods, beginning after December 15, 2017. Early adoption is permitted. The standard will be effective for the Company's 2018 fiscal year. The adoption of this ASU is not expected to have a material effect on the Company's Consolidated Financial Statements.

In March 2017, the FASB issued ASU 2017-07, Consolidation (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost. This update affects employers' presentation of defined benefit retirement plan costs. Early adoption is permitted. The standard will be effective for the Company's 2019 fiscal year. Early adoption is permitted. The adoption of this ASU is not expected to have a material effect on the Company's Consolidated Financial Statements.

In January 2017, the FASB issued ASU 2017-04, Intangibles – Goodwill and Other (Topic 350): Simplifying the Accounting for Goodwill Impairment. This standard removes the second step of the goodwill impairment test, where a determination of the fair value of individual assets and liabilities of a reporting unit were needed to measure the goodwill impairment. Under this updated standard, goodwill impairment will now be the amount by which a reporting unit's carrying value exceeds its fair value, not to exceed the carrying amount of goodwill. The Company will adopt this for any impairment test performed after July 1, 2017 as permitted under the standard.

In January 2017, the FASB issued ASU 2017-01, Business Combinations (Topic 805): Clarifying the definition of a business. This update changes the definition of a business to assist entities with evaluating when a set of transferred assets and activities is a business. Early adoption is permitted. The standard will be effective for the Company's 2019 fiscal year. Early adoption is permitted. The adoption of this ASU is not expected to have a material effect on the Company's Consolidated Financial Statements.

In October 2016, the FASB issued ASU 2016-16, Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory. This update requires that when intra-entity asset transfers occur, the entity must recognize tax effects in the period in which the transfer occurs. The standard will be effective for The Company's 2019 fiscal year. Early adoption is permitted. The adoption of this ASU is not expected to have a material effect on the Company's Consolidated Financial Statements.

In August 2016, the FASB issued ASU 2016-15, Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments. The guidance clarifies how entities should classify certain cash receipts and cash payments on the statement of cash flows. The guidance also clarifies how the predominance principle should be applied when cash receipts and cash payments have aspects of more than one class of cash flow. The update will be effective for the Company's 2019 fiscal year. Early adoption is permitted. The Company is evaluating the impact of this guidance on the Company's Consolidated Financial Statements.

In June 2016, the FASB issued ASU 2016-13, Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments. This update is intended to provide financial statement users with more decision-useful information about expected credit losses and other commitments to extend credit held by the reporting entity. The standard replaces the incurred loss impairment methodology in current GAAP with one that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. The update will be effective for the Company’s 2021 fiscal year. Early adoption is permitted. The Company is evaluating the impact of this guidance on the Company’s Consolidated Financial Statements.

In March 2016, the FASB issued ASU 2016-09, Compensation – Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting. This update simplifies several aspects of the accounting for employee share-based payment transactions, including the accounting for income taxes, forfeitures, and statutory tax withholding requirements, and classification in the statement of cash flows. The standard will be effective for the Company’s 2018 fiscal year. Early adoption is permitted. The adoption of this ASU is not expected to have a material effect on the Company’s Consolidated Financial Statements.

In March 2016, the FASB issued ASU 2016-07, Investments – Equity Method and Joint Ventures (Topic 323): Simplifying the Transition to the Equity Method of Accounting. This update eliminates the requirement to retrospectively apply the equity method in previous periods when an investor obtains significant influence over an investee. The standard will be effective for the Company’s 2018 fiscal year. Early adoption is permitted. The adoption of this ASU is not expected to have a material effect on the Company’s Consolidated Financial Statements.

In February 2016, the FASB issued ASU 2016-02, Leases (Topic 842): This update requires that a lessee recognize leased assets with terms greater than 12 months on the balance sheet for the rights and obligations created by those leases. The standard will be effective for the Company’s 2020 fiscal year. Early adoption is permitted. The Company is evaluating the impact of this guidance on the Company’s Consolidated Financial Statements.

In January 2016, the FASB issued ASU 2016-01, Financial Instruments – Recognition and measurement of Financial Assets and Financial Liabilities (Topic 825): This update requires that public entities measure equity investments with readily determinable fair values, at fair value, with changes in their fair value recorded through net income. This ASU also clarifies that an entity should evaluate the need for a valuation allowance on a deferred tax asset related to available for sale securities in combination with the entity’s other deferred tax assets. Early adoption is permitted. The standard will be effective for the Company’s 2018 fiscal year. The adoption of this ASU is not expected to have a material effect on the Company’s Consolidated Financial Statements.

In July 2015, the FASB issued ASU 2015-11, Inventory (Topic 330): Simplifying the Measurement of Inventory. This update simplifies the measurement of inventory valuation at the lower of cost or net realizable value. Net realizable value is the estimated selling price in the ordinary course of business, less reasonably predictable costs of completion, disposal and transportation. The new inventory measurement requirements will be effective for the Company’s 2018 fiscal year and will replace the current inventory valuation guidance that requires the use of a lower of cost or market framework. The adoption of this ASU is not expected to have a material effect on the Company’s Consolidated Financial Statements.

Note 2. Acquisitions

Acquisition of Integrated Photonics, Inc.

In June 2017, the Company acquired all the outstanding shares of Integrated Photonics, Inc. (“IPI”) a privately held company based in New Jersey. IPI is a leader in engineered magneto-optic materials that enable high-performance directional components such as optical isolators for the optical communications market. Under the terms of the merger

agreement, the consideration consisted of initial cash paid at the acquisition date of \$39.4 million, net of cash acquired and a working capital adjustment of \$0.7 million. In addition, the agreement provides up to a maximum of \$2.5 million of additional cash earnout opportunities based upon IPI achieving certain agreed upon financial and transitional objectives, which if earned would be payable in the amount of \$2.5 million for the achievement of the annual target.

The following table presents the preliminary purchase price at the date of acquisition (\$000):

Net cash paid at acquisition	\$39,436
Fair value of cash earnout arrangement	2,250
Purchase price	\$41,686

The following table presents the preliminary allocation of the purchase price of the assets acquired and liabilities assumed at the date of acquisition, as the Company intends to finalize its accounting for the valuation of property, plant and equipment, identifiable intangibles and deferred income tax liabilities and anticipates completion of the valuation within one year from the date of the acquisition (\$000):

Assets	
Accounts receivable	\$2,083
Inventories	3,968
Prepaid and other assets	322
Property, plant & equipment	11,257
Intangible assets	22,213
Goodwill	17,107
Total assets acquired	\$56,950
Liabilities	
Accounts payable	\$846
Other accrued liabilities	1,032
Long-term debt assumed	3,834
Deferred tax liabilities	9,552
Total liabilities assumed	15,264
Net assets acquired	\$41,686

The goodwill of \$17.1 million is included in the II-VI Photonics segment and is attributed to the expected synergies and the assembled workforce of IPI. None of the goodwill is deductible for income tax purposes. The fair value of accounts receivable acquired was \$2.1 million with the gross contractual amount being \$2.1 million. At the time of acquisition, the Company expected to collect all of the accounts receivable. The Company expensed transaction costs of \$0.3 million for the year ended June 30, 2017.

The amount of revenues and net earnings of IPI included in the Company's Consolidated Statement of Earnings since the acquisition was immaterial. Pro forma information was omitted due to the immaterial impact of IPI financial results.

Acquisition of DirectPhotonics Industries GmbH

During the quarter ended December 31, 2016, the Company purchased certain assets, mainly inventory and fixed assets, of DirectPhotonics Industries GmbH located in Berlin, Germany for approximately \$0.6 million. This business was combined with the Company's II-VI HIGHYAG division in the II-VI Laser Solutions segment. Due to the insignificant amount of the acquisition purchase price, certain business combinations disclosures typically required under U.S. GAAP have been omitted.

Acquisition of EpiWorks, Inc.

In February 2016, the Company acquired all the outstanding shares of EpiWorks, Inc. ("EpiWorks") a privately held company based in Illinois. Under the terms of the merger agreement, the consideration consisted of initial cash paid at the acquisition date of \$43.0 million, net of cash acquired and a working capital adjustment of \$0.2 million. In addition, the agreement provided up to a maximum of \$6.0 million of additional cash earnout opportunities based upon EpiWorks achieving certain agreed upon financial and operational targets for capacity, wafer output and gross margin, which if earned would be payable in the amount of \$2.0 million for the achievement of each specific annual

target over the next three years. EpiWorks develops and manufactures compound semiconductor epitaxial wafers for applications in optical components, wireless devices and high-speed communication systems. EpiWorks is a business unit of the Company's II-VI Laser Solutions operating segment for financial reporting purposes.

The following table presents the allocation of the purchase price at the date of acquisition (\$000):

Net cash paid at acquisition	\$42,981
Cash paid for working capital adjustment	163
Fair value of cash earnout arrangement	4,352
Purchase price	\$47,496

59

The following table presents the final allocation of the purchase price of the assets acquired and liabilities assumed at the date of acquisition. (\$000):

Assets	
Accounts receivable	\$2,121
Inventories	2,435
Prepaid and other assets	68
Property, plant & equipment	9,043
Intangible assets	14,124
Goodwill	27,588
Total assets acquired	\$55,379
Liabilities	
Accounts payable	\$605
Other accrued liabilities	859
Deferred tax liabilities	6,419
Total liabilities assumed	7,883
Net assets acquired	\$47,496

The goodwill of \$27.6 million is included in the II-VI Laser Solutions segment and is attributed to the expected synergies and the assembled workforce of EpiWorks. None of the goodwill is deductible for income tax purposes. The fair value of accounts receivable acquired was \$2.1 million with the gross contractual amount being \$2.1 million. At the time of acquisition, the Company expected to collect all of the accounts receivable. The Company expensed transaction costs of \$0.4 million for the year ended June 30, 2016.

The purchase price allocation was finalized in the 2017 first quarter and did not result in any adjustments to the preliminary fair values.

Acquisition of ANADIGICS, Inc.

In March 2016, the Company acquired all the outstanding shares of ANADIGICS (Nasdaq:ANAD), which was a publicly traded company based in New Jersey. Under the terms of the merger agreement, the consideration consisted of both a working capital advance of \$3.5 million and cash paid of \$78.2 million at the acquisition date, net of cash acquired of \$2.7 million. ANADIGICS has a 6-inch gallium arsenide wafer fabrication capability allowing for the production of high performance lasers and integrated circuits in high volume. In addition, at the time of the acquisition, ANADIGICS designed and manufactured innovative radio frequency (RF) solutions for CATV infrastructure, small-cell, WIFI and cellular markets. The Company divested this portion of the business in June 2016. In conjunction with the sale of the RF business, the Company renamed ANADIGICS as II-VI Optoelectronic Devices Division. OED is a business unit of the Company's II-VI Laser Solutions operating segment for financial reporting purposes.

The following table presents the final allocation of the purchase price of the assets acquired and liabilities assumed at the date of acquisition. (\$000):

Edgar Filing: II-VI INC - Form 10-K

Assets	
Accounts receivable	\$3,973
Inventories	8,322
Prepaid and other assets	2,347
Property, plant & equipment	25,810
Intangible assets	1,060
Goodwill	48,312
Total assets acquired	\$89,824
Liabilities	
Accounts payable	\$3,586
Other accrued liabilities	7,226
Total liabilities assumed	10,812
Net assets acquired	\$79,012

The goodwill of \$48.3 million is included in the II-VI Laser Solutions segment and is attributed to the expected synergies and the assembled workforce of ANADIGICS. None of the goodwill is deductible for income tax purposes. In conjunction with the June 3, 2016 sale of the RF business noted below, the Company disposed of \$35.4 million of goodwill. The fair value of accounts receivable acquired was \$4.0 million with the gross contractual amount being \$4.0 million. At the time of acquisition, the Company expected to collect all of the accounts receivable. The Company expensed transaction costs of \$2.9 million for the year ended June 30, 2016.

The purchase price allocation was finalized in the 2017 first quarter and did not result in any adjustments to the preliminary fair values.

Deferred Income Taxes

In connection with the acquisitions of EpiWorks and ANADIGICS, the Company adopted an accounting policy to apply acquired deferred tax liabilities to pre-existing deferred tax assets before evaluating the need for a valuation allowance for acquired deferred tax assets. During fiscal year 2016, the Company recorded a \$36.2 million valuation allowance within purchase accounting as a result of the Company incurring a cumulative U.S. three year loss.

Divestiture of the RF Business of ANADIGICS

On June 3, 2016, the Company sold the RF business of ANADIGICS that it acquired on March 15, 2016. The consideration consisted of \$45.0 million of cash received at closing, a working capital adjustment of \$0.6 million to be received within 60 days after closing and \$5.0 million contingent consideration to be earned based upon supplying minimum volumes of wafers to the purchaser over an 18-month period through December 2017. The \$5.0 million contingent consideration will be recognized in net earnings when earned and received from the purchaser. The Company believes the sale of this non-strategic business will allow the Company to focus its financial resources and devote greater attention to the 6-inch wafer fab business. The Company incurred approximately \$0.4 million in transaction expenses and recorded an immaterial gain of less than \$0.1 million on the sale of the RF business.

The following table presents the carrying value of the assets and liabilities included as part of the disposal of the RF business of ANADIGICS (\$000):

Assets	
Inventories	\$5,378
Equipment	5,813
Goodwill	35,352
	\$46,543
Liabilities	
Accounts payable	\$963
Total Consideration	\$45,580

In conjunction with the sale of the RF business, the Company recorded approximately \$7.5 million of severance expense for employees of the business. The amount of revenue and net loss from the RF business of ANADIGICS from the acquisition date to the date of sale included in the Company's Consolidated Statements of Earnings were \$10.1 million and \$8.4 million, respectively, for the year ended June 30, 2016.

Note 3. Inventories

The components of inventories, net of reserves, were as follows:

June 30, (\$000)	2017	2016
Raw materials	\$78,979	\$70,623
Work in progress	61,679	57,566
Finished goods	63,037	46,944
	\$203,695	\$175,133

Note 4. Property, Plant and Equipment

Property, plant and equipment consist of the following:

June 30, (\$000)	2017	2016
Land and land improvements	\$5,667	\$4,990
Buildings and improvements	144,293	110,219
Machinery and equipment	492,042	409,551
Construction in progress	88,458	34,602
	730,460	559,362
Less accumulated depreciation	(362,732)	(316,505)
	\$367,728	\$242,857

During the quarter ended March 31, 2017, the Company sold its manufacturing facility located in Newport Ritchey, Florida. The Company received \$1.7 million, net of customary closing costs and a \$0.3 million reserve held in escrow for environmental purposes. The gain on sale of \$0.3 million was recorded in other expense (income), net in the Consolidated Statement of Earnings.

Depreciation expense was \$50.9 million, \$44.3 million and \$41.1 million for the fiscal years ended June 30, 2017, 2016 and 2015, respectively.

Included in the cost and accumulated depreciation of property, plant and equipment is the effect of foreign currency translation on the portion relating to the Company's foreign subsidiaries.

Note 5. Goodwill and Other Intangible Assets

Goodwill represents the excess of the cost over the net tangible and identifiable intangible assets of acquired businesses. Identifiable intangible assets acquired in business combinations are recorded based upon fair market value at the date of acquisition.

Changes in the carrying amount of goodwill were as follows (\$000):

	Year Ended June 30, 2017			Total
	II-VI Laser Solutions	II-VI Photonics	II- VI Performance Products	
Balance-beginning of period	\$84,105	\$96,760	\$ 52,890	\$233,755
Goodwill acquired	-	17,107	-	17,107
Foreign currency translation	75	(595)	-	(520)
Balance-end of period	\$84,180	\$113,272	\$ 52,890	\$250,342

Year Ended June 30, 2016

	II-VI Laser Solutions	II-VI Photonics	II- VI Performance Products	Total
Balance-beginning of period	\$43,578	\$ 99,426	\$ 52,890	\$195,894
Goodwill acquired	75,900	-	-	75,900
Goodwill attributed to the RF business sold	(35,352)	-	-	(35,352)
Foreign currency translation	(21)	(2,666)	-	(2,687)
Balance-end of period	\$84,105	\$ 96,760	\$ 52,890	\$233,755

The Company reviews the recoverability of goodwill at least annually and any time business conditions indicate a potential change in recoverability. The measurement of a potential impairment begins with comparing the current fair value of the Company's reporting units to the recorded value (including goodwill). The Company primarily used a discounted cash flow (DCF) model and a market analysis to determine the current fair value of its reporting units. A number of significant assumptions and estimates are involved in estimating the forecasted cash flows used in the DCF model, including markets and market shares, sales volume and pricing, costs to produce, working capital changes and income tax rates. Management considers historical experience and all available information at the time the fair values of the reporting units are estimated. The Company has the option to perform a qualitative assessment of goodwill to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount, including goodwill and other intangible assets. As of April 1 of fiscal years 2017 and 2016, the Company completed its annual impairment tests of its reporting units. Based on the results of these analyses, the Company's goodwill was not impaired.

The gross carrying amount and accumulated amortization of the Company's intangible assets other than goodwill as of June 30, 2017 and 2016 were as follows (\$000):

	June 30, 2017			June 30, 2016		
	Gross Carrying Amount	Accumulated Amortization	Net Book Value	Gross Carrying Amount	Accumulated Amortization	Net Book Value
Technology and Patents	\$65,438	\$ (27,313)	\$38,125	\$54,344	\$ (22,724)	\$31,620
Trade Names	15,806	(1,340)	14,466	15,869	(1,209)	14,660
Customer Lists	123,058	(41,740)	81,318	112,141	(33,912)	78,229
Other	1,571	(1,523)	48	1,571	(1,490)	81
Total	\$205,873	\$ (71,916)	\$133,957	\$183,925	\$ (59,335)	\$124,590

Amortization expense recorded on the intangible assets for the fiscal years ended June 30, 2017, 2016 and 2015 was \$12.7 million, \$12.3 million, and \$12.0 million, respectively. The technology and patents are being amortized over a range of 60 to 240 months with a weighted-average remaining life of approximately 100 months. The customer lists are being amortized over 60 to 240 months with a weighted-average remaining life of approximately 149 months.

In conjunction with the acquisitions of IPI, the Company recorded \$11.3 million of technology and patents and \$10.9 million of customer lists. The intangibles were recorded based on the Company's preliminary purchase price allocation which is expected to be finalized within one year from the date of the acquisition.

In connection with past acquisitions, the Company acquired trade names with indefinite lives. The carrying amount of these trade names of \$14.0 million as of June 30, 2017 is not amortized but tested annually for impairment. The Company completed its impairment test of these trade names with indefinite lives in the fourth quarter of fiscal years 2017 and 2016. Based on the results of these tests, the trade names were not impaired in fiscal years 2017 and 2016.

During the year ended June 30, 2015, the Company recognized an impairment charge on two of its indefinite lived trade names in the II-VI Photonics reporting unit as these trade names were abandoned as a result of the Company's rebranding efforts. Total impairment recorded during the year ended June 30, 2015 was \$2.0 million, which represented the entire carrying value of these two trade names and was recorded in other expense (income), net in the Consolidated Statements of Earnings.

Included in the gross carrying amount and accumulated amortization of the Company's technology and patents, customer list and other component of intangible assets and goodwill is the effect of the foreign currency translation on the portion relating to the Company's German and China subsidiaries. The estimated amortization expense for existing intangible assets for each of the five succeeding years is as follows (\$000):

Year Ending June 30,	
2018	\$13,800
2019	13,500
2020	12,500
2021	11,800
2022	10,300

Note 6. Debt

The components of debt were as follows (\$000):

June 30,	2017	2016
Line of credit, interest at LIBOR, as defined, plus 1.5%	\$252,000	\$188,000
Term loan, interest at LIBOR, as defined, plus 1.5%	85,000	45,000
Yen denominated line of credit, interest at LIBOR, as defined, plus 0.625%	2,679	2,917
Note payable assumed in IPI acquisition	3,834	-
Total debt	343,513	235,917
Current portion of long-term debt	(20,000)	(20,000)
Unamortized debt issuance costs	(1,491)	(610)
Long-term debt, less current portion	\$322,022	\$215,307

On July 28, 2016, the Company amended and restated its existing credit agreement. The Third Amended and Restated Credit Agreement (the “Amended Credit Facility”) provides for a revolving credit facility of \$325 million, as well as a \$100 million term loan. The term loan is being repaid in consecutive quarterly principal payments on the first business day of each January, April, July and October, with the first payment having commenced on October 1, 2016, as follows: (i) twenty consecutive quarterly installments of \$5 million and (ii) a final installment of all remaining principal due and payable on the maturity date of July 2021. Amounts borrowed under the revolving credit facility are due and payable on the maturity date. The Amended Credit Facility is unsecured, but is guaranteed by each existing and subsequently acquired or organized wholly-owned domestic subsidiary of the Company. The Company has the option to request an increase to the size of the revolving credit facility in an aggregate additional amount not to exceed \$100 million. The Amended Credit Facility has a five-year term through July 28, 2021 and has an interest rate of either a Base Rate Option or a Euro-Rate Option, plus an Applicable Margin, as defined in the agreement governing the Amended Credit Facility. If the Base Rate option is selected for a borrowing, the Applicable Margin is 0.00% to 1.25% and if the Euro-Rate Option is selected for a borrowing, the Applicable Margin is 1.00% to 2.25%. The Applicable Margin is based on the Company’s ratio of consolidated indebtedness to consolidated EBITDA. Additionally, the Amended Credit Facility is subject to certain covenants, including those relating to minimum interest coverage and maximum leverage ratios. As of June 30, 2017, the Company was in compliance with all financial covenants under its Amended Credit Facility.

The Company’s Yen denominated line of credit is a 500 million Yen (\$4.9 million) facility. The Yen line of credit matures August 2020. The interest rate equal to the Euro-Rate, as defined in the loan agreement, plus 1.00% to 2.25%. At June 30, 2017, the Company had 300 million yen outstanding under the line of credit. Additionally, the facility is subject to certain covenants, including those relating to minimum interest coverage and maximum leverage ratios. As of June 30, 2017, the Company had \$2.7 million outstanding and was in compliance with all financial covenants under its Yen facility.

The Company had aggregate availability of \$73.5 million and \$37.7 million under its lines of credit as of June 30, 2017 and 2016, respectively. The amounts available under the Company’s lines of credit are reduced by outstanding letters of credit. As of June 30, 2017 and 2016, total outstanding letters of credit supported by the credit facilities were \$1.3 million and \$1.2 million, respectively.

The weighted-average interest rate of total borrowings for each of the years ended June 30, 2017 and 2016 was 2.2% and 1.6%, respectively. The weighted-average of total borrowings for the fiscal years ended June 30, 2017 and 2016 was \$272.1 million and \$193.7 million, respectively.

The Company has a line of credit facility with a Singapore bank which permits maximum borrowings in the local currency of approximately \$0.6 million for the fiscal years ended June 30, 2017 and 2016, respectively. Borrowings are payable upon demand with interest charged at the rate of 1.00% above the bank’s prevailing prime lending rate. The interest rate was 5.25% at June 30, 2017 and June 30, 2016. At June 30, 2017 and 2016, there were no outstanding borrowings under this facility. The Company had \$0.3 million and \$0.2 million of letters of credit supported by the Singapore line of credit facility as of June 30, 2017 and 2016, respectively.

In conjunction with the acquisition of IPI, the Company assumed a non-interest bearing note payable owed to a major customer of IPI. The agreement if not terminated early by either party is payable in full in May 2019.

There are no interim maturities or minimum payment requirements related to the credit facilities before their respective expiration dates. Interest and commitment fees paid during the fiscal year ended June 30, 2017, 2016 and 2015 were \$6.1 million, \$3.1 million and \$4.0 million, respectively.

Remaining annual principal payments under the Company's existing credit facilities and note payable as of June 30, 2017 were as follows (\$000):

Period	Term	Yen Line of Credit	U.S. Dollar		Total
			Line of Credit	Note Payable	
Year 1	\$20,000	\$-	\$-	\$-	\$20,000
Year 2	20,000	-	-	3,834	\$23,834
Year 3	20,000	-	-	-	\$20,000
Year 4	20,000	2,679	-	-	\$22,679
Year 5	5,000	-	252,000	-	\$257,000
Thereafter	-	-	-	-	\$-
Total	\$85,000	\$2,679	\$252,000	\$3,834	\$343,513

Note 7. Income Taxes

The components of earnings (losses) before income taxes were as follows:

Year Ended June 30,	2017	2016	2015
(\$000)			
U.S. loss	\$(6,944)	\$(5,809)	\$(5,326)
Non-U.S. income	125,732	95,764	84,438
Earnings before income taxes	\$118,788	\$89,955	\$79,112

The components of income tax expense were as follows:

Year Ended June 30,	2017	2016	2015
(\$000)			
Current:			
Federal	\$2,133	\$3,704	\$(146)
State	253	5	86
Foreign	22,312	19,783	16,978
Total Current	\$24,698	\$23,492	\$16,918
Deferred:			
Federal	\$(6,963)	\$2,759	\$(2,762)
State	(1,251)	1,302	(251)
Foreign	7,030	(3,084)	(768)
Total Deferred	\$(1,184)	\$977	\$(3,781)
Total Income Tax Expense	\$23,514	\$24,469	\$13,137

Principal items comprising deferred income taxes were as follows:

June 30,	2017	2016
(\$000)		
Deferred income tax assets		
Inventory capitalization	\$6,338	\$6,814
Non-deductible accruals	1,705	2,212
Accrued employee benefits	9,738	15,543
Net-operating loss and credit carryforwards	53,048	43,516
Share-based compensation expense	12,386	11,693
Other	1,761	1,770
Valuation allowances	(42,562)	(42,641)
Total deferred income tax assets	\$42,414	\$38,907
Deferred income tax liabilities		

Edgar Filing: II-VI INC - Form 10-K

Tax over book accumulated depreciation	\$(7,803)	\$(9,759)
Intangible assets	(38,108)	(29,628)
Tax on unremitted earnings	(6,210)	(797)
Other	(2,615)	(1,978)
Total deferred income tax liabilities	\$(54,736)	\$(42,162)
Net deferred income taxes	\$(12,322)	\$(3,255)

The reconciliation of income tax expense at the statutory federal rate to the reported income tax expense is as follows:

Year Ended June 30, (\$000)	2017	%	2016	%	2015	%
Taxes at statutory rate	\$41,576	35	\$31,484	35	\$27,689	35
Increase (decrease) in taxes resulting from:						
State income taxes-net of federal benefit	(641)	-	864	1	(196)	-
Taxes on non U.S. earnings	(12,907)	(11)	(13,860)	(15)	(11,687)	(15)
Valuation allowance	(806)	(1)	8,464	9	678	1
Research and manufacturing incentive deductions	(3,346)	(3)	(3,074)	(3)	(2,573)	(3)
Other	(362)	-	591	-	(774)	(1)
	\$23,514	20	\$24,469	27	\$13,137	17

During the fiscal years ended June 30, 2017, 2016, and 2015, net cash paid by the Company for income taxes was \$23.6 million, \$18.5 million, and \$13.0 million, respectively.

Our foreign subsidiaries in the Philippines operate under various tax holiday arrangements. The benefits of such arrangements phase out through the fiscal year ended June 30, 2019. The impact of the tax holidays on our effective rate is a reduction in the rate of 0.31%, 0.37% and 0.22% for the fiscal years ended June 30, 2017, 2016 and 2015, respectively, and the impact of the tax holidays on diluted earnings per share is immaterial.

The cumulative amount of the Company's foreign undistributed net earnings for which no deferred taxes have been provided was approximately \$715 million at June 30, 2017. If the earnings of such foreign subsidiaries were not indefinitely reinvested, an additional deferred tax liability of approximately \$108 million would have been required as of June 30, 2017. It is the Company's intention to permanently reinvest substantially all of its undistributed earnings of its foreign subsidiaries; therefore, no provision has been made for future income taxes on the undistributed earnings of the majority of foreign subsidiaries, as they are considered indefinitely reinvested. The Company has provided a deferred tax liability for future income taxes on the earnings of certain foreign subsidiaries as these earnings are planned to be repatriated.

The Company has the following gross operating loss carryforwards and tax credit carryforwards as of June 30, 2017:

Type (\$000)	Amount	Expiration Date
Tax credit carryforwards:		
Federal research and development credits	\$10,953	June 2019-June 2037
Foreign tax credits	4,539	June 2024-June 2027
State tax credits	4,820	June 2018-June 2037
Operating loss carryforwards:		
Loss carryforwards - federal	\$100,922	June 2020-June 2037
Loss carryforwards - state	71,536	June 2018-June 2037
Loss carryforwards - foreign	2,610	June 2018-June 2024

The Company has recorded a valuation allowance against the majority of the loss and credit carryforwards. The Company's federal loss carryforwards, federal research and development credit carryforwards, and certain state tax

credits resulted from the Company's acquisitions are subject to various annual limitations under Section 382 of the Internal Revenue Code.

Changes in the liability for unrecognized tax benefits for the fiscal years ended June 30, 2017, 2016 and 2015 were as follows:

	2017	2016	2015
(\$000)			
Balance at Beginning of Year	\$5,559	\$4,022	\$2,775
Increases in current year tax positions	895	2,146	2,450
Increases in prior year tax positions	2,605	190	203
Decreases in prior year tax positions	-	(67)	-
Settlements	(1,143)	-	-
Expiration of statute of limitations	(339)	(732)	(1,406)
Balance at End of Year	\$7,577	\$5,559	\$4,022

The Company classifies all estimated and actual interest and penalties as income tax expense. During fiscal year 2017, there was \$0.5 million of interest and penalties within income tax expense. During the fiscal year 2016, there was no interest and penalties within income tax expense. During the fiscal year 2015, there was a benefit of \$0.1 million of interest and penalties within tax expense. The Company had \$0.3 million, \$0.1 million, and \$0.1 million of interest and penalties accrued at June 30, 2017, 2016, and 2015, respectively. The Company has classified the uncertain tax positions as non-current income tax liabilities as the amounts are not expected to be paid within one year. Including tax positions for which the Company determined that the tax position would not meet the more likely than not recognition threshold upon examination by the tax authorities based upon the technical merits of the position, the total estimated unrecognized tax benefit that, if recognized, would affect our effective tax rate was approximately \$1.3 million and \$0.5 million at June 30, 2017 and 2016, respectively. The Company expects a decrease of \$0.4 million of unrecognized tax benefits during the next 12 months due to the expiration of statutes of limitation.

Fiscal years 2014 to 2017 remain open to examination by the Internal Revenue Service, fiscal years 2012 to 2017 remain open to examination by certain state jurisdictions, and fiscal years 2007 to 2017 remain open to examination by certain foreign taxing jurisdictions. The Company's subsidiary in Germany has been notified of an examination to start in fiscal year 2018. The Company believes its income tax reserves for these tax matters are adequate.

Note 8. Earnings Per Share

The following table sets forth the computation of earnings per share for the periods indicated. Weighted-average shares issuable upon the exercise of stock options that were not included in the calculation were 140,000, 153,000 and 576,000 for the fiscal years ended June 30, 2017, 2016 and 2015, respectively, because they were anti-dilutive.

Year Ended June 30, (\$000 except per share)	2017	2016	2015
Net earnings	\$95,274	\$65,486	\$65,975
Divided by:			
Weighted average shares	62,576	61,366	61,219
Basic earnings per common share	\$1.52	\$1.07	\$1.08
Net earnings	\$95,274	\$65,486	\$65,975
Divided by:			
Weighted average shares	62,576	61,366	61,219
Dilutive effect of common stock equivalents	1,931	1,543	1,367
Diluted weighted average common shares	64,507	62,909	62,586
Diluted earnings per common share	\$1.48	\$1.04	\$1.05

Note 9. Operating Leases

The Company leases certain property under operating leases that expire at various dates. Future rental commitments applicable to the operating leases at June 30, 2017 are as follows:

Year Ending June 30, (\$000)	
2018	\$14,400
2019	12,400
2020	10,500
2021	6,800
2022	4,600
Thereafter	17,900

Rent expense was approximately \$14.7 million, \$14.2 million, and \$15.0 million for the fiscal years ended June 30, 2017, 2016 and 2015, respectively.

Note 10. Share-Based Compensation Plans

The Company's Board of Directors adopted the II-VI Incorporated Amended and Restated 2012 Omnibus Incentive Plan (the "Plan") which was approved by the shareholders at the Annual Meeting in November 2014. The Plan provides for the grant of non-qualified stock options, stock appreciation rights, restricted shares, restricted share units, deferred shares, performance shares and performance share units to employees, officers and directors of the Company. The maximum number of shares of the Company's Common Stock authorized for issuance under the Plan is limited to 4,900,000 shares of Common Stock, not including any remaining shares forfeited under the predecessor plans that may be rolled into the Plan. The Plan has vesting provisions predicated upon the death, retirement or disability of the grantee. As of June 30, 2017, there were approximately 1,644,000 shares available to be issued under the Plan, including forfeited shares from predecessor plans.

The Company records share-based compensation expense for these awards which requires the recognition of the grant-date fair value of share-based compensation in net earnings. The Company recognizes the share-based compensation expense over the requisite service period of the individual grantees, which generally equals the vesting period. The Company accounts for cash-based stock appreciation rights, cash-based restricted share unit awards and cash-based performance share unit awards as liability awards, in accordance with applicable accounting standards.

Share-based compensation expense for the fiscal years ended June 30, 2017, 2016 and 2015 is as follows (\$000):

Year Ended June 30,	2017	2016	2015
Stock Options and Cash-Based Stock Appreciation Rights	\$5,611	\$4,309	\$5,158
Restricted Share Awards and Cash-Based Restricted Share Unit Awards	6,799	4,401	5,182
Performance Share Awards and Cash-Based Performance Share Unit Awards	3,626	2,196	2,649
	\$16,036	\$10,906	\$12,989

The share-based compensation expense is allocated approximately 20% to cost of goods sold and 80% to selling, general and administrative expense in the Consolidated Statements of Earnings, based on the employee classification of the grantees. Share-based compensation expense associated with liability awards was \$4.3 million, \$1.2 million, and \$1.6 million, in fiscal years ended June 30, 2017, 2016, and 2015, respectively.

Stock Options and Cash-Based Stock Appreciation Rights:

The Company utilized the Black-Scholes valuation model for estimating the fair value of stock option expense. During the fiscal years ended June 30, 2017, 2016 and 2015, the weighted-average fair value of options granted under the stock option plan was \$8.88, \$7.35 and \$5.76, respectively, per option using the following assumptions:

Year Ended June 30,	2017	2016	2015
Risk-free interest rate	1.43 %	1.68 %	1.71 %
Expected volatility	37 %	38 %	41 %
Expected life of options	6.28 years	6.43 years	5.94 years
Dividend yield	None	None	None

The risk-free interest rate is derived from the average U.S. Treasury Note rate during the period, which approximates the rate in effect at the time of grant related to the expected life of the options. The risk-free interest rate shown above is the weighted average rate for all options granted during the fiscal year. Expected volatility is based on the historical volatility of the Company's Common Stock over the period commensurate with the expected life of the options. The expected life calculation is based on the observed time to post-vesting exercise and/or forfeitures of options by our employees. The dividend yield of zero is based on the fact that the Company has never paid cash dividends and has no current intention to pay cash dividends in the future. The estimated annualized forfeitures are based on the Company's historical experience of option pre-vesting cancellations and are estimated at a rate of 18.71%. The Company will record additional expense in future periods if the actual forfeiture rate is lower than estimated, and will adjust expense in future periods if the actual forfeitures are higher than estimated.

Stock option and cash-based stock appreciation rights activity during the fiscal year ended June 30, 2017 was as follows:

	Stock Options		Cash-Based Stock Appreciation Rights	
	Number of Shares	Weighted Average Exercise Price	Number of Rights	Weighted Average Exercise Price
Outstanding - July 1, 2016	4,251,926	\$ 17.15	178,234	\$ 17.13
Granted	771,900	\$ 23.15	86,705	\$ 22.51
Exercised	(858,445)	\$ 17.58	(44,856)	\$ 17.42
Forfeited and Expired	(84,466)	\$ 19.62	(5,616)	\$ 19.39
Outstanding - June 30, 2017	4,080,915	\$ 18.15	214,467	\$ 19.17
Exercisable - June 30, 2017	2,242,901	\$ 16.97	34,334	\$ 17.59

As of June 30, 2017, 2016 and 2015, the aggregate intrinsic value of stock options and cash-based stock appreciation rights outstanding and exercisable was \$69.3 million, \$10.1 million and \$14.3 million, respectively. Aggregate intrinsic value represents the total pretax intrinsic value (the difference between the Company's closing stock price on the last trading day of the year ended June 30, 2017, and the option's exercise price, multiplied by the number of in-the-money options) that would have been received by the option holders had all option holders exercised their options on June 30, 2017. This amount varies based on the fair market value of the Company's stock. The total intrinsic value of stock options and cash-based stock appreciation rights exercised during the fiscal years ended June 30, 2017, 2016, and 2015 was \$12.3 million, \$4.5 million, and \$2.9 million, respectively. As of June 30, 2017, total unrecognized compensation cost related to non-vested stock options and cash-based stock appreciation rights was \$12.0 million. This cost is expected to be recognized over a weighted-average period of approximately three years. Outstanding and exercisable stock options at June 30, 2017 were as follows:

Range of Exercise Prices	Stock Options and Cash-Based Stock Appreciation Rights Outstanding			Stock Options and Cash-Based Stock Appreciation Rights Exercisable		
	Number of Shares or Rights	Weighted Average Remaining Contractual Term (Years)	Weighted Average Exercise Price	Number of Shares or Rights	Weighted Average Remaining Contractual Term (Years)	Weighted Average Exercise Price
\$10.04 - \$15.38	1,093,446	4.80	\$ 13.18	717,394	3.59	\$ 12.74
\$15.41 - \$23.45	2,852,141	6.61	\$ 19.12	1,331,371	4.76	\$ 18.13
\$23.49 - \$35.50	328,075	3.78	\$ 25.53	228,470	1.29	\$ 23.65
\$39.65 - \$39.65	21,720	9.62	39.65	-	-	\$ -
	4,295,382	5.95	\$ 18.20	2,277,235	\$ 4.04	\$ 16.98

Restricted Share Awards and Cash-Based Restricted Share Unit Awards:

Restricted share awards and cash-based restricted share unit awards compensation expense was calculated based on the number of shares or units expected to be earned by the grantee multiplied by the stock price at the date of grant (for restricted share awards) or the stock price at the period end date (for cash-based restricted share unit awards), and is being recognized over the vesting period. Generally, the restricted share awards and restricted share unit awards have a three year cliff-vesting provision and an estimated forfeiture rate of 13.0%.

Restricted share and cash-based restricted share unit activity during the fiscal year ended June 30, 2017, was as follows:

	Restricted Share Awards		Cash-Based Restricted Share Units	
	Number of Shares	Weighted Average Grant Date Fair Value	Number of Units	Weighted Average Grant Date Fair Value
Nonvested - June 30, 2016	760,915	\$ 17.49	105,935	\$ 16.67
Granted	271,113	\$ 23.23	67,790	\$ 22.09
Vested	(200,799)	\$ 17.22	(29,470)	\$ 17.22
Forfeited	(19,396)	\$ 18.32	(3,328)	\$ 18.61
Nonvested - June 30, 2017	811,833	\$ 19.45	140,927	\$ 19.12

As of June 30, 2017, total unrecognized compensation cost related to non-vested restricted share and cash-based restricted share unit awards was \$9.5 million. This cost is expected to be recognized over a weighted-average period of approximately two years. The restricted share compensation expense was calculated based on the number of shares expected to be earned multiplied by the stock price at the date of grant and is being recognized over the vesting period. The cash-based restricted share unit compensation expense

was calculated based on the number of shares expected to be earned multiplied by the stock price at the period-end date and is being recognized over the vesting period. The total fair value of the restricted share and cash-based restricted share unit awards granted during the years ended June 30, 2017, 2016 and 2015, was \$7.8 million, \$6.3 million and \$5.9 million, respectively. The total fair value of restricted shares vested was \$6.2 million, \$5.5 million and \$5.1 million during fiscal years 2017, 2016 and 2015, respectively.

Performance Share Awards and Cash-Based Performance Share Unit Awards:

The Compensation Committee of the Board of Directors of the Company has granted certain executive officers and employees performance share awards and performance share unit awards under the Plan. As of June 30, 2017, the Company had outstanding grants covering performance periods ranging from 12 to 36 months. These awards are intended to provide continuing emphasis on specified financial performance goals that the Company considers important contributors to the creation of long-term shareholder value. These awards are payable only if the Company achieves specified levels of financial performance during the performance periods.

The performance share compensation expense was calculated based on the number of shares expected to be earned multiplied by the stock price at the date of grant, and is being recognized over the vesting period. The cash-based performance share unit compensation expense was calculated based on the number of shares expected to be earned multiplied by the stock price at the period-end date, and is being recognized over the vesting period. Performance share and cash-based performance share unit award activity relating to the plan during the year ended June 30, 2017, was as follows:

	Performance Share Awards		Cash-Based Performance Share Units	
	Number of Shares	Weighted Average Grant Date Fair Value	Number of Units	Weighted Average Grant Date Fair Value
Nonvested - June 30, 2016	293,541	\$ 16.12	98,659	\$ 18.44
Granted	234,174	\$ 21.67	10,808	\$ 21.67
Vested	(88,354)	\$ 15.56	(58,654)	\$ 18.52
Forfeited	(61,651)	\$ 17.16	(33,661)	\$ 18.70
Nonvested - June 30, 2017	377,710	\$ 19.52	17,152	\$ 19.37

As of June 30, 2017, total unrecognized compensation cost related to non-vested performance share and cash-based performance share unit awards was \$4.2 million. This cost is expected to be recognized over a weighted-average period of approximately one year. The total fair value of the performance share and cash-based performance share unit awards granted during the fiscal years ended June 30, 2017, 2016 and 2015 was \$5.3 million, \$2.4 million and \$2.3 million, respectively. The total fair value of performance shares vested during the fiscal years ended June 30, 2017, 2016 and 2015 was \$5.9 million, \$1.5 million and \$1.6 million, respectively.

For our relative Total Shareholder Return, or TSR, performance-based awards, which are based on market performance of our stock as compared to the Russel 2000 Index, the compensation cost is recognized over the performance period on a straight-line basis net of forfeitures, because the awards vest only at the end of the measurement period and the probability of actual shares expected to be earned is considered in the grant date valuation. As a result, the expense is not adjusted to reflect the actual shares earned. We estimate the fair value of the TSR performance-based awards using the Monte-Carlo simulation model.

Note 11. Segment and Geographic Reporting

The Company reports its business segments using the “management approach” model for segment reporting. This means that the Company determines its reportable business segments based on the way the chief operating decision maker organizes business segments within the Company for making operating decisions and assessing performance.

The Company reports its financial results in the following three segments: (i) II-VI Laser Solutions, (ii) II-VI Photonics, and (iii) II-VI Performance Products, and the Company’s chief operating decision maker receives and reviews financial information based on these segments. The Company evaluates business segment performance based upon segment operating income, which is defined as earnings before income taxes, interest and other income or expense. The segments are managed separately due to the market, production requirements and facilities unique to each segment.

The II-VI Laser Solutions segment is located in the United States, Singapore, China, Germany, Switzerland, Japan, Belgium, the United Kingdom, Italy, South Korea, the Philippines and Taiwan. II-VI Laser Solutions is directed by the President of II-VI Laser Solutions, while each geographic location is directed by a general manager, and is further divided into production and administrative units that are directed by managers. II-VI Laser Solutions designs, manufactures and markets optical and electro-optical components and materials sold under the II-VI Infrared brand name and used primarily in high-power CO₂ lasers, fiber-delivered beam delivery systems and processing tools and direct diode lasers for industrial lasers sold under the II-VI HIGHYAG and II-VI Laser Enterprise

brand names. II-VI Laser Solutions also manufactures compound semiconductor epitaxial wafers for applications in optical components, wireless devices, and high-speed communication systems and manufactures 6-inch gallium arsenide wafers allowing for the production of high performance lasers and integrated circuits in high volume sold under the II-VI EpiWorks and II-VI OptoElectronic Devices Division brand names.

The II-VI Photonics segment is located in the United States, China, Vietnam, Germany, Japan, the United Kingdom, Italy and Hong Kong. II-VI Photonics is directed by the President of II-VI Photonics and is further divided into production and administrative units that are directed by managers. II-VI Photonics manufactures crystal materials, optics, microchip lasers and optoelectronic modules for use in optical communication networks and other diverse consumer and commercial applications. In addition, the segment also manufactures pump lasers, optical isolators, and optical amplifiers and micro-optics for optical amplifiers for both terrestrial and submarine applications within the optical communications market.

The II-VI Performance Products segment is located in the United States, Vietnam, Japan, China, Germany and the Philippines. II-VI Performance Products is directed by the President of II-VI Performance Products, while each geographic location is directed by a general manager. II-VI Performance Products is further divided into production and administrative units that are directed by managers. II-VI Performance Products designs, manufactures and markets infrared optical components and high-precision optical assemblies for military, medical and commercial laser imaging applications. In addition, the segment designs, manufactures and markets unique engineered materials for thermoelectric and silicon carbide applications servicing the semiconductor, military and medical markets.

On June 19, 2017, the Company completed its acquisition of IPI. See Note 2. Acquisitions. The operating results of this acquisition have been reflected in the selected financial information of the Company's II-VI Photonics segment

The accounting policies of the segments are the same as those of the Company. The Company's corporate expenses are allocated to the segments. The Company evaluates segment performance based upon reported segment operating income, which is defined as earnings from continuing operations before income taxes, interest and other income or expense. Inter-segment sales and transfers have been eliminated.

The following tables summarize selected financial information of the Company's operations by segment:

	II-VI Laser Solutions	II-VI Photonics	II-VI Performance Products	Eliminations	Total
(\$000)					
2017					
Revenues	\$339,341	\$418,515	\$ 214,190	\$ -	\$972,046
Inter-segment revenues	33,792	14,236	10,189	(58,217)	-
Operating income	30,931	62,975	21,635	-	115,541
Interest expense	-	-	-	-	(6,809)
Other income, net	-	-	-	-	10,056
Income taxes	-	-	-	-	(23,514)
Net earnings	-	-	-	-	95,274
Depreciation and amortization	24,958	21,442	17,237	-	63,637
Expenditures for property, plant & equipment	82,760	27,397	32,788	-	142,945
Segment assets	589,239	578,315	309,743	-	1,477,297
Equity investment	-	-	11,727	-	11,727

Edgar Filing: II-VI INC - Form 10-K

Goodwill	84,180	113,272	52,890	-	250,342
71					

Edgar Filing: II-VI INC - Form 10-K

	II-VI Laser Solutions	II-VI Photonics	II-VI Performance Products	Eliminations	Total
(\$000)					
2016					
Revenues	\$303,002	\$325,879	\$198,335	\$-	\$827,216
Inter-segment revenues	24,290	12,081	7,274	(43,645)	-
Operating income	36,184	37,849	17,780	-	91,813
Interest expense	-	-	-	-	(3,081)
Other income, net	-	-	-	-	1,223
Income taxes	-	-	-	-	(24,469)
Net earnings	-	-	-	-	65,486
Depreciation and amortization	17,222	19,855	19,586	-	56,663
Expenditures for property, plant & equipment	25,620	21,096	11,454	-	58,170
Segment assets	469,754	467,486	274,741	-	1,211,981
Equity investment	-	-	11,354	-	11,354
Goodwill	84,105	96,760	52,890	-	233,755

	II-VI Laser Solutions	II-VI Photonics	II-VI Performance Products	Eliminations	Total
(\$000)					
2015					
Revenues	\$287,881	\$260,825	\$193,255	\$-	\$741,961
Inter-segment revenues	21,021	13,210	9,325	(43,556)	-
Operating income	55,039	7,208	14,552	-	76,799
Interest expense	-	-	-	-	(3,863)
Other income, net	-	-	-	-	6,176
Income taxes	-	-	-	-	(13,137)
Net earnings	-	-	-	-	65,975
Depreciation and amortization	14,127	21,073	17,883	-	53,083
Expenditures for property, plant & equipment	27,349	11,324	13,640	-	52,313

Geographic information for revenues from the country of origin (shipped from), and long-lived assets from the country of origin, which include property, plant and equipment, net of related depreciation, and certain other long-term assets, were as follows:

Year Ended June 30,	Revenues		
	2017	2016	2015
(\$000)			
United States	\$294,200	\$266,347	\$241,974
Non-United States			
China	208,595	172,292	140,586

Edgar Filing: II-VI INC - Form 10-K

Hong Kong	190,702	140,821	109,428
Germany	88,304	72,070	77,524
Japan	76,212	57,287	52,864
Switzerland	50,497	54,760	56,940
Vietnam	22,497	24,267	24,307
Italy	10,791	10,160	9,313
United Kingdom	8,473	8,154	7,749
Belgium	7,503	6,026	5,731
Korea	6,584	3,887	-
Singapore	3,913	3,039	3,897
Philippines	3,057	8,106	11,334
Taiwan	718	-	-
Australia	-	-	314
Total Non-United States	677,846	560,869	499,987
	\$972,046	\$827,216	\$741,961

72

June 30, (\$000)	Long-Lived Assets		
	2017	2016	2015
United States	\$240,029	\$137,521	\$102,171
Non-United States			
China	62,024	51,824	46,794
Switzerland	36,795	38,202	26,384
Germany	15,323	15,162	15,790
Vietnam	8,272	8,895	7,985
Philippines	6,115	4,399	6,003
Hong Kong	1,914	1,765	2,476
Other	1,100	1,146	1,282
Total Non-United States	131,543	121,393	106,714
	\$371,572	\$258,914	\$208,885

Note 12. Fair Value of Financial Instruments

The FASB defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous markets for the asset and liability in an orderly transaction between market participants at the measurement date. The Company estimates fair value of its financial instruments utilizing an established three-level hierarchy in accordance with U.S. GAAP. The hierarchy is based upon the transparency of inputs to the valuation of an asset or liability as of the measurement date as follows:

Level 1 – Valuation is based upon unadjusted quoted prices for identical assets or liabilities in active markets.

Level 2 – Valuation is based upon quoted prices for similar assets and liabilities in active markets, or other inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the financial instruments.

Level 3 – Valuation is based upon other unobservable inputs that are significant to the fair value measurements.

The classification of fair value measurements within the hierarchy is based upon the lowest level of input that is significant to the measurement.

At June 30, 2017, the Company had foreign currency forward contracts recorded at fair value. The fair values of these instruments were measured using valuations based upon quoted prices for similar assets and liabilities in active markets (Level 2) and are valued by reference to similar financial instruments, adjusted for credit risk and restrictions and other terms specific to the contracts.

In February 2016, the Company entered into a contingent earnout arrangement which provides up to a maximum of \$6.0 million of additional cash earnout opportunities based upon EpiWorks achieving certain agreed upon financial and operational targets for capacity, wafer output and gross margin, which if earned would be payable for the achievement of each specific annual target over the next three years. The Company paid the first year earnout amount of \$2.0 million during the quarter ended June 30, 2017.

In June 2017, the Company entered into a contingent earnout arrangement which provides up to a maximum of \$2.5 million of additional cash earnout opportunities based upon IPI achieving certain agreed upon financial and transitional objectives relating to finance, information technology and human resources, which if earned would be payable for the achievement of each specific annual target over the next year.

The fair values of these contingent earnout arrangements were measured using valuations based upon other unobservable inputs that are significant to the fair value measurement (Level 3).

73

The following tables provide a summary by level of the fair value of financial instruments that are measured on a recurring basis as of June 30, 2017 and 2016 (\$000):

Fair Value Measurements at June 30, 2017				
Using:				
	Quoted Prices in Active Markets for Identical Assets	Significant Other Observable Inputs	Significant Unobservable Inputs	
	June 30, 2017	(Level 1)	(Level 2)	(Level 3)
Assets:				
Foreign currency forward contracts	\$ 191	\$ -	\$ 191	\$ -
Liabilities:				
Contingent earnout arrangements	\$ 5,795	\$ -	\$ -	\$ 5,795

Fair Value Measurements at June 30, 2016				
Using:				
	Quoted Prices in Active Markets for Identical Assets	Significant Other Observable Inputs	Significant Unobservable Inputs	
	June 30, 2016	(Level 1)	(Level 2)	(Level 3)
Liabilities:				
Foreign currency forward contracts	\$ 511	\$ -	\$ 511	\$ -
Contingent earnout arrangement	\$ 4,352	\$ -	\$ -	\$ 4,352

The Company's policy is to report transfers into and out of Levels 1 and 2 of the fair value hierarchy at fair values as of the beginning of the period in which the transfers occur. There were no transfers in and out of Levels 1 and 2 of the fair value hierarchy during fiscal years 2017 and 2016.

The following table presents a reconciliation of the beginning and ending fair value measurements of the Company's level 3 contingent earnout arrangement related to the acquisitions of II-VI EpiWorks and IPI (\$000):

	Significant Unobservable Inputs (Level 3)
Balance at July 1, 2016	\$ 4,352
Contingent earnout arrangements:	
Contingent earnout - IPI	2,250
Payments	(2,000)
Changes in fair value recorded in other expense, (income)	1,193
Balance at June 30, 2017	\$ 5,795

The fair values of cash and cash equivalents are considered Level 1 among the fair value hierarchy and approximate fair value because of the short-term maturity of those instruments. The Company's borrowings include variable interest rate, non-interest bearing debt and a capital lease obligation and are considered Level 2 among the fair value hierarchy and accordingly their carrying amounts approximate fair value.

Note 13. Derivative Instruments

The Company, from time to time, purchases foreign currency forward exchange contracts, primarily in Japanese Yen, that permit it to sell specified amounts of these foreign currencies expected to be received from its export sales for pre-established U.S. dollar amounts at specified dates. These contracts are entered into to limit transactional exposure to changes in currency exchange rates of export sales transactions in which settlement will occur in future periods and which otherwise would expose the Company, on the basis of its aggregate net cash flows in respective currencies, to foreign currency risk.

The Company has recorded the fair market value of these contracts in the Company's financial statements. These contracts had a total notional amount of \$12.7 million and \$9.2 million at June 30, 2017 and 2016, respectively. As of June 30, 2017, these forward contracts had expiration dates ranging from July 2017 through October 2017, with Japanese Yen denominations individually between 300 million and 400 million Yen. The Company does not account for these contracts as hedges as defined by U.S. GAAP and records the change in the fair value of these contracts in Other expense (income), net in the Consolidated Statements of Earnings as they occur. The fair value measurement takes into consideration foreign currency rates and the current creditworthiness of the counterparties to these contracts, as applicable, and is based upon quoted prices for similar assets and liabilities in active markets, or other inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the financial instruments and thus represents a Level 2 measurement. These contracts are recorded in prepaid and other current assets in the Company's Consolidated Balance Sheets as of June 30, 2017. The change in the fair value of these contracts for the fiscal year ended June 30, 2017, 2016 and 2015 was insignificant.

Note 14. Employee Benefit Plans

Eligible U.S. employees of the Company participate in a profit sharing retirement plan. Contributions accrued for the plan are made at the discretion of the Company's board of directors and were \$4.3 million, \$3.4 million, and \$2.8 million for the years ended June 30, 2017, 2016 and 2015, respectively.

The Company has an employee stock purchase plan available for employees who have completed six months of continuous employment with the Company. The employee may purchase the Company's Common Stock at 5% below the prevailing market price. The amount of shares which may be bought by an employee during each fiscal year is limited to 10% of the employee's base pay. This plan, as amended, limits the number of shares of Common Stock available for purchase to 1,600,000 shares. There were 477,949 and 492,913 shares of Common Stock available for purchase under the plan at June 30, 2017 and 2016, respectively.

Switzerland Defined Benefit Plan

In conjunction with the acquisition of II-VI Laser Enterprise in fiscal year 2014, the Company assumed a pension plan covering employees of our Swiss subsidiary (the "Swiss Plan"). Employer and employee contributions are made to the Swiss Plan based on various percentages of salary and wages that vary according to employee age and other factors. Employer contributions to the Swiss Plan for year ended June 30, 2017 were \$2.4 million. Expected employer contributions in fiscal year 2018 are \$2.6 million.

The funded status of the Swiss Plan in the fiscal years ended June 30, 2017 and 2016 were as follows:

Year Ended June 30,	2017	2016
Change in projected benefit obligation:		
Projected benefit obligation, beginning of period	\$54,094	\$42,575
Service cost	3,689	2,680
Interest cost	163	434
Participant contributions	1,262	1,046
Benefits received	1,743	1,567
Actuarial (gain) loss on obligation	(2,777)	8,071
Currency translation adjustment	1,344	(2,279)
Projected benefit obligation, end of period	\$59,518	\$54,094
Change in plan assets:		
Plan assets at fair value, beginning of period	35,857	32,509
Actual return on plan assets	805	431
Employer contributions	2,432	2,043
Participant contributions	1,262	1,046
Benefits received	1,743	1,567
Currency translation adjustment	891	(1,739)
Plan assets at fair value, end of period	\$42,990	\$35,857
Amounts recognized in consolidated balance sheets:		
Other non-current assets:		
Deferred tax asset	\$3,496	\$3,857
Other non-current liabilities:		
Underfunded pension liability	\$16,528	18,237
Amounts recognized in accumulated other comprehensive		
income, net of tax:		
Pension adjustment	\$2,514	\$(7,031)
Accumulated benefit obligation, end of period	\$56,457	\$50,772

Net periodic pension cost associated with the Swiss Plan included the following components:

Year Ended June 30,	2017	2016
Service cost	\$3,689	\$2,680
Interest cost	163	434
Expected return on plan assets	(742)	(1,097)
Prior service cost	594	(234)
Net period pension cost	\$3,704	\$1,783

The projected and accumulated benefit obligations for the Swiss Plan were calculated as of June 30, 2017 and 2016 using the following assumptions:

Edgar Filing: II-VI INC - Form 10-K

Year Ended June 30,	2017	2016
Discount rate	0.8 %	0.3 %
Salary increase rate	2.0 %	2.0 %
Expected return on plan assets	2.0 %	2.0 %
Expected average remaining working life (in years)	9.9	10.2

The discount rate is based on assumed pension benefit maturity and estimates developed using the rate of return and yield curves for high quality Swiss corporate and government bonds. The salary increase rate is based on our best assessment for on-going increases over time. The expected long-term rate of return on plan assets is based on the expected asset allocation and taking into consideration historical long-term rates of return for the relevant asset categories.

As is customary with Swiss pension plans, the assets of the plan are invested in a collective fund with multiple employers. We have no investment authority over the assets of the plan that are held and invested by a Swiss insurance company. The investment strategy of the Swiss Plan is managed by an independent asset manager with the objective of achieving a consistent long-term return which will provide sufficient funding for future pension obligations while limiting risk.

The Swiss Plan is legally separate from II-VI, as are the assets of the plan. As of June 30, 2017, the Swiss Plan's asset allocation was as follows:

Year Ended June 30,	2017	2016
Fixed income investments	10.0 %	15.0 %
Equity investments	52.0 %	51.0 %
Real estate	26.0 %	28.0 %
Cash	9.0 %	3.0 %
Alternative investments	3.0 %	3.0 %
	100.0%	100.0%

Estimated future benefit payments under the Swiss Plan are estimated to be as follows:

Year Ending June 30, (\$000)	
2018	\$2,683
2019	4,062
2020	1,575
2021	2,533
2022	2,681
Next five years	19,163

Other Employee Benefit Plans

The Company has no program for post-retirement health and welfare benefits.

The II-VI Incorporated Deferred Compensation Plan (the "Compensation Plan") is designed to allow officers and key employees of the Company to defer receipt of compensation into a trust fund for retirement purposes. Under the Compensation Plan, as it is currently implemented by the Company, eligible participants can elect to defer up to 100% of certain discretionary incentive compensation and certain equity awards into the Compensation Plan. The Compensation Plan is a nonqualified, defined contribution employees' retirement plan. At the Company's discretion, the Compensation Plan may be funded by the Company making contributions based on compensation deferrals, matching contributions and discretionary contributions. Compensation deferrals will be based on an election by the participant to defer a percentage of compensation under the Compensation Plan. All assets in the Compensation Plan are subject to claims of the Company's creditors until such amounts are paid to the Compensation Plan participants. Employees of the Company made contributions to the Compensation Plan in the amounts of approximately \$0.8 million, \$1.2 million, and \$0.7 million for the fiscal years ended June 30, 2017, 2016, and 2015, respectively. During the fiscal year ended June 30, 2017, the Company made a contribution of \$0.1 million to the Compensation Plan on behalf of Dr. Mattera for his appointment as Chief Executive Officer. There were no employer contributions made to the Compensation Plan for the fiscal years ended June 30, 2016 and 2015.

Note 15. Other Accrued Liabilities

The components of other accrued liabilities were as follows:

Edgar Filing: II-VI INC - Form 10-K

Year Ended June 30, (\$000)	2017	2016
Deferred revenue	\$2,345	\$4,014
Warranty reserve	4,546	3,908
Current portion of earnout arrangements	3,930	1,935
Other accrued liabilities	18,235	15,989
	\$29,056	\$25,846

The following table summarizes the change in the carrying value of the Company's warranty reserve included in Other Accrued Liabilities as of and for the year ended June 30, 2017.

Year Ended June 30, (\$000)	2017
Balance-Beginning of Year	\$3,908
Settlements during the period	(4,212)
Additional warranty liability recorded	4,850
Balance-End of Year	\$4,546

Note 16. Commitments and Contingencies

The Company has purchase commitments for materials and supplies as part of the ordinary conduct of business. A portion of the commitments are long-term and are based on minimum purchase requirements. Certain short-term raw material purchase commitments have a variable price component which is based on market pricing at the time of purchase. Due to the proprietary nature of some of the Company's materials and processes, certain contracts may contain penalty provisions for early termination. The Company does not believe that a significant amount of penalties are reasonably likely to be incurred under these commitments based upon historical experience and current expectation. Total future commitments are as follows:

Year Ending June 30, (\$000)	
2018	\$21,988
2019	866
2020	578
2021	-
2022	-

Note 17. Share Repurchase Programs

In August 2014, the Board of Directors authorized the Company to purchase up to \$50 million of its Common Stock. The repurchase program has no expiration and calls for shares to be purchased in the open market or in private transactions from time to time. Shares purchased by the Company will be retained as treasury stock and available for general corporate purposes. During the fiscal year ended June 30, 2017, the Company did not repurchase shares of its Common Stock. During fiscal years ended June 30, 2016 and 2015, the Company purchased 380,538 and 936,049 shares of its Common Stock for \$6.3 million and \$12.7 million respectively, under this repurchase program.

Note 18. Accumulated Other Comprehensive Income (Loss)

The changes in accumulated other comprehensive income (“AOCI”) by component, net of tax, for the years ended June 30, 2017, 2016, and 2015 were as follows (\$000):

	Foreign Currency Translation Adjustment	Defined Benefit Plan	Total Accumulated Other Comprehensive Income
AOCI - June 30, 2014	\$ 17,963	\$ 1,443	\$ 19,406
Other comprehensive income (loss) before reclassifications	(8,497)	(2,244)	(10,741)
Amounts reclassified from AOCI	-	-	-
Net current-period other comprehensive income	(8,497)	(2,244)	(10,741)
AOCI - June 30, 2015	9,466	(801)	8,665
Other comprehensive income (loss) before reclassifications	(15,651)	(6,805)	(22,456)
Amounts reclassified from AOCI	-	(226)	(226)
Net current-period other comprehensive income	(15,651)	(7,031)	(22,682)
AOCI - June 30, 2016	\$ (6,185)	\$ (7,832)	\$ (14,017)
Other comprehensive income (loss) before reclassifications	(2,275)	1,920	(355)
Amounts reclassified from AOCI	-	594	594
Net current-period other comprehensive income	(2,275)	2,514	239
AOCI - June 30, 2017	\$ (8,460)	\$ (5,318)	\$ (13,778)

Note 19. Capital Lease

During the quarter ended December 31, 2016, the Company’s OptoElectronic Devices subsidiary entered into a capital lease related to a building in Warren, New Jersey. The following table shows the future minimum lease payments due under the non-cancelable capital lease (\$000):

Fiscal Year Ending June 30,	Amount
2018	\$2,579
2019	2,579
2020	2,579
2021	2,579
2022	2,579
Thereafter	24,503
Total minimum lease payments	\$37,398
Less amount representing interest	12,909
Present value of capitalized payments	\$24,489
Less: current portion	1,074

Long-term portion	\$23,415
-------------------	----------

The current and long-term portion of the capital lease obligation was recorded in Other accrued liabilities and Capital lease obligation, respectively, in the Company's Consolidated Balance Sheet as of June 30, 2017. The present value of the minimum capital lease payments at inception was \$25.0 million recorded in Property, Plant & Equipment, net, in the Company's Consolidated Balance Sheet as of June 30, 2017, with associated depreciation being recorded over the 15 year life of the lease. During the fiscal year ended June 30, 2017, the Company recorded \$0.8 million of depreciation expense associated with the capital leased asset.

Note 20. Subsequent Events

On July 26, 2017, the Company signed a definitive purchase agreement to acquire 100% of the outstanding stock of Kaim Laser Limited, a company located in the United Kingdom for \$80 million. The Company will operate under the name II-VI Compound Semiconductor Ltd. and will be included in the II-VI Laser Solutions segment for financial reporting purposes. The preliminary purchase price allocation is incomplete at this time and will be accounted for in accordance with ASU 805 Business Combinations.

Quarterly Financial Data (unaudited)

Fiscal Year 2017

Quarter Ended	September 30, 2016	December 31, 2016	March 31, 2017	June 30, 2017
(\$000)				
2017				
Net revenues	\$ 221,520	\$ 231,822	\$ 244,987	\$ 273,717
Cost of goods sold	133,918	137,559	147,277	164,939
Internal research and development	21,832	23,632	25,380	25,966
Selling, general and administrative	42,079	43,495	43,291	47,137
Interest expense	1,246	1,365	1,936	2,262
Other expense (income) - net	(1,402)	(6,045)	(2,164)	(445)
Earnings before income taxes	23,847	31,816	29,267	33,858
Income taxes	7,553	7,913	6,837	1,211
Net Earnings	\$ 16,294	\$ 23,903	\$ 22,430	\$ 32,647
Basic earnings per share	\$ 0.26	\$ 0.38	\$ 0.36	\$ 0.52
Diluted earnings per share	\$ 0.26	\$ 0.37	\$ 0.35	\$ 0.50

Fiscal Year 2016

Quarter Ended	September 30, 2015	December 31, 2015	March 31, 2016	June 30, 2016
(\$000)				
2016				
Net revenues	\$ 189,207	\$ 191,434	\$ 205,105	\$ 241,470
Cost of goods sold	118,018	120,090	127,436	148,859
Internal research and development	13,151	12,155	14,946	20,102
Selling, general and administrative	36,310	37,408	43,333	43,595
Interest expense	649	597	769	1,066
Other expense (income) - net	(1,057)	(994)	1,257	(429)
Earnings before income taxes	22,136	22,178	17,364	28,277
Income taxes	4,922	3,187	2,426	13,934
Net Earnings	\$ 17,214	\$ 18,991	\$ 14,938	\$ 14,343
Basic earnings per share	\$ 0.28	\$ 0.31	\$ 0.24	\$ 0.23
Diluted earnings per share	\$ 0.27	\$ 0.30	\$ 0.24	\$ 0.23

SCHEDULE II

II-VI INCORPORATED AND SUBSIDIARIES

VALUATION AND QUALIFYING ACCOUNTS

YEARS ENDED JUNE 30, 2017, 2016, 2015 AND

(IN THOUSANDS OF DOLLARS)

	Balance at Beginning of Year	Additions Charged to Expense	Charged to Other Accounts	Deduction from Reserves	Balance at End of Year
YEAR ENDED JUNE 30, 2017:					
Allowance for doubtful accounts	\$ 2,016	\$(134)	\$ -	\$ (568) ⁽²⁾	\$1,314
Warranty reserves	\$ 3,908	\$4,850	\$ -	\$ (4,212)	\$4,546
Deferred tax asset valuation allowance	\$ 42,641	\$(79)	\$ -	\$ -	\$42,562
YEAR ENDED JUNE 30, 2016:					
Allowance for doubtful accounts	\$ 1,048	\$1,123	\$ -	\$ (155) ⁽²⁾	\$2,016
Warranty reserves	\$ 3,251	\$4,648	\$ 82	⁽¹⁾ \$ (4,073)	\$3,908
Deferred tax asset valuation allowance	\$ 2,713	\$8,464	\$ 36,240	⁽³⁾ \$ (4,776) ⁽⁴⁾	\$42,641
YEAR ENDED JUNE 30, 2015:					
Allowance for doubtful accounts	\$ 1,852	\$(482)	\$ -	\$ (322) ⁽²⁾	\$1,048
Warranty reserves	\$ 2,859	\$5,047	\$ -	\$ (4,655)	\$3,251

(1) Relates to the warranty reserve acquired from the acquisitions.

(2) Primarily relates to write-offs of accounts receivable.

(3) Valuation allowance recorded through goodwill.

(4) Reduction in valuation allowance as a result of divestiture of portion of business.

Item 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

Item 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

The Company's management evaluated, with the participation of the Company's Chief Executive Officer, and the Company's Chief Financial Officer and Treasurer, the effectiveness of the Company's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934, as amended (the "Exchange Act")) as of the end of the period covered by this Annual Report on Form 10-K. The Company's disclosure controls were designed to provide reasonable assurance that information required to be disclosed in reports that we file

or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC. It should be noted that 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, regardless of how remote. However, the controls have been designed to provide reasonable assurance of achieving the controls' stated goals. Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that, as of June 30, 2017, the Company's disclosure controls and procedures are effective.

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) and 15d-15(f) under the Exchange Act. The Company's internal control system is designed to provide reasonable assurance concerning the reliability of the financial data used in the preparation of the Company's financial statements, as well as reasonable assurance with respect to safeguarding the Company's assets from unauthorized use or disposition. All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement presentation and other results of such systems. Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we

conducted an evaluation of the effectiveness of our internal control over financial reporting as of June 30, 2017. In making this evaluation, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control – Integrated Framework (2013). Management excluded from the scope of its assessment of internal control over financial reporting, the operations and related assets of Integrated Photonics Inc. which was acquired on June 19, 2017. The recent acquisition excluded from management’s assessment of internal controls over financial reporting represented approximately \$59.8 million and \$45.3 million of total assets and net assets, respectively, as of June 30, 2017 and approximately \$1.3 million and \$0.1 million of total revenues and net income, respectively, for the fiscal year then ended. Based on the evaluation, management concluded that as of June 30, 2017, the Company’s internal controls over financial reporting were effective.

Report of the Registered Public Accounting Firm

The report of Ernst & Young LLP, an independent registered public accounting firm, with respect to our internal control over financial reporting is included in Item 8 of this Annual Report on Form 10-K.

Changes in Internal Control over Financial Reporting

There have been no changes in the Company’s internal controls over financial reporting that occurred during our most recent quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. OTHER INFORMATION

None.

PART III

Item 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT

The information set forth above in Part I of this Annual Report on Form 10-K under the caption “Executive Officers of the Registrant” is incorporated herein by reference. The other information required by this item is incorporated herein by reference to the information set forth under the captions “Election of Directors Section 16(a) Beneficial Ownership Reporting Compliance” in the Company’s definitive proxy statement for the 2017 Annual Meeting of Shareholders to be filed pursuant to Regulation 14A of the Exchange Act (the “Proxy Statement”).

Audit Committee Financial Expert

The information as to the Audit Committee and the Audit Committee Financial Expert is incorporated herein by reference to the information set forth in the Company’s Proxy Statement.

Code of Ethics

The Company has adopted its Code of Business Conduct and Ethics for all of its employees and its Code of Ethics for Senior Financial Officers including the principal executive officer and principal financial officer. The Code of Business Conduct and Ethics and Code of Ethics for Senior Financial Officers can be found on the Company’s Internet web site at www.ii-vi.com under “Investors Information – Corporate Governance Documents.” The Company will promptly disclose on its web site (i) any amendments or waivers with respect to a director’s or executive officer’s

compliance with the Code of Business Conducts and Ethics and (ii) any amendments or waivers with respect to any provision of the Code of Ethics for Senior Financial Officers. Any person may also obtain a copy of the Code of Business Conduct and Ethics and/or the Code of Ethics for Senior Financial Officer without charge by submitting their request to the Chief Financial Officer and Treasurer of II-VI Incorporated, 375 Saxonburg Boulevard, Saxonburg, Pennsylvania 16056 or by calling (724) 352-4455.

The web site and information contained on it or incorporated in it are not intended to be incorporated in this Annual Report on Form 10-K or other filings with the SEC.

Item 11. EXECUTIVE COMPENSATION

The information required by this item is incorporated herein by reference to the information set forth under the caption “Director Compensation in Fiscal Year 2017,” “Executive Compensation,” “Compensation Committee Report” and “Compensation and Risk” in the Company’s Proxy Statement.

Item 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this item is incorporated herein by reference to the information set forth under the captions “Equity Compensation Plan Information” and “Security Owners of Certain Beneficial Owners and Management” in the Company’s Proxy Statement.

Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

The information required by this item is incorporated herein by reference to the information set forth under the caption “Director Independence and Corporate Governance Policies” in the Company’s Proxy Statement.

Item 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by this item is incorporated herein by reference to the information set forth under the caption “Ratification of Selection of Independent Registered Public Accounting Firm” in the Company’s Proxy Statement.

PART IV

Item 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a)(1) Financial Statements

The financial statements are set forth under Item 8 of this Annual Report on Form 10-K.

(2) Schedules

Schedule II – Valuation and Qualifying Accounts for each of the three fiscal years in the period ended June 30, 2017 is set forth under Item 8 of this Annual Report on Form 10-K.

Financial statements, financial statement schedules and exhibits not listed have been omitted where the required information is included in the Consolidated Financial Statements or notes thereto, or is not applicable or required.

Exhibit No.	Description	Location
3.01	Amended and Restated Articles of Incorporation of II-VI Incorporated	Incorporated herein by reference to Exhibit 3.1 to II-VI's Current Report on Form 8-K (File No. 000-16195) filed on November 8, 2011.
3.02	Amended and Restated By-Laws of II-VI Incorporated	Incorporated herein by reference to Exhibit 3.1 to II-VI's Current Report on Form 8-K (File No. 000-16195) filed on November 14, 2014.
10.01	Third Amended and Restated Credit Agreement, by and among II-VI Incorporated, each of the Guarantors party thereto, the Lenders party thereto, and PNC Bank, National Association, as Administrative and Documentation Agent, and Bank of America, N.A., as Syndication Agent, dated as of July 28, 2016.	Incorporated herein by reference to Exhibit 10.1 to II-VI's Current Report on Form 8-K (File No. 000-16195) filed on August 2, 2016.
10.02	Credit Agreement, dated as of January 31, 2012, by and among II-VI Japan Incorporated, each of the Guarantors party thereto, PNC Bank, National Association, the other Banks party thereto, and PNC Bank, National Association, in its capacity as agent for the Banks thereunder (500,000,000 Yen Revolving Credit Facility)	Incorporated herein by reference to Exhibit 10.02 to II-VI's Annual Report on Form 10-K (File No. 000-16195) for the year ended June 30, 2015.
10.03	First Amendment to Credit Agreement, dated as of September 18, 2015, by and among II-VI Japan Incorporated, the Guarantors party thereto, the Banks party thereto, and PNC Bank, National Association, as agent.	Incorporated herein by reference to Exhibit 10.01 to II-VI's Quarterly Report on Form 10-Q (File No. 000-16195) for the quarter ended September 30, 2015.
10.04	Amended and Restated Employment Agreement, dated September 19, 2008, by and between II-VI and Francis J. Kramer*	Incorporated herein by reference to Exhibit 10.1 to II-VI's Current Report on Form 8-K (File No. 000-16195) filed on September 24, 2008.
10.05		

Edgar Filing: II-VI INC - Form 10-K

- Employment Agreement, dated August 1, 2016, by and between II-VI and Vincent D. Mattera, Jr.* Incorporated herein by reference to Exhibit 10.1 to II-VI's Current Report on Form 8-K (File No. 000-16195) filed on August 2, 2016.
- 10.06 Employment Agreement, dated March 6, 2014, by and between II-VI Incorporated and Mary Jane Raymond* Incorporated herein by reference to Exhibit 10.1 to II-VI's Current Report on Form 10-Q (File No. 000-16195) for the quarter ended March 31, 2014.
- 10.07 Employment Agreement, dated October 3, 2012, by and between II-VI Incorporated and Giovanni Barbarossa* Incorporated herein by reference to Exhibit 10.07 to II-VI's Annual Report on Form 10-K (File No. 000-16195) for the year ended June 30, 2015.
- 10.08 Employment Agreement, dated November 10, 2008, by and between II-VI Incorporated and David G. Wagner* Incorporated herein by reference to Exhibit 10.08 to II-VI's Annual Report on Form 10-K (File No. 000-16195) for the year ended June 30, 2015.
- 10.09 Secondment Engagement Letter, dated November 6, 2015, among Sherrard, German & Kelly, P.C., II-VI Incorporated, and Walter R. Bashaw II* Incorporated herein by reference to Exhibit 10.02 to II-VI's Current Report on Form 10-Q (File No. 000-16195) for the Quarter ended December 31, 2015.
- 10.10 Employment Agreement, dated February 1, 2016, by and between II-VI Incorporated and Gary A. Kapusta* Incorporated herein by reference to Exhibit 10.01 to II-VI's Current Report on Form 8-K (File No. 000-16195) filed on February 1, 2016.

Edgar Filing: II-VI INC - Form 10-K

- | | | |
|-------|---|---|
| 10.11 | Employment Agreement, dated March 6, 2017, by and between II-VI Incorporated and Jo Anne Schwendinger * | Filed herewith. |
| 10.12 | Consulting Agreement, dated June 30, 2016, between II-VI Incorporated and Carl J. Johnson* | Incorporated herein by reference to Exhibit 10.01 to II-VI's Current Report on Form 10-Q (File No. 000-16195) for the quarter ended March 31, 2017. |
| 10.13 | Form of Employment Agreement* | Incorporated herein by reference to Exhibit 10.16 to II-VI's Registration Statement on Form S-1 (File No. 33-16389). |
| 10.14 | Form of Executive Employment Agreement | Filed herewith |
| 10.15 | Form of Exhibit 1 to Employment Agreement | Filed herewith |
| 10.16 | Form of Indemnification Agreement | Filed herewith |
| 10.17 | Form of Representative Agreement between II-VI and its foreign representatives | Incorporated herein by reference to Exhibit 10.15 to II-VI's Registration Statement on Form S-1 (File No. 33-16389). |
| 10.18 | II-VI Incorporated Amended and Restated Employees' Stock Purchase Plan | Incorporated herein by reference to Exhibit 10.04 to II-VI's Registration Statement on Form S-1 (File No. 33-16389). |
| 10.19 | First Amendment to the II-VI Incorporated Amended and Restated Employees' Stock Purchase Plan | Incorporated herein by reference to Exhibit 10.01 to II-VI's Quarterly Report on Form 10-Q (File No. 000-16195) for the quarter ended March 31, 1996. |
| 10.20 | II-VI Incorporated Amended and Restated Employees' Profit-Sharing Plan and Trust Agreement, as amended | Incorporated herein by reference to Exhibit 10.05 to II-VI's Registration Statement on Form S-1 (File No. 33-16389). |
| 10.21 | Description of Bonus Incentive Plan* | Incorporated herein by reference to Exhibit 10.14 to II-VI's Annual Report on Form 10-K (File No. 000-16195) for the fiscal year ended June 30, |

Edgar Filing: II-VI INC - Form 10-K

1996.

- | | | |
|-------|--|---|
| 10.22 | Description of Discretionary Incentive Plan (now known as the Goal/ Results Incentive Program)* | Incorporated herein by reference to Exhibit 10.27 to II-VI's Annual Report on Form 10-K (File No. 000-16195) for the fiscal year ended June 30, 2009. |
| 10.23 | Description of Management-By-Objective Plan* | Incorporated herein by reference to Exhibit 10.09 to II-VI's Annual Report on Form 10-K (File No. 000-16195) for the fiscal year ended June 30, 1993. |
| 10.24 | Amended and Restated II-VI Incorporated Deferred Compensation Plan (applicable to periods prior to January 1, 2015)* | Incorporated herein by reference to Exhibit 10.17 to II-VI's Annual Report on Form 10-K (File No. 000-16195) for the fiscal year ended June 30, 2015. |
| 10.25 | Amended and Restated II-VI Incorporated Deferred Compensation Plan (applicable to periods after January 1, 2015)* | Incorporated herein by reference to Exhibit 10.18 to II-VI's Annual Report on Form 10-K (File No. 000-16195) for the fiscal year ended June 30, 2015. |
| 10.26 | Trust Under the II-VI Incorporated Deferred Compensation Plan* | Incorporated herein by reference is Exhibit 10.13 to II-VI's Annual Report on Form 10-K (File No. 000-16195) for the fiscal year ended June 30, 1996. |

- 10.27 II-VI Incorporated 2009 Omnibus Incentive Plan* Incorporated herein by reference to Exhibit A to II-VI's Definitive Proxy Statement on Schedule 14A (File No. 000-16195) filed on September 25, 2009.
- 10.28 Form of Nonqualified Stock Option Agreement under the II-VI Incorporated 2009 Omnibus Incentive Plan* Incorporated herein by reference to Exhibit 10.27 to II-VI's Current Report on Form 10-Q (File No. 000-16195) for the quarter ended December 31, 2011.
- 10.29 Form of Restricted Share Award Agreement under the II-VI Incorporated 2009 Omnibus Incentive Plan* Incorporated herein by reference to Exhibit 10.28 to II-VI's Current Report on Form 10-Q (File No. 000-16195) for the quarter ended December 31, 2011.
- 10.30 Form of Performance Share Award Agreement under the II-VI Incorporated 2009 Omnibus Incentive Plan* Incorporated herein by reference to Exhibit 10.29 to II-VI's Current Report on Form 10-Q (File No. 000-16195) for the quarter ended December 31, 2011.
- 10.31 Form of Stock Appreciation Rights Agreement under the II-VI Incorporated 2009 Omnibus Incentive Plan* Incorporated herein by reference to Exhibit 10.30 to II-VI's Current Report on Form 10-Q (File No. 000-16195) for the quarter ended December 31, 2011.
- 10.32 Form of Performance Unit Award Agreement under the II-VI Incorporated 2009 Omnibus Incentive Plan* Incorporated herein by reference to Exhibit 10.31 to II-VI's Current Report on Form 10-Q (File No. 000-16195) for the quarter ended March 31, 2012.
- 10.33 Form of Restricted Share Unit Award Agreement under the II-VI Incorporated 2009 Omnibus Incentive Plan* Incorporated herein by reference to Exhibit 10.32 to II-VI's Current Report on Form 10-Q (File No. 000-16195) for the quarter ended March 31, 2012.
- 10.34 II-VI Incorporated Amended and Restated 2012 Omnibus Incentive Plan* Incorporated herein by reference to Exhibit 10.01 to II-VI's Registration Statement on Form S-8 (File No. 333-199855) filed on November 4, 2014.

10.35

Edgar Filing: II-VI INC - Form 10-K

- | | |
|---|---|
| Form of Nonqualified Stock Option Agreement under the II-VI Incorporated Amended and Restated 2012 Omnibus Incentive Plan* | Incorporated herein by reference to Exhibit 10.30 to II-VI's Annual Report on Form 10-K (File No. 000-16195) for the fiscal year ended June 30, 2013. |
| 10.36 Form of Restricted Share Award Agreement under the II-VI Incorporated Amended and Restated 2012 Omnibus Incentive Plan* | Incorporated herein by reference to Exhibit 10.31 to II-VI's Annual Report on Form 10-K (File No. 000-16195) for the fiscal year ended June 30, 2013. |
| 10.37 Form of Performance Share Award Agreement (Consolidated Revenue) under the II-VI Incorporated Amended and Restated 2012 Omnibus Incentive Plan* | Incorporated herein by reference to Exhibit 10.32 to II-VI's Annual Report on Form 10-K (File No. 000-16195) for the fiscal year ended June 30, 2013. |
| 10.38 Form of Stock Appreciation Rights Agreement under the II-VI Incorporated Amended and Restated 2012 Omnibus Incentive Plan* | Incorporated herein by reference to Exhibit 10.33 to II-VI's Annual Report on Form 10-K (File No. 000-16195) for the fiscal year ended June 30, 2013. |
| 10.39 Form of Performance Unit Award Agreement under the II-VI Incorporated Amended and Restated 2012 Omnibus Incentive Plan* | Incorporated herein by reference to Exhibit 10.34 to II-VI's Annual Report on Form 10-K (File No. 000-16195) for the fiscal year ended June 30, 2013. |

- 10.40 Form of Restricted Share Unit Award Agreement under the II-VI Incorporated Amended and Restated 2012 Omnibus Incentive Plan* Incorporated herein by reference to Exhibit 10.35 to II-VI's Annual Report on Form 10-K (File No. 000-16195) for the fiscal year ended June 30, 2013.
- 10.41 Form of Performance Share Award Agreement (Total Shareholder Return) under the II-VI Incorporated Amended and Restated 2012 Omnibus Incentive Plan* Incorporated herein by reference to Exhibit 10.38 to II-VI's Annual Report on Form 10-K (File No. 000-16195) for the fiscal year ended June 30, 2014.
- 10.42 Form of Performance Unit Award Agreement (Total Shareholder Return) under the II-VI Incorporated Amended and Restated 2012 Omnibus Incentive Plan* Incorporated herein by reference to Exhibit 10.39 to II-VI's Annual Report on Form 10-K (File No. 000-16195) for the fiscal year ended June 30, 2014.
- 10.43 Form of Performance Share Award Agreement (Cash Flow From Operations) under the II-VI Incorporated Amended and Restated 2012 Omnibus Incentive Plan* Incorporated herein by reference to Exhibit 10.36 to II-VI's Annual Report on Form 10-K (File No. 000-16195) for the fiscal year ended June 30, 2015.
- 10.44 Form of Performance Unit Award Agreement (Cash Flow From Operations) under the II-VI Incorporated Amended and Restated 2012 Omnibus Incentive Plan* Incorporated herein by reference to Exhibit 10.37 to II-VI's Annual Report on Form 10-K (File No. 000-16195) for the fiscal year ended June 30, 2015.
- 10.45 II-VI Incorporated Second Amended and Restated Omnibus Incentive Plan* Incorporated herein by reference to Exhibit 10.1 to II-VI's Current Report on Form 10-Q (File No. 000-16195) for the quarter ended December 31, 2015.
- 10.46 Form of Nonqualified Stock Option Agreement under the II-VI Incorporated Second Amended and Restated Omnibus Incentive Plan* Incorporated herein by reference to Exhibit 10.03 to II-VI's Quarterly Report on Form 10-Q (File No. 000-16195) for the quarter ended September 30, 2016.
- 10.47 Form of Stock Appreciation Rights Agreement under the II-VI Incorporated Second Amended and Restated Omnibus Incentive Plan* Incorporated herein by reference to Exhibit 10.04 to II-VI's Quarterly Report on Form 10-Q (File No. 000-16195) for the quarter ended September 30, 2016.

10.48

Edgar Filing: II-VI INC - Form 10-K

- | | |
|--|---|
| Form of Restricted Share Award Agreement (3 year) under the II-VI Incorporated Second Amended and Restated Omnibus Incentive Plan* | Incorporated herein by reference to Exhibit 10.05 to II-VI's Quarterly Report on Form 10-Q (File No. 000-16195) for the quarter ended September 30, 2016. |
| 10.49 Form of Restricted Share Award Agreement (1 year) under the II-VI Incorporated Second Amended and Restated Omnibus Incentive Plan* | Incorporated herein by reference to Exhibit 10.06 to II-VI's Quarterly Report on Form 10-Q (File No. 000-16195) for the quarter ended September 30, 2016. |
| 10.50 Form of Restricted Share Unit Award Agreement under the II-VI Incorporated Second Amended and Restated Omnibus Incentive Plan* | Incorporated herein by reference to Exhibit 10.07 to II-VI's Quarterly Report on Form 10-Q (File No. 000-16195) for the quarter ended September 30, 2016. |
| 10.51 Form of Performance Share Award Agreement under the II-VI Incorporated Second Amended and Restated Omnibus Incentive Plan* | Incorporated herein by reference to Exhibit 10.08 to II-VI's Quarterly Report on Form 10-Q (File No. 000-16195) for the quarter ended September 30, 2016. |
| 10.52 Form of Performance Unit Award Agreement under the II-VI Incorporated Second Amended and Restated Omnibus Incentive Plan* | Incorporated herein by reference to Exhibit 10.09 to II-VI's Quarterly Report on Form 10-Q (File No. 000-16195) for the quarter ended September 30, 2016. |

Edgar Filing: II-VI INC - Form 10-K

10.53	Form of Performance Share Award Agreement (June 30, 2019) under the II-VI Incorporated Second Amended and Restated Omnibus Incentive Plan*	Incorporated herein by reference to Exhibit 10.10 to II-VI's Quarterly Report on Form 10-Q (File No. 000-16195) for the quarter ended September 30, 2016.
10.54	Form of Total Shareholder Return Performance Share Award Agreement under the II-VI Incorporated Second Amended and Restated Omnibus Incentive Plan*	Incorporated herein by reference to Exhibit 10.11 to II-VI's Quarterly Report on Form 10-Q (File No. 000-16195) for the quarter ended September 30, 2016.
10.55	Form of Total Shareholder Return Performance Unit Award Agreement under the II-VI Incorporated Second Amended and Restated Omnibus Incentive Plan*	Incorporated herein by reference to Exhibit 10.12 to II-VI's Quarterly Report on Form 10-Q (File No. 000-16195) for the quarter ended September 30, 2016.
21.01	List of Subsidiaries of II-VI Incorporated	Filed herewith.
23.01	Consent of Ernst & Young LLP	Filed herewith.
31.01	Certification of the Chief Executive Officer pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934, as amended, and Section 302 of the Sarbanes-Oxley Act of 2002	Filed herewith.
31.02	Certification of the Chief Financial Officer pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934, as amended, and Section 302 of the Sarbanes-Oxley Act of 2002	Filed herewith.
32.01	Certification of the Chief Executive Officer pursuant to Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, and 18 U.S.C. § 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	Furnished herewith.
32.02	Certification of the Chief Financial Officer pursuant to Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, and 18 U.S.C. § 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	Furnished herewith.

101 Interactive Data File

(101.INS) XBRL Instance Document Filed herewith.

(101.SCH) XBRL Taxonomy Extension Schema Document Filed herewith.

(101.CAL) XBRL Taxonomy Extension Calculation Linkbase Document Filed herewith.

(101.DEF) XBRL Taxonomy Definition Linkbase Filed herewith.

(101.LAB) XBRL Taxonomy Extension Label Linkbase Document Filed herewith.

(101.PRE) XBRL Taxonomy Extension Presentation Linkbase Document Filed herewith.

*Denotes management contract or compensatory plan, contract or arrangement.

The Registrant will furnish to the Commission upon request copies of any instruments not filed herewith which authorize the issuance of long-term obligations of the Registrant not in excess of 10% of the Registrant's total assets on a consolidated basis.

Item 16.FORM 10-K SUMMARY

None.

88

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

II-VI INCORPORATED

Date: August 21, 2017 By: /s/ Vincent D. Mattera Jr.
Vincent D. Mattera Jr.
President and Chief Executive Officer

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 and in the capacities and on the dates indicated.

Principal Executive Officer:

Date: August 21, 2017 By: /s/ Vincent D. Mattera Jr.
Vincent D. Mattera Jr.
President and Chief Executive Officer

Principal Financial and Accounting Officer:

Date: August 21, 2017 By: /s/ Mary Jane Raymond
Mary Jane Raymond
Chief Financial Officer and Treasurer

Date: August 21, 2017 By: /s/ Francis J. Kramer
Francis J. Kramer
Chairman of the Board and Director

Date: August 21, 2017 By: /s/ Joseph J. Corasanti
Joseph J. Corasanti
Director

Date: August 21, 2017 By: /s/ RADM Marc Y. E. Pelaez (retired)
RADM Marc Y. E. Pelaez (retired)
Director

Date: August 21, 2017 By: /s/ Howard H. Xia
Howard H. Xia
Director

Date: August 21, 2017 By: /s/ William Schromm
William Schromm
Director

Date: August 21, 2017 By: /s/ Shaker Sadasivam
Shaker Sadasivam
Director

EXHIBIT INDEX

Exhibit No.	Description	Location
3.01	Amended and Restated Articles of Incorporation of II-VI Incorporated	Incorporated herein by reference to Exhibit 3.1 to II-VI's Current Report on Form 8-K (File No. 000-16195) filed on November 8, 2011.
3.02	Amended and Restated By-Laws of II-VI Incorporated	Incorporated herein by reference to Exhibit 3.1 to II-VI's Current Report on Form 8-K (File No. 000-16195) filed on November 14, 2014.
10.01	Third Amended and Restated Credit Agreement, by and among II-VI Incorporated, each of the Guarantors party thereto, the Lenders party thereto, and PNC Bank, National Association, as Administrative and Documentation Agent, and Bank of America, N.A., as Syndication Agent, dated as of July 20, 2016.	Incorporated herein by reference to Exhibit 10.1 to II-VI's Current Report on Form 8-K (File No. 000-16195) filed on August 2, 2016.
10.02	Credit Agreement, dated as of January 31, 2012, by and among II-VI Japan Incorporated, each of the Guarantors party thereto, PNC Bank, National Association, the other Banks party thereto, and PNC Bank, National Association, in its capacity as agent for the Banks thereunder (500,000,000 Yen Revolving Credit Facility)	Incorporated herein by reference to Exhibit 10.02 to II-VI's Annual Report on Form 10-K (File No. 000-16195) for the year ended June 30, 2015.
10.03	First Amendment to Credit Agreement, dated as of September 18, 2015, by and among II-VI Japan Incorporated, the Guarantors party thereto, the Banks party thereto, and PNC Bank, National Association, as agent.	Incorporated herein by reference to Exhibit 10.01 to II-VI's Quarterly Report on Form 10-Q (File No. 000-16195) for the quarter ended September 30, 2015.
10.04	Amended and Restated Employment Agreement, dated September 19, 2008, by and between II-VI and Francis J. Kramer*	Incorporated herein by reference to Exhibit 10.1 to II-VI's Current Report on Form 8-K (File No. 000-16195) filed on September 24, 2008.
10.05	Employment Agreement, dated August 1, 2016, by and between II-VI and Vincent D. Mattera, Jr.*	Incorporated herein by reference to Exhibit 10.1 to II-VI's Current Report on Form 8-K

Edgar Filing: II-VI INC - Form 10-K

(File No. 000-16195) filed on August 2, 2016.

- 10.06 Employment Agreement, dated March 6, 2014, by and between II-VI Incorporated and Mary Jane Raymond* Incorporated herein by reference to Exhibit 10.1 to II-VI's Current Report on Form 10-Q (File No. 000-16195) for the quarter ended March 31, 2014.
- 10.07 Employment Agreement, dated October 3, 2012, by and between II-VI Incorporated and Giovanni Barbarossa* Incorporated herein by reference to Exhibit 10.07 to II-VI's Annual Report on Form 10-K (File No. 000-16195) for the year ended June 30, 2015.
- 10.08 Employment Agreement, dated November 10, 2008, by and between II-VI Incorporated and David G. Wagner* Incorporated herein by reference to Exhibit 10.08 to II-VI's Annual Report on Form 10-K (File No. 000-16195) for the year ended June 30, 2015.
- 10.09 Secondment Engagement Letter, dated November 6, 2015, among Sherrard, German & Kelly, P.C., II-VI Incorporated, and Walter R. Bashaw II* Incorporated herein by reference to Exhibit 10.02 to II-VI's Current Report on Form 10-Q (File No. 000-16195) for the Quarter ended December 31, 2015.
- 10.10 Employment Agreement, dated February 1, 2016, by and between II-VI Incorporated and Gary A. Kapusta* Incorporated herein by reference to Exhibit 10.01 to II-VI's Current Report on Form 8-K (File No. 000-16195) filed on February 1, 2016.

Edgar Filing: II-VI INC - Form 10-K

- | | | |
|-------|---|---|
| 10.11 | Employment Agreement, dated March 6, 2017, by and between II-VI Incorporated and Jo Anne Schwendinger * | Filed herewith. |
| 10.12 | Consulting Agreement, dated June 30, 2016, between II-VI Incorporated and Carl J. Johnson | Incorporated herein by reference to Exhibit 10.01 to II-VI's Current Report on Form 10-Q (File No. 000-16195) for the quarter ended March 31, 2017. |
| 10.13 | Form of Employment Agreement* | Incorporated herein by reference to Exhibit 10.16 to II-VI's Registration Statement on Form S-1 (File No. 33-16389). |
| 10.14 | Form of Executive Employment Agreement | Filed herewith |
| 10.15 | Form of Exhibit 1 to Employment Agreement | Filed herewith |
| 10.16 | Form of Indemnification Agreement | Filed herewith |
| 10.17 | Form of Representative Agreement between II-VI and its foreign representatives | Incorporated herein by reference to Exhibit 10.15 to II-VI's Registration Statement on Form S-1 (File No. 33-16389). |
| 10.18 | II-VI Incorporated Amended and Restated Employees' Stock Purchase Plan | Incorporated herein by reference to Exhibit 10.04 to II-VI's Registration Statement on Form S-1 (File No. 33-16389). |
| 10.19 | First Amendment to the II-VI Incorporated Amended and Restated Employees' Stock Purchase Plan | Incorporated herein by reference to Exhibit 10.01 to II-VI's Quarterly Report on Form 10-Q (File No. 000-16195) for the quarter ended March 31, 1996. |
| 10.20 | II-VI Incorporated Amended and Restated Employees' Profit-Sharing Plan and Trust Agreement, as amended | Incorporated herein by reference to Exhibit 10.05 to II-VI's Registration Statement on Form S-1 (File No. 33-16389). |
| 10.21 | Description of Bonus Incentive Plan* | Incorporated herein by reference to Exhibit 10.14 to II-VI's Annual Report on Form 10-K (File No. 000-16195) for the fiscal year ended June 30, |

Edgar Filing: II-VI INC - Form 10-K

1996.

- | | | |
|-------|--|---|
| 10.22 | Description of Discretionary Incentive Plan (now known as the Goal/ Results Incentive Program)* | Incorporated herein by reference to Exhibit 10.27 to II-VI's Annual Report on Form 10-K (File No. 000-16195) for the fiscal year ended June 30, 2009. |
| 10.23 | Description of Management-By-Objective Plan* | Incorporated herein by reference to Exhibit 10.09 to II-VI's Annual Report on Form 10-K (File No. 000-16195) for the fiscal year ended June 30, 1993. |
| 10.24 | Amended and Restated II-VI Incorporated Deferred Compensation Plan (applicable to periods prior to January 1, 2015)* | Incorporated herein by reference to Exhibit 10.17 to II-VI's Annual Report on Form 10-K (File No. 000-16195) for the fiscal year ended June 30, 2015. |
| 10.25 | Amended and Restated II-VI Incorporated Deferred Compensation Plan (applicable to periods after January 1, 2015)* | Incorporated herein by reference to Exhibit 10.18 to II-VI's Annual Report on Form 10-K (File No. 000-16195) for the fiscal year ended June 30, 2015. |
| 10.26 | Trust Under the II-VI Incorporated Deferred Compensation Plan* | Incorporated herein by reference is Exhibit 10.13 to II-VI's Annual Report on Form 10-K (File No. 000-16195) for the fiscal year ended June 30, 1996. |

- 10.27 II-VI Incorporated 2009 Omnibus Incentive Plan* Incorporated herein by reference to Exhibit A to II-VI's Definitive Proxy Statement on Schedule 14A (File No. 000-16195) filed on September 25, 2009.
- 10.28 Form of Nonqualified Stock Option Agreement under the II-VI Incorporated 2009 Omnibus Incentive Plan* Incorporated herein by reference to Exhibit 10.27 to II-VI's Current Report on Form 10-Q (File No. 000-16195) for the quarter ended December 31, 2011.
- 10.29 Form of Restricted Share Award Agreement under the II-VI Incorporated 2009 Omnibus Incentive Plan* Incorporated herein by reference to Exhibit 10.28 to II-VI's Current Report on Form 10-Q (File No. 000-16195) for the quarter ended December 31, 2011.
- 10.30 Form of Performance Share Award Agreement under the II-VI Incorporated 2009 Omnibus Incentive Plan* Incorporated herein by reference to Exhibit 10.29 to II-VI's Current Report on Form 10-Q (File No. 000-16195) for the quarter ended December 31, 2011.
- 10.31 Form of Stock Appreciation Rights Agreement under the II-VI Incorporated 2009 Omnibus Incentive Plan* Incorporated herein by reference to Exhibit 10.30 to II-VI's Current Report on Form 10-Q (File No. 000-16195) for the quarter ended December 31, 2011.
- 10.32 Form of Performance Unit Award Agreement under the II-VI Incorporated 2009 Omnibus Incentive Plan* Incorporated herein by reference to Exhibit 10.31 to II-VI's Current Report on Form 10-Q (File No. 000-16195) for the quarter ended March 31, 2012.
- 10.33 Form of Restricted Share Unit Award Agreement under the II-VI Incorporated 2009 Omnibus Incentive Plan* Incorporated herein by reference to Exhibit 10.32 to II-VI's Current Report on Form 10-Q (File No. 000-16195) for the quarter ended March 31, 2012.
- 10.34 II-VI Incorporated Amended and Restated 2012 Omnibus Incentive Plan* Incorporated herein by reference to Exhibit 10.01 to II-VI's Registration Statement on Form S-8 (File No. 333-199855) filed on November 4, 2014.

10.35

Edgar Filing: II-VI INC - Form 10-K

- | | |
|---|---|
| Form of Nonqualified Stock Option Agreement under the II-VI Incorporated Amended and Restated 2012 Omnibus Incentive Plan* | Incorporated herein by reference to Exhibit 10.30 to II-VI's Annual Report on Form 10-K (File No. 000-16195) for the fiscal year ended June 30, 2013. |
| 10.36 Form of Restricted Share Award Agreement under the II-VI Incorporated Amended and Restated 2012 Omnibus Incentive Plan* | Incorporated herein by reference to Exhibit 10.31 to II-VI's Annual Report on Form 10-K (File No. 000-16195) for the fiscal year ended June 30, 2013. |
| 10.37 Form of Performance Share Award Agreement (Consolidated Revenue) under the II-VI Incorporated Amended and Restated 2012 Omnibus Incentive Plan* | Incorporated herein by reference to Exhibit 10.32 to II-VI's Annual Report on Form 10-K (File No. 000-16195) for the fiscal year ended June 30, 2013. |
| 10.38 Form of Stock Appreciation Rights Agreement under the II-VI Incorporated Amended and Restated 2012 Omnibus Incentive Plan* | Incorporated herein by reference to Exhibit 10.33 to II-VI's Annual Report on Form 10-K (File No. 000-16195) for the fiscal year ended June 30, 2013. |
| 10.39 Form of Performance Unit Award Agreement under the II-VI Incorporated Amended and Restated 2012 Omnibus Incentive Plan* | Incorporated herein by reference to Exhibit 10.34 to II-VI's Annual Report on Form 10-K (File No. 000-16195) for the fiscal year ended June 30, 2013. |

10.40	Form of Restricted Share Unit Award Agreement under the II-VI Incorporated Amended and Restated 2012 Omnibus Incentive Plan*	Incorporated herein by reference to Exhibit 10.35 to II-VI's Annual Report on Form 10-K (File No. 000-16195) for the fiscal year ended June 30, 2013.
10.41	Form of Performance Share Award Agreement (Total Shareholder Return) under the II-VI Incorporated Amended and Restated 2012 Omnibus Incentive Plan*	Incorporated herein by reference to Exhibit 10.38 to II-VI's Annual Report on Form 10-K (File No. 000-16195) for the fiscal year ended June 30, 2014.
10.42	Form of Performance Unit Award Agreement (Total Shareholder Return) under the II-VI Incorporated Amended and Restated 2012 Omnibus Incentive Plan*	Incorporated herein by reference to Exhibit 10.39 to II-VI's Annual Report on Form 10-K (File No. 000-16195) for the fiscal year ended June 30, 2014.
10.43	Form of Performance Share Award Agreement (Cash Flow From Operations) under the II-VI Incorporated Amended and Restated 2012 Omnibus Incentive Plan*	Incorporated herein by reference to Exhibit 10.36 to II-VI's Annual Report on Form 10-K (File No. 000-16195) for the fiscal year ended June 30, 2015.
10.44	Form of Performance Unit Award Agreement (Cash Flow From Operations) under the II-VI Incorporated Amended and Restated 2012 Omnibus Incentive Plan*	Incorporated herein by reference to Exhibit 10.37 to II-VI's Annual Report on Form 10-K (File No. 000-16195) for the fiscal year ended June 30, 2015.
10.45	II-VI Incorporated Second Amended and Restated Omnibus Incentive Plan*	Incorporated herein by reference to Exhibit 10.1 to II-VI's Current Report on Form 10-Q (File No. 000-16195) for the quarter ended December 31, 2015.
10.46	Form of Nonqualified Stock Option Agreement under the II-VI Incorporated Second Amended and Restated Omnibus Incentive Plan*	Incorporated herein by reference to Exhibit 10.03 to II-VI's Quarterly Report on Form 10-Q (File No. 000-16195) for the quarter ended September 30, 2016.
10.47	Form of Stock Appreciation Rights Agreement under the II-VI Incorporated Second Amended and Restated Omnibus Incentive Plan*	Incorporated herein by reference to Exhibit 10.04 to II-VI's Quarterly Report on Form 10-Q

(File No. 000-16195) for the quarter ended September 30, 2016.

- | | | |
|-------|--|---|
| 10.48 | Form of Restricted Share Award Agreement (3 year) under the II-VI Incorporated Second Amended and Restated Omnibus Incentive Plan* | Incorporated herein by reference to Exhibit 10.05 to II-VI's Quarterly Report on Form 10-Q (File No. 000-16195) for the quarter ended September 30, 2016. |
| 10.49 | Form of Restricted Share Award Agreement (1 year) under the II-VI Incorporated Second Amended and Restated Omnibus Incentive Plan* | Incorporated herein by reference to Exhibit 10.06 to II-VI's Quarterly Report on Form 10-Q (File No. 000-16195) for the quarter ended September 30, 2016. |
| 10.50 | Form of Restricted Share Unit Award Agreement under the II-VI Incorporated Second Amended and Restated Omnibus Incentive Plan* | Incorporated herein by reference to Exhibit 10.07 to II-VI's Quarterly Report on Form 10-Q (File No. 000-16195) for the quarter ended September 30, 2016. |
| 10.51 | Form of Performance Share Award Agreement under the II-VI Incorporated Second Amended and Restated Omnibus Incentive Plan* | Incorporated herein by reference to Exhibit 10.08 to II-VI's Quarterly Report on Form 10-Q (File No. 000-16195) for the quarter ended September 30, 2016. |
| 10.52 | Form of Performance Unit Award Agreement under the II-VI Incorporated Second Amended and Restated Omnibus Incentive Plan* | Incorporated herein by reference to Exhibit 10.09 to II-VI's Quarterly Report on Form 10-Q (File No. 000-16195) for the quarter ended September 30, 2016. |

Edgar Filing: II-VI INC - Form 10-K

10.53	Form of Performance Share Award Agreement (June 30, 2019) under the II-VI Incorporated Second Amended and Restated Omnibus Incentive Plan*	Incorporated herein by reference to Exhibit 10.10 to II-VI's Quarterly Report on Form 10-Q (File No. 000-16195) for the quarter ended September 30, 2016.
10.54	Form of Total Shareholder Return Performance Share Award Agreement under the II-VI Incorporated Second Amended and Restated Omnibus Incentive Plan*	Incorporated herein by reference to Exhibit 10.11 to II-VI's Quarterly Report on Form 10-Q (File No. 000-16195) for the quarter ended September 30, 2016.
10.55	Form of Total Shareholder Return Performance Unit Award Agreement under the II-VI Incorporated Second Amended and Restated Omnibus Incentive Plan*	Incorporated herein by reference to Exhibit 10.12 to II-VI's Quarterly Report on Form 10-Q (File No. 000-16195) for the quarter ended September 30, 2016.
21.01	List of Subsidiaries of II-VI Incorporated	Filed herewith.
23.01	Consent of Ernst & Young LLP	Filed herewith.
31.01	Certification of the Chief Executive Officer pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934, as amended, and Section 302 of the Sarbanes-Oxley Act of 2002	Filed herewith.
31.02	Certification of the Chief Financial Officer pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934, as amended, and Section 302 of the Sarbanes-Oxley Act of 2002	Filed herewith.
32.01	Certification of the Chief Executive Officer pursuant to Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, and 18 U.S.C. § 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	Furnished herewith.
32.02	Certification of the Chief Financial Officer pursuant to Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, and 18 U.S.C. § 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	Furnished herewith.

101 Interactive Data File

(101.INS) XBRL Instance Document Filed herewith.

(101.SCH) XBRL Taxonomy Extension Schema Document Filed herewith.

(101.CAL) XBRL Taxonomy Extension Calculation Linkbase Document Filed herewith.

(101.DEF) XBRL Taxonomy Definition Linkbase Filed herewith.

(101.LAB) XBRL Taxonomy Extension Label Linkbase Document Filed herewith.

(101.PRE) XBRL Taxonomy Extension Presentation Linkbase Document Filed herewith.

*Denotes management contract or compensatory plan, contract or arrangement.

The Registrant will furnish to the Commission upon request copies of any instruments not filed herewith which authorize the issuance of long-term obligations of the Registrant not in excess of 10% of the Registrant's total assets on a consolidated basis.

Item 16.FORM 10-K SUMMARY

None.

94