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As confidentially submitted to the Securities and Exchange Commission on June 28, 2013

Registration Statement No. 333-

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# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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Amendment No. 2 to  
**Form S-1**  
REGISTRATION STATEMENT  
UNDER  
THE SECURITIES ACT OF 1933

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## Applied Optoelectronics, Inc.

(Exact Name of Registrant as Specified in Its Charter)

<b>Delaware</b>	<b>3674</b>	<b>76-0533927</b>
(State or Other Jurisdiction of Incorporation or Organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification Number)

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**13115 Jess Pirtle Blvd.  
Sugar Land, TX 77478  
(281) 295-1800**

(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

**Chih-Hsiang (Thompson) Lin  
President and Chief Executive Officer  
13115 Jess Pirtle Blvd.  
Sugar Land, TX 77478  
(281) 295-1800**

(Name, Address Including Zip Code, and Telephone Number, Including Area Code, of Agent For Service)

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**Approximate date of commencement of proposed  
sale to the public:**

**As soon as practicable after this Registration  
Statement becomes effective.**

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

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

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definitions of "large accelerated filer," "accelerated filer," and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer o

Accelerated filer o

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

Smaller reporting company o

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The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell these securities and we are not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

Subject to Completion, Dated June 28, 2013

PRELIMINARY PROSPECTUS

shares



Common stock

This is our initial public offering of common stock. We are offering \_\_\_\_\_ shares and the selling stockholders identified in this prospectus are offering \_\_\_\_\_ shares. We will not receive any of the proceeds from the sale of the shares being sold by the selling stockholders. Prior to this offering, no public market has existed for our common stock. We currently estimate that the initial public offering price will be between \$ \_\_\_\_\_ and \$ \_\_\_\_\_ per share. We have applied to list our common stock on the NASDAQ Global Market under the symbol "AAOI."

Investing in our common stock involves a high degree of risk. See "Risk Factors" beginning on page 13.

	Per share	Total
Initial public offering price	\$	\$
Underwriting discounts and commissions	\$	\$
Proceeds to us, before expenses	\$	\$
Proceeds to selling stockholders, before expenses	\$	\$

We and the selling stockholders have granted the underwriters an option for a period of 30 days to purchase up to \_\_\_\_\_ additional shares of common stock to cover over-allotments.

We are an "emerging growth company" as defined under the federal securities laws and, as such, have elected to comply with certain reduced public company reporting requirements.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed on the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The underwriters expect to deliver the shares of common stock to purchasers on or about \_\_\_\_\_, 2013.

RAYMOND JAMES

PIPER JAFFRAY

COWEN AND COMPANY

ROTH CAPITAL PARTNERS

The date of this prospectus is \_\_\_\_\_, 2013

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**You should rely only on the information contained in this prospectus and any free writing prospectus prepared by or on behalf of us in connection with this offering. We have not, the selling stockholders have not and the underwriters have not, authorized any other person to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We are not, the selling stockholders are not and the underwriters are not, making an offer to sell these securities in any jurisdiction where an offer or sale is not permitted. You should assume that the information appearing in this prospectus is accurate as of the date on the front cover of this prospectus only. Our business, financial condition, results of operations and prospects may have changed since that date.**

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Until \_\_\_\_\_, 2013 (25 days after the commencement of this offering), all dealers that buy, sell or trade shares of our common stock, whether or not participating in this offering, may be required to deliver a prospectus. This delivery requirement is in addition to the obligation of dealers to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

**No action is being taken in any jurisdiction outside the United States of America, or U.S., to permit a public offering of the common stock or possession or distribution of this prospectus in that jurisdiction. Persons who come into possession of this prospectus in jurisdictions**

outside the U.S. are required to inform themselves about and to observe any restrictions as to this offering and the distribution of this prospectus applicable to that jurisdiction.

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"Applied Optoelectronics, Inc.," "AOI" and our logo are registered trademarks of Applied Optoelectronics, Inc. This prospectus contains additional trade names, trademarks and service marks of ours and of other companies.

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Unless the context otherwise requires, we use the terms "AOI," "we," "us" and "our" in this prospectus to refer to Applied Optoelectronics, Inc. and its subsidiaries.

## PROSPECTUS SUMMARY

*This summary highlights information contained elsewhere in this prospectus and does not contain all of the information that you should consider in making your investment decision. Before investing in our common stock, you should carefully read this entire prospectus, including our consolidated financial statements and the related notes thereto and the information set forth under the sections "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations," in each case appearing elsewhere in this prospectus.*

### Overview

We are a leading, vertically integrated provider of fiber-optic networking solutions, primarily for three networking end-markets: cable television, or CATV, fiber-to-the-home, or FTTH, and internet data centers. We design and manufacture a range of optical communications products at varying levels of integration, from components, subassemblies and modules to complete turn-key equipment. We are primarily focused on the higher-performance segments within all three of our target markets, which increasingly demand faster connectivity and innovation.

The three end markets we target are all driven by significant bandwidth demand fueled by the growth of network-connected devices, video traffic, cloud computing and online social networking. According to Cisco Systems' 2012 Visual Networking Index, global network traffic is expected to grow at a compound annual growth rate, or CAGR, of 29% from 2011 to 2016. To address this increased bandwidth demand, CATV and telecommunications service providers are competing directly against each other by providing bundles of voice, video and data services to their subscribers and investing to enhance the capacity, reliability and capability of their networks. The trend of rising bandwidth consumption also impacts the internet data center market, as reflected in the shift to higher speed server connections. As a result of these trends, fiber-optic networking technology is becoming essential in all three of our target markets, as it is often the only economic way to deliver the desired bandwidth.

The CATV market is our largest and most established market, for which we supply a broad array of products including lasers, transmitters and turn-key equipment. In 2012, we were the leading provider of optical components and the second largest provider of subsystems to the CATV industry, according to research firm Ovum Limited, or Ovum. Sales of headend, node and distribution equipment have contributed significantly to our growth in recent years as a result of our ability to meet the needs of CATV equipment vendors who have begun to outsource both the design and manufacture of this equipment. While equipment vendors have relied upon third parties to assemble portions of their products, within the past four years certain of our customers have accelerated the outsourcing of both the design and manufacturing of both head-end equipment and node equipment to third parties. The shift is due in part to the sophisticated engineering expertise needed to perform this work. We believe that our extensive high-speed optical, mixed-signal semiconductor and mechanical engineering capabilities position us well to benefit from these industry dynamics.

Our vertically integrated manufacturing model provides us several advantages, including rapid product development, fast response times to customer requests and control over product quality and manufacturing costs. We design, manufacture and integrate our own analog and digital lasers using a proprietary Molecular Beam Epitaxy, or MBE, fabrication process, which we believe is unique in our industry. The lasers we manufacture are proven to be reliable over time and highly tolerant of changes in temperature and humidity, making them well-suited to the CATV and FTTH markets where networking equipment is often installed outdoors.

In 2012, our products were used by the five largest CATV original equipment manufacturers, or OEMs, consisting of Arris Group Inc., Aurora Networks, Inc., Cisco Systems, Inc., Harmonic Inc. and Motorola Mobility Holdings, Inc. Our key customers in the CATV market include Cisco Systems and Biogenomics Corp., a distributor. In 2010, 2011 and 2012, Cisco Systems accounted for 18.9%, 26.8% and 33.2%, respectively, of our revenue and Biogenomics Corp. accounted for 13.8%, 11.7% and 11.2%, respectively, of our revenue. Our key customers in the FTTH market in 2012 included Genexis B.V., and our key customers in the internet data center market in 2012 included Microsoft Corporation.

Our revenue in 2012 was \$63.4 million, our gross margin was 29.8%. We have grown our revenue at a CAGR of 36.4% since 2009. In the years ended December 31, 2010, 2011 and 2012, and in the three-month periods ended March 31, 2012 and 2013, we incurred losses of \$3.4 million, \$5.3 million, \$0.9 million, \$0.5 million and \$0.9 million, respectively, and our accumulated deficit at December 31, 2012 and March 31, 2013 was \$81.9 million and \$82.9 million, respectively.

### Industry Background

Our three target markets of CATV, FTTH and internet data centers share a common trend of a significant growth in bandwidth consumption, and the corresponding need for network infrastructure improvement to support it. Based upon data prepared by Ovum, we estimate these markets represented an annual revenue opportunity of \$2.2 billion in 2012.

The prevailing themes in our target markets include:

- **Trends in the CATV Market.** In recent years, CATV service providers have invested extensively to support high speed, two-way communications, and we expect that they will continue to do so, particularly in countries with less developed CATV networks. According to Infonetics, CATV service providers spent approximately \$41 billion from 2008 through 2012 on upgrades and extensions to their networking infrastructure, including \$25 billion spent in North America. In China, nearly half of the 90 million cable television subscribers are served by relatively low capacity, one-way cable networks today. According to Infonetics, China has implemented a \$30 billion government stimulus program to support the construction of critical networking infrastructure and promote the delivery of enhanced voice, video and data services between 2009 and 2015.

While equipment vendors have historically only relied upon third parties to assemble portions of their products, within the past four years certain of our customers have accelerated the outsourcing of both the design and manufacturing of both head-end equipment and node equipment to third parties. This shift is due in part to the sophisticated engineering expertise needed to perform this work.

- **Trends in the FTTH Market.** The FTTH market generally refers to the Passive Optical Networks, or PONs, that telecommunications service providers are deploying. The most commonly deployed PON technology is Gigabit PON, or GPON, which delivers up to 2.5 gigabits per second of data, but due to the splitting of the bandwidth among multiple users, the actual bandwidth delivered to an individual subscriber is far less than 2.5 gigabits per second. One approach that does support true 1 gigabit per second service to the home is wavelength division multiplexing PON, or WDM-PON, a technology that enables the transmission of multiple wavelengths of data over a single fiber-optic strand.

- **Trends in the Internet Data Center Market.** To support the substantial increase in bandwidth consumption, internet data center operators are increasing the scale of their internet data centers and accelerating data transmission rates. As a result, there is an ongoing transition from the use of copper cable to optical fiber as a transport medium. In recent years, a number of leading Internet companies such as Amazon.com Inc., Facebook, Inc. Google, Inc. and Microsoft Corporation have begun to adopt more open internet data center architectures, using a mix of systems and components from a variety of vendors, and in some cases designing their own equipment. For these companies, compatibility of new networking equipment with legacy infrastructure is not as important, and as a consequence, these companies are more willing to work with non-traditional equipment vendors, which creates an open and growing opportunity for optical device vendors.

We experience certain challenges within our target markets, including continuous pressure to innovate and deliver highly integrated products that perform reliably in harsh, demanding environments and to produce high-quality devices in large volumes.

#### **Our Solutions**

By addressing the challenges in our target markets, we provide the following benefits to our customers:

- **Enable customers to deliver innovative products.** We leverage our deep expertise in high-speed optical, mixed-signal semiconductor and mechanical engineering and our proprietary MBE laser fabrication process to deliver technologically advanced solutions to our customers.
- **Enhance efficiency and cost effectiveness of our customers' supply chain.** We design and sell products at the level of integration desired by a customer, from components to turn-key equipment, providing our customers a dependable, cost-effective and simplified supply chain.
- **Deliver high quality, reliable products in high volume.** As a vertically integrated supplier, we are able to monitor and maintain quality control throughout the production process, using our internally produced components where possible for our final products. With manufacturing facilities in the U.S., Taiwan and China, we can support high volume production and timely delivery for our customers around the world.
- **Provide sophisticated design solutions to our customers.** We believe our in-house expertise in both analog and digital optical engineering enables us to design comprehensive solutions that meet many of the different network architectures and protocols used by our customers.

#### **Our Strengths**

Our key competitive strengths include the following:

- **Industry-leading position in the CATV market.** We are the leading provider of optical components and the second largest provider of subsystems to the CATV market, according to Ovum.



- **Proprietary technological expertise and track record of innovation.** We continue to develop innovative solutions by leveraging our technological expertise, including our proprietary MBE laser fabrication process. We have achieved design wins since 2010 that collectively account for a significant portion of our revenue today.
- **Highly customized products.** Most of our products have some level of customization, making it more difficult for our customers to switch rapidly to another supplier. We believe this element of customization contributes to longer product lifecycles and more stable product pricing.
- **Proven system design capabilities.** We have deep expertise and proven design capabilities in high-speed optical, mixed-signal semiconductor and mechanical engineering, which we believe position us to take advantage of the continuing shift to outsourced design and manufacturing among CATV equipment vendors.
- **Vertically integrated, geographically distributed manufacturing model.** Our vertically integrated design and manufacturing process encompasses various steps from laser design and fabrication to complete optical system design and assembly. Furthermore, we have geographically distributed our manufacturing by strategically locating our operations in the U.S., China and Taiwan to reduce development time and production costs, to better support our customers and to help protect our intellectual property.

## Our Strategy

We seek to be the leading global provider of optical components, modules and equipment for each of our three target markets, CATV, FTTH and internet data centers. Our strategy includes the following key elements:

- **Extend our leadership in CATV networking.** We intend to maintain our position as the leading producer of optical components used in CATV networks, and to capture an increasing share of the CATV equipment market as the major equipment vendors continue to outsource the design and manufacturing of such products.
- **Continue to penetrate FTTH and internet data center markets.** We believe our WDM-PON technology is a cost-effective solution for delivering substantially greater bandwidth to a residence. In the internet data center, we target internet data center operators who have adopted an open system architecture—one in which the optical connectivity solutions can be provided by a different vendor than the vendor which provides their servers and switches.
- **Continue to invest in our capabilities and infrastructure.** We intend to continue to invest in new products, new technology and our production infrastructure and facilities to maintain and strengthen our competitive position.
- **Selectively pursue other opportunities that leverage our existing expertise.** Our expertise in designing and manufacturing outdoor equipment for the CATV industry positions us well to pursue applications that are also characterized by having varying and demanding environments, including wireless and wireline telecom infrastructure, industrial robotics, aerospace and defense, and oil and gas exploration.
- **Pursue complementary acquisition and strategic alliance opportunities.** We evaluate and selectively pursue acquisition opportunities or strategic alliances that we believe

will enhance or complement our current product offerings, augment our technology roadmap, or diversify our revenue base.

### **Risk Factors**

Our business is subject to numerous risks and uncertainties, such as those highlighted in the "Risk Factors" section immediately following this prospectus summary, including:

- We are dependent on our key customers for a significant portion of our revenue and the loss of, or a significant reduction in orders from, any of our key customers would adversely impact our revenue and results of operations;
- If our customers do not qualify our products for use on a timely basis, our results of operations may suffer;
- Customer demand is difficult to forecast accurately and, as a result, we may be unable to match production with customer demand;
- We are subject to the cyclical nature of the markets in which we compete and any future downturn will likely reduce demand for our products and revenue;
- If the CATV, FTTH and internet data center markets do not continue to develop as we expect, or if there is any downturn in these markets, our business would be materially adversely affected;
- If we encounter manufacturing problems, we may lose sales and damage our customer relationships;
- We must continually develop successful new products and enhance existing products, and if we fail to do so or if our release of new or enhanced products is delayed, our business may be harmed;
- Given the high fixed costs associated with our vertically integrated business, a reduction in demand for our products could materially adversely impact our gross profits and our results of operations;
- We face intense competition which could negatively impact our results of operations and market share; and
- We have substantial manufacturing assets in China, and in 2012 we derived approximately 29% of our revenue from sales in China.

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**Corporate Information**

We were incorporated in the State of Texas in 1997. In March 2013, Applied Optoelectronics, Inc., a Texas corporation, converted into a Delaware corporation. Our principal executive offices are located at 13115 Jess Pirtle Blvd., Sugar Land, TX 77478, and our telephone number is (281) 295-1800. Our website address is [www.ao-inc.com](http://www.ao-inc.com). Information contained on our website is not incorporated by reference into this prospectus, and you should not consider information contained on our website as part of this prospectus or in deciding whether to purchase shares of our common stock.

We have registered the trademarks APPLIED OPTOELECTRONICS, INC., AOI and its respective logo with the U.S. Patent and Trademark Office. These marks are also registered in, or have applications for registration pending in, various foreign trademark offices. Other trademarks and trade names appearing in this prospectus are the property of their respective owners.

## THE OFFERING

Common stock offered by us	Shares
Common stock offered by selling stockholders	Shares
Over-allotment option	Shares
Total common stock to be outstanding after this offering	Shares

Use of proceeds

We estimate that the net proceeds of the sale of our common stock in this offering will be approximately \$            million, based on an assumed initial public offering price of \$            per share, which is the midpoint of the range listed on the cover page of this prospectus. Our management will have broad discretion in the application of our net proceeds from this offering, and investors will be relying on management's judgment regarding the application of these net proceeds. We may also use a portion of our net proceeds to repay outstanding indebtedness, which currently has interest rates ranging from 4.375% to 6.875% per annum and maturity dates ranging from July 2013 to November 2014, but we currently have no commitments or specific plans to repay any particular indebtedness in advance of its maturity date. We intend to use the remaining net proceeds from this offering for working capital and other general corporate purposes. See "Use of Proceeds." We will not receive any of the proceeds from the sale of shares of common stock offered by the selling stockholders.

Proposed symbol on the NASDAQ Global Market            AAOI

The number of shares of our common stock to be outstanding after this offering is based on 268,920,162 shares of our common stock outstanding as of March 31 2013, assuming conversion of all outstanding shares of preferred stock into common stock. This number of shares does not include:

- 22,219,328 shares of common stock subject to outstanding options as of March 31, 2013, with a weighted average exercise price of \$0.2213 per share;
- 300,000 shares of common stock issuable upon the exercise of outstanding warrants, with a weighted average exercise price of \$0.20 per share;

- 1,730,000 shares of Series F preferred stock issuable upon the exercise of outstanding warrants, with a weighted average exercise price of \$0.21387 per share;
- 382,442 shares of Series G preferred stock issuable upon the exercise of outstanding warrants, with a weighted average exercise price of \$0.469261 per share; and
- 24,000,000 shares of common stock available for future sale or issuance under our stock option plans.

Unless otherwise indicated, this prospectus reflects and assumes the following:

- the automatic conversion of all of our outstanding shares of preferred stock into 260,800,071 shares of our common stock upon the closing of this offering;
- the filing of our amended and restated certificate of incorporation and the adoption of our amended and restated bylaws immediately prior to the closing of this offering; and
- no exercise of the underwriters' over-allotment option.

## SUMMARY CONSOLIDATED FINANCIAL DATA

The following tables summarize the consolidated financial and operating data for the periods indicated. This summary consolidated financial data should be read together with our consolidated financial statements and related notes and "Management's Discussion and Analysis of Financial Condition and Results of Operations" appearing elsewhere in this prospectus. The consolidated statements of operations data for the years ended December 31, 2010, 2011 and 2012 are derived from our consolidated financial statements appearing elsewhere in this prospectus. The consolidated statements of operations data for the three months ended March 31, 2012 and 2013 and the consolidated balance sheet data as of March 31, 2013 have been derived from our unaudited consolidated financial statements included elsewhere in this prospectus. Our historical results are not necessarily indicative of our future results. You should read the summary financial data presented below in conjunction with our consolidated financial statements and related notes and the sections of this prospectus titled "Selected Consolidated Financial Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations."

	Years ended December 31,			Three months ended March 31,	
	2010	2011	2012	2012	2013
	(unaudited)				
	(in thousands, except percentages, share and per share data)				
<b>Consolidated statements of operations data:</b>					
Revenue	\$ 40,489	\$ 47,840	\$ 63,421	\$ 12,506	\$ 14,317
Cost of goods sold (1)	27,539	34,468	44,492	8,393	9,732
Gross profit	\$ 12,950	\$ 13,372	\$ 18,929	\$ 4,113	\$ 4,585
Gross margin	32.0%	28.0%	29.8%	32.9%	32.0%
Operating expenses:					
Research and development (1)	5,176	6,451	7,603	1,575	2,004
Sales and marketing (1)	1,993	2,412	3,135	809	907
General and administrative (1)	8,383	8,243	8,012	1,965	2,374
Asset impairment charges	492	—	—	—	—
Total operating expenses	\$ 16,043	\$ 17,106	\$ 18,750	\$ 4,349	\$ 5,285
Income (loss) from operations	(3,093)	(3,734)	179	(236)	(700)
Interest and other income (expense), net	(287)	(1,594)	(1,124)	(287)	(294)
Income (loss) before income taxes	\$ (3,380)	\$ (5,328)	\$ (945)	\$ (523)	\$ (994)
Benefit from (provision for) income taxes	—	—	—	—	—
Net income (loss)	\$ (3,380)	\$ (5,328)	\$ (945)	\$ (523)	\$ (994)
Net income (loss) attributable to common stockholders	\$ (3,380)	\$ (5,328)	\$ (945)	\$ (523)	\$ (994)
Net income (loss) per share attributable to common stockholders:					
Basic and diluted	\$ (0.44)	\$ (0.67)	\$ (0.12)	\$ (0.07)	\$ (0.12)
Weighted average shares used to compute net income (loss) per share attributable to common stockholders:					
Basic and diluted	7,767,035	7,909,736	7,967,272	7,955,050	7,988,523
Pro forma net income (loss) per share attributable to common stockholders (2):					
Basic and diluted			\$ (0.00)		\$ (0.00)
Weighted average shares used to compute pro forma net income (loss) per share attributable to common stockholders (2):					
Basic and diluted			251,406,466		268,267,555

	Years ended December 31,			Three months ended March 31,	
	2010	2011	2012	2012	2013
	(in thousands, except percentages, share and per share data)				
<b>Additional Financial Data:</b>					
Non-GAAP gross profit (3)	\$ 13,011	\$ 13,405	\$ 18,936	\$ 4,115	\$ 4,597
Non-GAAP income (loss) from operations (3)	(1,922)	(3,000)	441	(203)	(555)
Non-GAAP net income (loss) (3)	(1,780)	(5,027)	(503)	(443)	(686)
Adjusted EBITDA (3)	2,881	(638)	3,734	656	321

- (1) These expenses include stock-based compensation expense. Stock-based compensation expense is accounted for at fair value, using the Black-Scholes option-pricing model. Stock-based compensation expense is recognized over the vesting period of the stock options and was included in cost of goods sold and operating expenses as follows:

	Years ended December 31,			Three months ended March 31,	
	2010	2011	2012	2012	2013
	(in thousands)				
<b>Cost of goods sold</b>	\$ 61	\$ 35	\$ 7	\$ 2	\$ 12
Research and development	60	50	8	2	11
Sales and marketing	80	58	9	2	10
General and administrative	579	420	137	12	78
<b>Total stock-based compensation expense</b>	<b>\$ 780</b>	<b>\$ 563</b>	<b>\$ 161</b>	<b>18</b>	<b>111</b>

- (2) The pro forma basic and diluted net loss per share attributable to our common stockholders calculations assume the conversion of all outstanding shares of preferred stock into shares of common stock using the as-if-converted method as though the conversion had occurred at the beginning of the period presented and the resulting reclassification of the preferred stock warrant liability to additional paid-in capital.
- (3) We prepare Adjusted EBITDA and our other non-GAAP measures to eliminate the impact of items that we do not consider indicative of our overall operating performance. To arrive at our non-GAAP gross profit, we exclude stock-based compensation expense from our GAAP gross profit. To arrive at our non-GAAP income (loss) from operations, we exclude all amortization of intangible assets, stock-based compensation expense and non-recurring consulting fees, if any, from our GAAP net income (loss) from operations. To arrive at Adjusted EBITDA, we exclude these same items and, additionally, exclude asset impairment charges, loss (gain) from disposal of idle assets, unrealized exchange loss (gain), interest (income) expense, on a net basis, provision for (benefit from) income taxes and depreciation expense, from our GAAP net income (loss).

We believe that our non-GAAP measures are useful to investors in evaluating our operating performance for the following reasons:

- We believe that elimination of items such as stock-based compensation expense, depreciation and amortization, income tax expense and other income, net, is appropriate because treatment of these items may vary for reasons unrelated to our overall operating performance;
- We use non-GAAP measures in conjunction with our GAAP financial measures for planning purposes, including the preparation of our annual operating budget, as a measure of operating performance and the effectiveness of our business strategies and in communications with our board of directors concerning our financial performance;
- We believe that non-GAAP measures provide better comparability with our past financial performance, facilitates better period-to-period comparisons of operational results and also facilitates comparisons with our peer companies, many of which also use similar non-GAAP financial measures to supplement their GAAP reporting; and
- We anticipate that, after consummating this offering, our investor presentations and those of securities analyst will include non-GAAP measures to evaluate our overall operating performance.

Adjusted EBITDA and other non-GAAP measures should not be considered as an alternative to gross profit, income (loss) from operations, net income (loss) or any other measure of financial performance calculated and presented in accordance with GAAP. Our Adjusted EBITDA and other non-GAAP measures may not be comparable to similarly titled measures of other organizations because other organizations may not calculate Adjusted EBITDA or such other non-GAAP measures in the same manner. You are encouraged to evaluate these adjustments and the reason we consider them appropriate.

The following table reflects the reconciliation of U.S. GAAP financial measures to non-GAAP financial measures:

	Years ended December 31,			Three months ended March 31,	
	2010	2011	2012	2012	2013
	(in thousands)				
Gross profit	\$ 12,950	\$ 13,372	\$ 18,929	\$ 4,113	\$ 4,585
Non-GAAP adjustment:					
Stock-based compensation expense	61	35	7	2	12
Non-GAAP gross profit	<u>\$ 13,011</u>	<u>\$ 13,405</u>	<u>\$ 18,936</u>	<u>\$ 4,115</u>	<u>\$ 4,597</u>
Income (loss) from operations	\$ (3,093)	\$ (3,734)	\$ 179	\$ (236)	\$ (700)
Non-GAAP adjustments:					
Amortization of intangible assets	41	46	60	15	17
Stock-based compensation expense	780	563	161	18	111
Non-recurring consultant fee	350	125	41	—	17
Non-GAAP income (loss) from operations	<u>\$ (1,922)</u>	<u>\$ (3,000)</u>	<u>\$ 441</u>	<u>\$ (203)</u>	<u>\$ (555)</u>
Net income (loss)	\$ (3,380)	\$ (5,328)	\$ (945)	\$ (523)	\$ (994)
Non-GAAP adjustments:					
Amortization of intangible assets	41	46	60	15	17
Stock-based compensation expense	780	563	161	18	111
Non-recurring consultant fee	350	125	41	—	17
Loss (gain) from disposal of idle assets	23	(80)	(37)	(36)	—
Unrealized exchange loss (gain)	406	(352)	217	83	163
Non-GAAP net income (loss)	<u>\$ (1,780)</u>	<u>\$ (5,027)</u>	<u>\$ (503)</u>	<u>\$ (443)</u>	<u>\$ (686)</u>
Net income (loss)	\$ (3,380)	\$ (5,328)	\$ (945)	\$ (523)	\$ (994)
Non-GAAP adjustments:					
Amortization of intangible assets	41	46	60	15	17
Stock-based compensation expense	780	563	161	18	111
Asset impairment charges	492	—	—	—	—
Depreciation expense	3,299	3,066	2,882	725	721
Non-recurring consultant fee	350	125	41	—	17
Loss (gain) from disposal of idle assets	23	(80)	(37)	(36)	—
Unrealized exchange loss (gain)	406	(352)	217	83	163
Interest (income) expense, net	872	1,323	1,355	374	286
Provision for (benefit from) income taxes	—	—	—	—	—
Adjusted EBITDA	<u>\$ 2,881</u>	<u>\$ (638)</u>	<u>\$ 3,734</u>	<u>\$ 656</u>	<u>\$ 321</u>



	March 31, 2013		
	Actual	Pro forma (4)	Pro forma as adjusted (5)
(in thousands)			
<b>Consolidated Balance Sheet Data:</b>			
Total cash (1)	\$ 9,343	\$	\$
Working capital (2)	13,270		
Total assets	61,057		
Total debt (3)	22,064		
Redeemable convertible preferred stock and convertible preferred stock	105,481		
Common stock and additional paid-in capital	5,672		
Total stockholders' equity	30,321		

(1) Total cash is defined as cash, cash equivalents and restricted cash.

(2) Working capital is defined as total current assets less total current liabilities.

(3) Total debt is defined as short-term loans, notes payable and total long-term debt.

(4) On a pro forma basis to give effect to the automatic conversion of all of our outstanding shares of preferred stock into 260,800,071 shares of common stock using the as-if-converted method as though the conversion had occurred at the beginning of the period presented and the resulting reclassification of the preferred stock warrant liability to additional paid-in capital.

(5) On a pro forma as adjusted basis to reflect the pro forma adjustments described in note 4 above and the sale by us of \_\_\_\_\_ shares of common stock in this offering, at an assumed initial public offering price of \$ \_\_\_\_\_ per share, the midpoint of the price range on the front cover of this prospectus, after deducting underwriting discounts and commissions and estimated offering expenses.

## RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the following risk factors and all other information contained in this prospectus before purchasing our common stock. If any of the following risks actually occur, we may be unable to conduct our business as currently planned and our financial condition and results of operations could be seriously harmed. In addition, the trading price of our common stock could decline due to the occurrence of any of these risks, and you may lose all or part of your investment.

### Risks Inherent in Our Business

***We are dependent on our key customers for a significant portion of our revenue and the loss of, or a significant reduction in orders from, any of our key customers would adversely impact our revenue and results of operations.***

We generate much of our revenue from a limited number of customers. In 2010, 2011 and 2012, our top ten customers represented 80.5%, 76.6% and 77.7% of our revenue, respectively. In 2012, Cisco Systems, Inc. represented 33.2% of our revenue and Biogenomics Corp., a distributor, represented 11.2% of our total revenue. As a result, the loss of, or a significant reduction in orders from any of our key customers would materially and adversely affect our revenue and results of operations. We typically do not have long-term contracts with our customers and instead rely on recurring purchase orders. If our key customers do not continue to purchase our existing products or fail to purchase additional products from us, our revenue would decline and our results of operations would be adversely affected.

Adverse events affecting our key customers could also negatively affect our ability to retain their business and obtain new purchase orders, which could adversely affect our revenue and results of operations. For example, in recent years, there has been consolidation among various network equipment manufacturers and this trend is expected to continue. We are unable to predict the impact that industry consolidation would have on our existing or potential customers. For instance, upon the closing of Arris Group Inc.'s acquisition of Motorola Mobility Holdings, Inc., which is expected to occur in the middle of this year, changes in strategy or management may affect purchasing decisions and other strategic objectives involving our products that were pursued prior to that acquisition. We may not be able to offset any potential decline in revenue arising from the consolidation of our existing customers with revenue from new customers or additional revenue from the merged company.

***If our customers do not qualify our products for use on a timely basis, our results of operations may suffer.***

Prior to the sale of new products, our customers typically require us to obtain their approval and qualify our products for use in their applications. Additionally, new customers often audit our manufacturing facilities and perform other evaluations during this process. The qualification process involves product sampling and reliability testing and collaboration with our product management and engineering teams in the design and manufacturing stages. If we are unable to accurately predict the amount of time required to qualify our products with customers, or are unable to qualify our products with certain customers at all, then our ability to generate revenue could be delayed or our revenue would be lower than expected and we may not be able to recover the costs associated with the qualification process or with our product development efforts, which would have an adverse effect on our results of operations.

In addition, due to rapid technological changes in our markets, a customer may cancel or modify a design project before we have qualified our product or begun volume manufacturing of a qualified product. It is unlikely that we would be able to recover the expenses for cancelled or unutilized custom design projects. It is difficult to predict with any certainty whether our customers will delay or terminate product qualification or the frequency with which customers will cancel or modify their projects, but any such delay, cancellation or modification would have a negative effect on our results of operations.

Our ability to successfully qualify and scale capacity for new technologies and products is important to our ability to grow our business and market presence. If we are unable to qualify and sell any of our new products in volume, on time, or at all, our results of operations may be adversely affected.

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

We make planning and spending decisions, including determining the levels of business that we will seek and accept, production schedules, component procurement commitments, personnel needs and other resource requirements, based on our estimates of product demand and customer requirements. Our products are typically purchased pursuant to individual purchase orders. While our customers may provide us with their demand forecasts, they are typically not contractually committed to buy any quantity of products beyond firm purchase orders. Furthermore, many of our customers may increase, decrease, cancel or delay purchase orders already in place without significant penalty. The short-term nature of commitments by our customers and the possibility of unexpected changes in demand for their products reduce our ability to accurately estimate future customer requirements. On occasion, customers may require rapid increases in production, which can strain our resources, cause our manufacturing to be negatively impacted by materials shortages, necessitate more onerous procurement commitments and reduce our gross margin. We may not have sufficient capacity at any given time to meet the volume demands of our customers, or one or more of our suppliers may not have sufficient capacity at any given time to meet our volume demands. If any of our major customers decrease, stop or delay purchasing our products for any reason, we will likely have excess manufacturing capacity or inventory and our business and results of operations would be harmed.

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

In each of our target markets, including the CATV market, our sales depend on the aggregate capital expenditures of service providers as they build out and upgrade their network infrastructure. These markets are highly cyclical and characterized by constant and rapid technological change, price erosion, evolving standards and wide fluctuations in product supply and demand. In the past, these markets have experienced significant downturns, often connected with, or in anticipation of, the maturation of product cycles. These downturns have been characterized by diminished product demand, production overcapacity, high inventory levels and accelerated erosion of average selling prices. Our historical results of operations have been subject to these cyclical fluctuations, and we may experience substantial period-to-period fluctuations in our future results of operations. Any future downturn in any of the markets in which we compete could significantly reduce the demand for our products and therefore may result in a significant reduction in our revenue. Our revenue and results of operations may be materially and adversely affected in the future due to changes in demand from individual customers or cyclical changes in any of the markets utilizing our products. We may not be able

to accurately predict these cyclical fluctuations and the impact of these fluctuations may have on our revenue and operating results.

***If the CATV market does not continue to develop as we expect, or if there is any downturn in this market, our business would be adversely affected.***

Historically, we have generated much of our revenue from the CATV market. In 2010, 2011 and 2012, the CATV market represented 73.3%, 78.3% and 78.6% of our revenue, respectively. In the CATV market, we are relying on expected increasing demand for bandwidth-intensive services and applications such as on-demand television programs, high-definition television channels, or HDTV, social media, peer-to-peer file sharing and online video creation and viewing from network service providers. Without network and bandwidth growth, the need for our products will not increase and may decline, adversely affecting our financial condition and results of operations. Although demand for broadband access is increasing, network and bandwidth growth may be limited by several factors, including an uncertain regulatory environment, high infrastructure costs to purchase and install equipment and uncertainty as to which competing content delivery solution, such as telecommunications, wireless or satellite, will gain the most widespread acceptance. If the trend of outsourcing for the design and manufacture of CATV equipment does not continue, or continues at a slower pace than currently expected, our customers' demand for our design and manufacturing services may not grow as quickly as expected. If expectations for the growth of the CATV market are not realized, our financial condition or results of operations will be adversely affected. In addition, if the CATV market is adversely impacted, whether due to competitive pressure from telecommunication service providers, regulatory changes, or otherwise, our business would be adversely affected. We may not be able to offset any potential decline in revenue from the CATV market with revenue from new customers in other markets.

***We have limited operating history in the FTTH and internet data center markets, and our business could be harmed if these markets do not develop as we expect.***

We have only recently begun offering products to the FTTH and internet data center markets. Our business in these markets is dependent on the deployment of our optical components, modules and subassemblies. In the FTTH market, we are relying on increasing demand for bandwidth-intensive services and telecommunications service providers' acceptance and deployment of WDM-PON as a technology supporting 1 gigabit per second service to the home. In the internet data center market, we are relying on the emergence of new internet data center providers and their adoption of open internet data center architectures that use a mix of systems and components from a variety of vendors, including non-traditional equipment vendors. Without network and bandwidth growth and adoption of our solutions by operators in these markets, we will not be able to sell our products in these markets in high volume or at our targeted margins, which would adversely affect our financial condition and results of operations. For example, WDM-PON technology may not be adopted by equipment and service providers in the FTTH market as rapidly as we expect or in the volumes we need to achieve acceptable margins, and internet data centers may elect to use larger vendors that require internet data center operators to purchase the optical modules for their systems from such larger vendors. Network and bandwidth growth may be limited by several factors, including an uncertain regulatory environment, high infrastructure costs to purchase and install equipment and uncertainty as to which competing content delivery solution, such as CATV, will gain the most widespread acceptance. In addition, as we enter new markets or expand our product offerings in existing markets, our margins may be adversely affected due to competition in those markets and commoditization of competing products. If our expectations for the growth of these markets are not realized, our financial condition or results of operations will be adversely affected.

***If we encounter manufacturing problems, we may lose sales and damage our customer relationships.***

We may experience delays, disruptions or quality control problems in our manufacturing operations. These and other factors may cause less than acceptable yields at our wafer fabrication facility. Manufacturing yields depend on a number of factors, including the quality of available raw materials, the degradation or change in equipment calibration and the rate and timing of the introduction of new products. Changes in manufacturing processes required as a result of changes in product specifications, changing customer needs and the introduction of new product lines may significantly reduce our manufacturing yields, resulting in low or negative margins on those products. In addition, we use an MBE fabrication process to make our lasers, rather than Metal Organic Chemical Vapor Deposition, or MOCVD, the technique most commonly used in optical manufacturing by communications optics vendors, and our MBE fabrication process relies on custom-manufactured equipment. If our MBE fabrication facility in Sugar Land, Texas were to be damaged or destroyed for any reason, our manufacturing process would be severely disrupted. Any such manufacturing problems would likely delay product shipments to our customers, which would negatively affect our sales, competitive position and reputation. We may also experience delays in production, typically in February, during the Chinese New Year holiday when our facilities in China and Taiwan are closed.

***We must continually develop successful new products and enhance existing products, and if we fail to do so or if our release of new or enhanced products is delayed, our business may be harmed.***

The markets for our products are characterized by frequent new product introductions, changes in customer requirements and evolving industry standards, all with an underlying pressure to reduce cost and meet stringent reliability and qualification requirements. Our future performance will depend on our successful development, introduction and market acceptance of new and enhanced products that address these challenges. If we are unable to make our new or enhanced products commercially available on a timely basis, we may lose existing and potential customers and our financial results would suffer.

In addition, due to the costs and length of research, development and manufacturing process cycles, we may not recognize revenue from new products until long after such expenditures, if at all, and our margins may decrease if our costs are higher than expected, adversely affecting our financial condition and results of operation.

Although the length of our product development cycle varies widely by product and customer, it may take 18 months or longer before we receive our first order. As a result, we may incur significant expenses long before customers accept and purchase our products.

Product development delays may result from numerous factors, including:

- modification of product specifications and customer requirements;
- unanticipated engineering complexities;
- difficulties in reallocating engineering resources and overcoming resource limitations; and
- rapidly changing technology or competitive product requirements.

The introduction of new products by us or our competitors could result in a slowdown in demand for our existing products and could result in a write-down in the value of our inventory. We have in the past experienced a slowdown in demand for existing products and delays in new product development, and such delays will likely occur in the future. To the extent we experience product development delays for any reason or we fail to qualify our products and obtain their approval for use, which we refer to as a design win, our competitive position would be adversely affected and our ability to grow our revenue would be impaired.

Furthermore, our ability to enter a market with new products in a timely manner can be critical to our success because it is difficult to displace an existing supplier for a particular type of product once a customer has chosen a supplier, even if a later-to-market product provides better performance or cost efficiency.

The development of new, technologically advanced products is a complex and uncertain process requiring frequent innovation, highly-skilled engineering and development personnel and significant capital, as well as the accurate anticipation of technological and market trends. We cannot assure you that we will be able to identify, develop, manufacture, market or support new or enhanced products successfully or on a timely basis. Further, we cannot assure you that our new products will gain market acceptance or that we will be able to respond effectively to product introductions by competitors, technological changes or emerging industry standards. We also may not be able to develop the underlying core technologies necessary to create new products and enhancements, license these technologies from third parties, or remain competitive in our markets.

***Increasing costs and shifts in product mix may adversely impact our gross margins.***

Our gross margins on individual products and among products fluctuate over each product's life cycle. Our overall gross margins have fluctuated from period to period as a result of shifts in product mix, the introduction of new products, decreases in average selling prices and our ability to reduce product costs, and these fluctuations are expected to continue in the future. We may not be able to accurately predict our product mix from period to period, and as a result we may not be able to forecast accurately our overall gross margins. The rate of increase in our costs and expenses may exceed the rate of increase in our revenue, either of which would materially and adversely affect our business, our results of operations and our financial condition.

***Given the high fixed costs associated with our vertically integrated business, a reduction in demand for our products will likely adversely impact our gross profits and our results of operations.***

We have a high fixed cost base due to our vertically integrated business model, including the fact that 510 of our employees as of March 31, 2013 were employed in manufacturing engineering and manufacturing operations. We may not be able to adjust these fixed costs quickly to adapt to rapidly changing market conditions. Our gross profit and gross margin are greatly affected by our sales volume and volatility on a quarterly basis and the corresponding absorption of fixed manufacturing overhead expenses. In addition, because we are a vertically integrated manufacturer, insufficient demand for our products may subject us to the risk of high inventory carrying costs and increased inventory obsolescence. Given our vertical integration, the rate at which we turn inventory has historically been low when compared to our cost of sales. We do not expect this to change significantly in the future and believe that we will have to maintain a relatively high level of inventory compared to our cost of sales. As a result, we continue to expect to have a significant amount of working capital invested in inventory. We

may be required to write down inventory costs in the future and our high inventory costs may have an adverse effect on our gross profits and our results of operations.

***We have a history of losses which may continue in the future.***

We have a history of losses and we may incur additional losses in future periods. In the years ended December 31, 2010, 2011 and 2012 and in the three months ended March 31, 2012 and March 31, 2013, we experienced net losses of \$3.4 million, \$5.3 million, \$0.9 million, \$0.5 million and \$0.9 million, respectively. As of December 31, 2012 and March 31, 2013, our accumulated deficit was \$81.9 million and \$82.9 million, respectively. These losses were due to expenditures made to expand our business, including expenditures for hiring additional research and development and sales and marketing personnel, and expenditures to expand and maintain our manufacturing facilities and research and development operations. We expect to continue to make significant expenditures related to our business, including expenditures for hiring additional research and development and sales and marketing personnel, and expenditures to maintain and expand our manufacturing facilities and research and development operations. In addition, as a public company, we will incur significant additional time demands and legal, accounting and other expenses that we did not incur as a private company. Our management and other personnel will need to devote a substantial amount of time to complying with the applicable rules and requirements of being a public company.

***Our financial results may vary significantly from quarter-to-quarter due to a number of factors, which may lead to volatility in our stock price.***

Our quarterly revenue and operating results have varied in the past and will likely continue to vary significantly from quarter to quarter. This variability may lead to volatility in our stock price as research analysts and investors respond to these quarterly fluctuations. These fluctuations are due to numerous factors, including:

- the timing, size and mix of sales of our products;
- fluctuations in demand for our products, including the increase, decrease, rescheduling or cancellation of significant customer orders;
- our ability to design, manufacture and deliver products to our customers in a timely and cost-effective manner and that meet customer requirements;
- new product introductions and enhancements by us or our competitors;
- the gain or loss of key customers;
- the rate at which our present and potential customers and end users adopt our technologies;
- changes in our pricing and sales policies or the pricing and sales policies of our competitors;
- quality control or yield problems in our manufacturing operations;
- length and variability of the sales cycles of our products;
- unanticipated increases in costs or expenses;

- the loss of key employees;
- different capital expenditure and budget cycles for our customers, affecting the timing of their spending for our products;
- political stability in the areas of the world in which we operate;
- fluctuations in foreign currency exchange rates;
- changes in accounting rules;
- the evolving and unpredictable nature of the markets for products incorporating our solutions; and
- general economic conditions and changes in such conditions specific to our target markets.

The foregoing factors are difficult to forecast, and these, as well as other factors, could materially adversely affect our quarterly and annual operating results. In addition, a significant amount of our operating expenses is relatively fixed in nature due to our internal manufacturing, research and development, sales and general administrative efforts. Any failure to adjust spending quickly enough to compensate for a revenue shortfall could magnify the adverse impact of such revenue shortfall on our results of operations. For these reasons, you should not rely on quarter-to-quarter comparisons of our results of operations as an indicator of future performance. Moreover, our operating results may not meet our announced guidance or the expectations of research analysts or investors, in which case the price of our common stock could decrease significantly. There can be no assurance that we will be able to successfully address these risks.

***We face intense competition which could negatively impact our results of operations and market share.***

The markets into which we sell our products are highly competitive. Our competitors range from large, international companies offering a wide range of products to smaller companies specializing in niche markets. Current and potential competitors may have substantially greater name recognition, financial, marketing, research and manufacturing resources than we do, and there can be no assurance that our current and future competitors will not be more successful than us in specific product lines or markets. Certain of our competitors may also have better-established relationships with our current or potential customers. Some of our competitors have more resources to develop or acquire new products and technologies and create market awareness for their products and technologies. In addition, some of our competitors have the financial resources to offer competitive products at below-market pricing levels that could prevent us from competing effectively and result in a loss of sales or market share or cause us to lower prices for our products. In recent years, there has been consolidation in our industry and we expect such consolidation to continue. Consolidation involving our competitors could result in even more intense competition. Network equipment manufacturers, who are our customers, and network service providers may decide to manufacture the optical subsystems incorporated into their network systems in-house instead of outsourcing such products to companies such as us. We also encounter potential customers that, because of existing relationships with our competitors, are committed to the products offered by our competitors.



***We depend on key personnel to develop and maintain our technology and manage our business in a rapidly changing market.***

The continued services of our executive officers and other key engineering, sales, marketing, manufacturing and support personnel is essential to our success. For example, our ability to achieve new design wins depends upon the experience and expertise of our engineers. Any of our key employees, including our Chief Executive Officer, Chief Financial Officer, Chief Strategy Officer, Senior Vice President of Network Equipment Module Business Unit and Asia General Manager, may resign at any time. We do not have key person life insurance policies covering any of our employees. In addition, our current loan agreement with East West Bank requires their prior written approval in connection with certain changes to our executive officers. To implement our business plan, we also intend to hire additional employees, particularly in the areas of engineering and manufacturing. Our ability to continue to attract and retain highly skilled employees is a critical factor in our success. Competition for highly skilled personnel is intense. We may not be successful in attracting, assimilating or retaining qualified personnel to satisfy our current or future needs. Our ability to develop, manufacture and sell our products, and thus our financial condition and results of operations, would be adversely affected if we are unable to retain existing personnel or hire additional qualified personnel.

***We depend on a limited number of suppliers and any supply interruption could have an adverse effect on our business.***

We depend on a limited number of suppliers for certain raw materials and components used in our products. Some of these suppliers could disrupt our business if they stop, decrease or delay shipments or if the materials or components they ship have quality or reliability issues. Some of the raw materials and components we use in our products are available only from a sole source or have been qualified only from a single supplier. Furthermore, other than our current suppliers, there are a limited number of entities from whom we could obtain certain materials and components. We may also face shortages if we experience increased demand for materials or components beyond what our qualified suppliers can deliver. Our inability to obtain sufficient quantities of critical materials or components could adversely affect our ability to meet demand for our products, adversely affecting our financial condition and results of operation.

We typically have not entered into long-term agreements with our suppliers and, therefore, our suppliers could stop supplying materials and components to us at any time or fail to supply adequate quantities of materials or components to us on a timely basis. It is difficult, costly, time consuming and, on short notice, sometimes impossible for us to identify and qualify new suppliers. Our customers generally restrict our ability to change the components in our products. For more critical components, any changes may require repeating the entire qualification process. Our reliance on a limited number of suppliers or a single qualified vendor may result in delivery and quality problems, and reduced control over product pricing, reliability and performance.

***Our products could contain defects that may cause us to incur significant costs or result in a loss of customers.***

Our products are complex and undergo quality testing as well as formal qualification by our customers. Our customers' testing procedures are limited to evaluating our products under likely and foreseeable failure scenarios and over varying amounts of time. For various reasons, such as the occurrence of performance problems that are unforeseeable in testing or that are detected only when products age or are operated under peak stress conditions, our products may fail to perform as expected long after customer acceptance. Failures could result from faulty

components or design, problems in manufacturing or other unforeseen reasons. As a result, we could incur significant costs to repair or replace defective products under warranty, particularly when such failures occur in installed systems. Our products are typically embedded in, or deployed in conjunction with, our customers' products, which incorporate a variety of components, modules and subsystems and may be expected to interoperate with modules produced by third parties. As a result, not all defects are immediately detectable and when problems occur, it may be difficult to identify the source of the problem. While we have not experienced material failures in the past, we will continue to face this risk going forward because our products are widely deployed in many demanding environments and applications worldwide. In addition, we may in certain circumstances honor warranty claims after the warranty has expired or for problems not covered by warranty to maintain customer relationships. Any significant product failure could result in litigation, damages, repair costs and lost future sales of the affected product and other products, divert the attention of our engineering personnel from our product development efforts and cause significant customer relations problems, all of which would harm our business. Although we carry product liability insurance, this insurance may not adequately cover our costs arising from defects in our products or otherwise.

***We face a variety of risks associated with our international sales and operations.***

We currently derive, and expect to continue to derive, a significant portion of our revenue from international sales. In 2010, 2011 and 2012, 60.8%, 66.9% and 75.0% of our revenue was derived from sales that occurred outside of the U.S., respectively. In addition, a significant portion of our manufacturing operations is based in Ningbo, China and Taipei, Taiwan. Our international revenue and operations are subject to a number of material risks, including:

- difficulties in staffing, managing and supporting operations in more than one country;
- difficulties in enforcing agreements and collecting receivables through foreign legal systems;
- fewer legal protections for intellectual property in foreign jurisdictions;
- foreign and U.S. taxation issues and international trade barriers;
- difficulties in obtaining any necessary governmental authorizations for the export of our products to certain foreign jurisdictions;
- fluctuations in foreign economies;
- fluctuations in the value of foreign currencies and interest rates;
- trade and travel restrictions;
- domestic and international economic or political changes, hostilities and other disruptions in regions where we currently operate or may operate in the future;
- difficulties and increased expenses in complying with a variety of U.S. and foreign laws, regulations and trade standards, including the Foreign Corrupt Practices Act; and
- different and changing legal and regulatory requirements in the jurisdictions in which we currently operate or may operate in the future.

Negative developments in any of these factors in China or Taiwan or other countries could result in a reduction in demand for our products, the cancellation or delay of orders already placed, difficulties in producing and delivering our products, threats to our intellectual property, difficulty in collecting receivables, and a higher cost of doing business. Although we maintain certain compliance programs throughout the company, violations of U.S. and foreign laws and regulations may result in criminal or civil sanctions, including material monetary fines, penalties and other costs against us or our employees, and may have a material adverse effect on our business.

Our business operations conducted in China and Taiwan are important to our success. A substantial portion of our property, plant and equipment is located in China and Taiwan. We expect to make further investments in China and Taiwan in the future. Therefore, our business, financial condition, results of operations and prospects are subject to economic, political, legal, and social events and developments in China and Taiwan. China does not recognize the sovereignty of Taiwan. Although significant economic and cultural relations have been established during recent years between China and Taiwan, relations have often been strained and the government of China has previously threatened to use military force to gain control over Taiwan. Factors affecting military, political or economic conditions in China and Taiwan could have a material adverse effect on our financial condition and results of operations, as well as the market price and the liquidity of our common shares.

***In some instances, we rely on third parties to assist in selling our products, and the failure of those parties to perform as expected could reduce our future revenue.***

Although we primarily sell our products through direct sales, we also sell our products to some of our customers through third party sales representatives and distributors. Many of such third parties also market and sell products from our competitors. Our third party sales representatives and distributors may terminate their relationships with us at any time, or with short notice. Our future performance will also depend, in part, on our ability to attract additional third party sales representatives and distributors that will be able to market and support our products effectively, especially in markets in which we have not previously distributed our products. If our current third party sales representatives and distributors fail to perform as expected, our revenue and results of operations could be harmed.

***Failure to manage our growth effectively may adversely affect our financial condition and results of operations.***

Successful implementation of our business plan in our target markets requires effective planning and management. We plan to continue to expand the scope of our operations. We currently operate facilities in Sugar Land, Texas, Ningbo, China and Taipei, Taiwan. We currently manufacture our lasers using a proprietary process and customized equipment located only in our Sugar Land, Texas facility, and it will be costly to duplicate that facility to scale our laser manufacturing capacity or to mitigate the risks associated with operating a single facility. The challenges of managing our geographically dispersed operations have increased and will continue to increase the demand on our management systems and resources. Moreover, we are continuing to improve our financial and managerial controls, reporting systems and procedures. Any failure to manage our expansion and the resulting demands on our management systems and resources effectively may adversely affect our financial condition and results of operations.

***Our loan agreements contain restrictive covenants that may adversely affect our ability to conduct our business.***

We have lending arrangements with several financial institutions, including loan agreements with East West Bank in the U.S., and our China subsidiary has a line of credit arrangement. Our loan agreements governing our long-term debt obligations in the U.S. contain certain financial and operating covenants that limit our management's discretion with respect to certain business matters. Among other things, these covenants require us to maintain certain financial ratios and restrict our ability to incur additional debt, create liens or other encumbrances, change the nature of our business, pay dividends, sell or otherwise dispose of assets and merge or consolidate with other entities. These restrictions may limit our flexibility in responding to business opportunities, competitive developments and adverse economic or industry conditions. Any failure by us or our subsidiaries to comply with these agreements could harm our business, financial condition and operating results. In addition, our obligations under our U.S. loan agreements with East West Bank are secured by substantially all of our U.S. assets, including our intellectual property assets, our Sugar Land facility and our equity interests in our subsidiaries, which limits our ability to provide collateral for additional financing. A breach of any of covenants under our loan agreements, or a failure to pay interest or indebtedness when due under any of our credit facilities, could result in a variety of adverse consequences, including the acceleration of our indebtedness.

***We may not be able to obtain additional capital when desired, on favorable terms or at all.***

We anticipate that the net proceeds we receive from this offering, together with our current cash, cash provided by operating activities and funds available through our bank loans and credit facilities, will be sufficient to meet our current and anticipated needs for general corporate purposes for the next 12 to 24 months. We operate in a market, however, that makes our prospects difficult to evaluate and, to remain competitive, we will be required to make continued investments in capital equipment, facilities and technological improvements. We expect that substantial capital will be required to expand our manufacturing capacity and fund working capital for anticipated growth. If we do not generate sufficient cash flow from operations or otherwise have the capital resources to meet our future capital needs, we may need additional financing to implement our business strategy, which includes:

- expansion of research and development;
- expansion of manufacturing capabilities;
- hiring of additional technical, sales and other personnel; and
- acquisitions of complementary businesses.

If we raise additional funds through the issuance of our common stock or convertible securities, the ownership interests of our stockholders could be significantly diluted. These newly issued securities may have rights, preferences or privileges senior to those of existing stockholders acquiring shares of our common stock in this offering. Additional financing may not, however, be available on terms favorable to us, or at all, if and when needed, and our ability to fund our operations, take advantage of unanticipated opportunities, develop or enhance our infrastructure or respond to competitive pressures could be significantly limited. If we cannot raise required capital when needed, we may be unable to meet the demands of existing and prospective customers, adversely affecting our sales and market opportunities and consequently our business, financial condition and results of operations.

***Future acquisitions may adversely affect our financial condition and results of operations.***

As part of our business strategy, we may pursue acquisitions of companies that we believe could enhance or complement our current product portfolio, augment our technology roadmap or diversify our revenue base. Acquisitions involve numerous risks, any of which could harm our business, including:

- difficulties integrating the acquired business;
- unanticipated costs, capital expenditures or liabilities or changes related to research in progress and product development;
- diversion of financial and management resources from our existing business;
- difficulties integrating the business relationships with suppliers and customers of the acquired business with our existing business relationships;
- risks associated with entering markets in which we have little or no prior experience; and
- potential loss of key employees, particularly those of the acquired organizations.

Acquisitions may also result in the recording of goodwill and other intangible assets subject to potential impairment in the future, adversely affecting our operating results. We may not achieve the anticipated benefits of an acquisition if we fail to evaluate it properly, and we may incur costs in excess of what we anticipate. A failure to evaluate and execute an acquisition appropriately or otherwise adequately address these risks may adversely affect our financial condition and results of operations.

***Our future results of operations may be subject to volatility as a result of exposure to fluctuations in currency exchange rates.***

We have significant foreign currency exposure, and are affected by fluctuations among the U.S. dollar, the Chinese renminbi, or RMB, and the New Taiwan, or NT, dollar because a substantial portion of our business is conducted in China and Taiwan. Our sales, raw materials, components and capital expenditures are denominated in U.S. dollars, RMB and NT dollars in varying amounts.

Foreign currency fluctuations may adversely affect our revenue and our costs and expenses, and hence our results of operations. The value of the NT dollar or the RMB against the U.S. dollar and other currencies may fluctuate and be affected by, among other things, changes in political and economic conditions. The RMB currency is no longer being pegged solely to the value of the U.S. dollar. While the international reaction to the RMB revaluation has generally been positive, there remains significant international pressure on the Chinese government to adopt an even more flexible currency policy, which may result in a further and more significant appreciation of the RMB against the U.S. dollar. In the long term, the RMB may appreciate or depreciate significantly in value against the U.S. dollar, depending upon the fluctuation of the basket of currencies against which it is currently valued, or it may be permitted to enter into a full float, which may also result in a significant appreciation or depreciation of the RMB against the U.S. dollar. In addition, our currency exchange variations may be magnified by Chinese exchange control regulations that restrict our ability to convert RMB into foreign currency.

Our sales in Europe are denominated in U.S. dollars, and fluctuations in the Euro or our customers' other local currencies relative to the U.S. dollar may impact our customers and affect our financial performance. If our customers' local currencies weaken against the U.S. dollar, we may need to lower our prices to remain competitive in our international markets which could have a material adverse effect on our margins. If our customers' local currencies strengthen against the U.S. dollar and if the local sales prices cannot be raised due to competitive pressures, we will experience a deterioration of our margins.

To date, we have not entered into any hedging transactions in an effort to reduce our exposure to foreign currency exchange risk. While we may decide to enter into hedging transactions in the future, the availability and effectiveness of these hedging transactions may be limited and we may not be able to successfully hedge our exposure.

***Natural disasters or other catastrophic events could harm our operations.***

Our operations in the U.S., China and Taiwan could be subject to significant risk of natural disasters, including earthquakes, hurricanes, typhoons, flooding and tornadoes, as well as other catastrophic events, such as epidemics, terrorist attacks or wars. For example, our corporate headquarters and wafer fabrication facility in Sugar Land, Texas, is located near Gulf of Mexico, an area that is susceptible to hurricanes. We use a proprietary MBE laser manufacturing process that requires customized equipment, and this process is currently conducted and located solely at our wafer fabrication facility in Sugar Land, Texas, such that a natural disaster, terrorist attack or other catastrophic event that affects that facility would materially harm our operations. In addition, our manufacturing facility in Taipei, Taiwan, is susceptible to typhoons, and our manufacturing facility in Ningbo, China, has from time to time, suffered electrical outages. Any disruption in our manufacturing facilities arising from these and other natural disasters or other catastrophic events could cause significant delays in the production or shipment of our products until we are able to shift production to different facilities or arrange for third parties to manufacture our products. We may not be able to obtain alternate capacity on favorable terms or at all. Our property insurance coverage with respect to natural disaster is limited and is subject to deductible and coverage limits. Such coverage may not be adequate or continue to be available at commercially reasonable rates and terms. The occurrence of any of these circumstances may adversely affect our financial condition and results of operation.

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

Our success depends on our ability to protect our intellectual property and other proprietary rights. We rely on a combination of patent, trademark, copyright, trade secret and unfair competition laws, as well as license agreements and other contractual provisions, to establish and protect our intellectual property and other proprietary rights. We have applied for patent registrations in the U.S. and in other foreign countries, some of which have been issued. In addition, we have registered certain trademarks in the U.S. We cannot guarantee that our pending applications will be approved by the applicable governmental authorities. Moreover, our existing and future patents and trademarks may not be sufficiently broad to protect our proprietary rights or may be held invalid or unenforceable in court. A failure to obtain patents or trademark registrations or a successful challenge to our registrations in the U.S. or other foreign countries may limit our ability to protect the intellectual property rights that these applications and registrations intended to cover.

Policing unauthorized use of our technology is difficult and we cannot be certain that the steps we have taken will prevent the misappropriation, unauthorized use or other infringement of our intellectual property rights. Further, we may not be able to effectively protect our intellectual property rights from misappropriation or other infringement in foreign countries

where we have not applied for patent protections, and where effective patent, trademark, trade secret and other intellectual property laws may be unavailable, or may not protect our proprietary rights as fully as U.S. law. We may seek to secure comparable intellectual property protections in other countries. However, the level of protection afforded by patent and other laws in other countries may not be comparable to that afforded in the U.S.

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

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

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

Participants in the markets in which we sell our products have experienced frequent litigation regarding patent and other intellectual property rights. While we have a policy in place that is designed to reduce the risk of infringement of intellectual property rights of others and we have conducted a limited review of other companies' relevant patents, there can be no assurance that third parties will not assert infringement claims against us. We cannot be certain that our products would not be found infringing the intellectual property rights of others. Regardless of their merit, responding to such claims can be time consuming, divert management's attention and resources and may cause us to incur significant expenses. Intellectual property claims against us could force us to do one or more of the following:

- obtain from a third party claiming infringement a license to the relevant technology, which may not be available on reasonable terms, or at all;
- stop manufacturing, selling, incorporating or using our products that use the challenged intellectual property;
- pay substantial monetary damages; or
- expend significant resources to redesign the products that use the technology and to develop non-infringing technology.

Any of these actions could result in a substantial reduction in our revenue and could result in losses over an extended period of time.

In any potential intellectual property dispute, our customers could also become the target of litigation. Because we often indemnify our customers for intellectual property claims made against them with respect to our products, any claims against our customers could trigger indemnification claims against us. These obligations could result in substantial expenses such as legal expenses, damages for past infringement or royalties for future use. Any indemnity claim could also adversely affect our relationships with our customers and result in substantial costs to us.

***If we fail to obtain the right to use the intellectual property rights of others that are necessary to operate our business, and to protect their intellectual property, our business and results of operations will be adversely affected.***

From time to time we may choose to or be required to license technology or intellectual property from third parties in connection with the development of our products. We cannot assure you that third party licenses will be available to us on commercially reasonable terms, if at all. Generally, a license, if granted, would include payments of up-front fees, ongoing royalties or both. These payments or other terms could have a significant adverse impact on our results of operations. Our inability to obtain a necessary third party license required for our product offerings or to develop new products and product enhancements could require us to substitute technology of lower quality or performance standards, or of greater cost, either of which could adversely affect our business. If we are not able to obtain licenses from third parties, if necessary, then we may also be subject to litigation to defend against infringement claims from these third parties. Our competitors may be able to obtain licenses or cross-license their technology on better terms than we can, which could put us at a competitive disadvantage.

***If we fail to maintain effective internal control over financial reporting in the future, the accuracy and timing of our financial reporting may be adversely affected.***

Preparing our consolidated financial statements involves a number of complex manual and automated processes, which are dependent upon individual data input or review and require significant management judgment. One or more of these elements may result in errors that may not be detected and could result in a material misstatement of our consolidated financial statements. In connection with the audit of our financial statements for the period ended December 31, 2012, we identified a material weakness related to the inappropriate recording of certain inventory returned for re-work in China as a reduction in cost of sales. This error arose as a result of the configuration of our ERP system, which lacked an automated control within the system to prevent overrides. In addition, the monitoring controls were not operating with sufficient precision to enable the errors to be detected and corrected by management in a timely manner. We believe we have remediated this material weakness by updating our ERP system with respect to the monitoring of returned inventory, providing additional training to certain personnel and adding management oversight. Also, in connection with the audit of our financial statements for the period ended December 31, 2012, three significant deficiencies were identified related to the reclassification of transactions within current liabilities between accounts payable and accrued liabilities, the cut-off of certain expenses for the December 31, 2012 closing related to our Asian operations, and the allocation of standard costing applied among cost of goods sold and inventory at our China subsidiary for the period ended December 31, 2012. We believe we have remediated these three significant deficiencies by providing additional staff training, developing additional procedures, enhancing our end of period closing processes, and providing for the allocation of standard cost of goods sold and inventory for the U.S., Taiwan and China locations.



We have not performed an evaluation of our internal control over financial reporting, such as would be required by Section 404 of the Sarbanes-Oxley Act, nor have we engaged our independent registered public accounting firm to perform an audit of our internal control over financial reporting. In addition, for so long as we qualify as an "emerging growth company" under the JOBS Act, which may be up to five years following this offering, we will not have to provide an auditor's attestation report on our internal controls in future annual reports on Form 10-K as otherwise required by Section 404(b) of the Sarbanes-Oxley Act. During the course of any evaluation, documentation or attestation, we or our independent registered public accounting firm may identify weaknesses and deficiencies that we may not otherwise identify in a timely manner or at all as a result of the deferred implementation of this additional level of review.

We have implemented internal controls that we believe provide reasonable assurance that we will be able to avoid accounting errors or material weaknesses in future periods. However, our internal controls cannot guarantee that no accounting errors exist or that all accounting errors, no matter how immaterial, will be detected because a control system, no matter how well designed and operated, can provide only reasonable, but not absolute assurance that the control system's objectives will be met. If we are unable to implement and maintain effective internal control over financial reporting, our ability to accurately and timely report our financial results could be adversely impacted. This could result in late filings of our annual and quarterly reports under the Securities Exchange Act of 1934, or the Exchange Act, restatements of our consolidated financial statements, a decline in our stock price, suspension or delisting of our common stock by NASDAQ, or other material adverse effects on our business, reputation, results of operations or financial condition.

***Our ability to use our net operating losses and certain other tax attributes may be limited.***

As of December 31, 2012, we had U.S. accumulated net operating losses, or NOLs, of approximately \$66.7 million for U.S. federal income tax purposes. We also had research and development credit carry-forwards totaling \$1.5 million as of December 31, 2012, which begin to expire in 2024. Under Section 382 of the Internal Revenue Code of 1986, as amended, if a corporation undergoes an "ownership change," the corporation's ability to use its pre-change NOLs, capital loss carry-forwards and other pre-change tax attributes to offset its post-change income may be limited. An ownership change is generally defined as a greater than 50% change in equity ownership by value over a 3-year period. We believe we have experienced ownership changes and may experience additional ownership changes in the future as a result of shifts in our stock ownership, including as a result of our contemplated issuance of shares of common stock pursuant to this offering. If we trigger ownership changes, our ability to use any NOLs and capital loss carry-forwards existing at that time could be limited going forward. We continue to update our analysis to determine if ownership changes occurred in connection with our prior equity financings and, if so, what limitations resulted.

***Changes in our effective tax rate may adversely affect our results of operation and our business.***

We are subject to income taxes in the U.S. and other foreign jurisdictions, including China. We base our tax position on the anticipated nature and conduct of our business and our understanding of the tax laws of the countries in which we have assets or conduct activities. Our tax position may be reviewed or challenged by tax authorities. Moreover, the tax laws currently in effect may change, and such changes may have retroactive effect. We have inter-company arrangements in place providing for administrative and financing services and transfer pricing, which involve a significant degree of judgment and are often subject to close review by tax

authorities. The tax authorities may challenge our positions related to these agreements. If the tax authorities successfully challenge our positions, our effective tax rate may increase, adversely affecting our results of operation and our business.

***Our manufacturing operations are subject to environmental regulation that could limit our growth or impose substantial costs, adversely affecting our financial condition and results of operations.***

Our properties, operations and products are subject to the environmental laws and regulations of the jurisdictions in which we operate and sell products. These laws and regulations govern, among other things, air emissions, wastewater discharges, the management and disposal of hazardous materials, the contamination of soil and groundwater, employee health and safety and the content, performance, packaging and disposal of products. Our failure to comply with current and future environmental laws and regulations, or the identification of contamination for which we are liable, could subject us to substantial costs, including fines, clean-up costs, third-party property damages or personal injury claims, and make significant investments to upgrade our facilities or curtail our operations. Liability under environmental, health and safety laws can be joint and several and without regard to fault or negligence. For example, pursuant to environmental laws and regulations, including but not limited to the Comprehensive Environmental Response Compensation and Liability Act, or CERCLA, we may be liable for the full amount of any remediation-related costs at properties we currently own or formerly owned, such as our currently owned Sugar Land, Texas facility, or at properties at which we operated, as well as at properties we will own or operate in the future, and properties to which we have sent hazardous substances, whether or not we caused the contamination. Identification of presently unidentified environmental conditions, more vigorous enforcement by a governmental authority, enactment of more stringent legal requirements or other unanticipated events could give rise to adverse publicity, restrict our operations, affect the design or marketability of our products or otherwise cause us to incur material environmental costs, adversely affecting our financial condition and results of operations.

***Failure to comply with the U.S. Foreign Corrupt Practices Act could subject us to penalties and other adverse consequences.***

As a public company, we will be subject to the U.S. Foreign Corrupt Practices Act which generally prohibits U.S. companies from engaging in bribery or other prohibited payments to foreign officials for the purpose of obtaining or retaining business. In addition, we are required to maintain records that accurately and fairly represent our transactions and have an adequate system of internal accounting controls. Foreign companies, including some that may compete with us, may not be subject to these prohibitions, and therefore may have a competitive advantage over us. If we are not successful in implementing and maintaining adequate preventative measures, we may be responsible for acts of our employees or other agents engaging in such conduct. We could suffer severe penalties and other consequences that may have a material adverse effect on our financial condition and results of operations.

***We are subject to governmental export and import controls that could subject us to liability or impair our ability to compete in international markets.***

We are subject to export and import control laws, trade regulations and other trade requirements that limit which products we sell and where and to whom we sell our products. In addition, various countries regulate the import of certain technologies and have enacted laws that could limit our ability to distribute our products. Failure to comply with these and similar laws on a timely basis, or at all, or any limitation on our ability to export or sell our products

would adversely affect our business, financial condition and results of operations. Changes in our products or any change in export or import regulations or related legislation, shift in approach to the enforcement or scope of existing regulations, or change in the countries, persons or technologies targeted by such regulations, could result in delayed or decreased sales of our products to existing or potential customers. In such event, our business and results of operations could be adversely affected.

***Rapidly changing standards and regulations could make our products obsolete, which would cause our revenue and results of operations to suffer.***

We design our products to conform to regulations established by governments and to standards set by industry standards bodies worldwide, such as The American National Standards Institute, the European Telecommunications Standards Institute, the International Telecommunications Union and the Institute of Electrical and Electronics Engineers, Inc. Various industry organizations are currently considering whether and to what extent to create standards applicable to our products. Because certain of our products are designed to conform to current specific industry standards, if competing or new standards emerge that are preferred by our customers, we would have to make significant expenditures to develop new products. If our customers adopt new or competing industry standards with which our products are not compatible, or the industry groups adopt standards or governments issue regulations with which our products are not compatible, our existing products would become less desirable to our customers and our revenue and results of operations would suffer.

***Customer demands and new regulations related to conflict-free minerals may adversely affect us.***

The Dodd-Frank Wall Street Reform and Consumer Protection Act imposes new disclosure requirements regarding the use of "conflict" minerals mined from the Democratic Republic of Congo and adjoining countries in products, whether or not these products are manufactured by third parties. These new requirements could affect the pricing, sourcing and availability of minerals used in the manufacture of our products. Certain of our customers are requiring additional information from us regarding the origin of our raw materials, and complying with these customer requirements may cause us to incur additional costs, such as costs related to determining the origin of any minerals used in our products. Our supply chain is complex and we may be unable to verify the origins for all metals used in our products. We may also encounter challenges with our customers and stockholders if we are unable to certify that our products are conflict free.

### **Risks Related to Our Operations in China**

***Adverse changes in economic and political policies in China, or Chinese laws or regulations could have a material adverse effect on business conditions and the overall economic growth of China, which could adversely affect our business.***

The Chinese economy differs from the economies of most developed countries in many respects, including the level of government involvement, level of development, growth rate, control of foreign exchange and allocation of resources. The Chinese economy has been transitioning from a planned economy to a more market-oriented economy. Despite reforms, the government continues to exercise significant control over China's economic growth by way of the allocation of resources, control over foreign currency-denominated obligations and monetary policy and provision of preferential treatment to particular industries or companies.

In addition, the laws, regulations and legal requirements in China, including the laws that apply to foreign-invested enterprises, or FIEs, are subject to frequent changes. The interpretation and enforcement of such laws is uncertain. Protections of intellectual property rights and confidentiality in China may not be as effective as in the U.S. or other countries or regions with more developed legal systems. Any litigation in China may be protracted and result in substantial costs and diversion of resources and management attention. Any adverse changes to these laws, regulations and legal requirements or their interpretation or enforcement could have a material adverse effect on our business.

Furthermore, while China's economy has experienced rapid growth in the past 20 years, growth has been uneven across different regions, among various economic sectors and over time. China has also in the past and may in the future experience economic downturns due to, for example, government austerity measures, changes in government policies relating to capital spending, limitations placed on the ability of commercial banks to make loans, reduced levels of exports and international trade, inflation, lack of financial liquidity, stock market volatility and global economic conditions. Any of these developments could contribute to a decline in business and consumer spending in addition to other adverse market conditions, which could adversely affect our business.

***The termination and expiration or unavailability of our preferential tax treatments in China may have a material adverse effect on our operating results.***

Prior to January 1, 2008, entities established in China were generally subject to a 30% state and 3% local enterprise income tax rate. In accordance with the China Income Tax Law for Enterprises with Foreign Investment and Foreign Enterprises, effective through December 31, 2007, our China subsidiary enjoyed preferential income tax rates. Effective January 1, 2008, the China Enterprise Income Tax Law, or the EIT law, imposes a single uniform income tax rate of 25% on all Chinese enterprises, including FIEs, and eliminates or modifies most of the tax exemptions, reductions and preferential treatment available under the previous tax laws and regulations. As a result, our China subsidiary may be subject to the uniform income tax rate of 25% unless we are able to qualify for preferential status. Currently, we have qualified for a preferential 15% tax rate that is available for new and high technology enterprises. The preferential rate applies to calendar years 2012, 2013 and 2014. We have not yet realized benefits from this reduction in tax rate because we have not yet generated taxable income in China. Any future increase in the enterprise income tax rate applicable to us or the expiration or other limitation of preferential tax rates available to us could increase our tax liabilities and reduce our net income.

***China regulation of loans and direct investment by offshore holding companies to China entities may delay or prevent us from using the proceeds we receive from this offering to make loans or additional capital contributions to our China subsidiary.***

In utilizing the proceeds we receive from this offering, we may make loans or additional capital contributions to our China subsidiary. Any loans to our China subsidiary are subject to China regulations and approvals. For example, any loans to our China subsidiary to finance their activities cannot exceed statutory limits, must be registered with State Administration of Foreign Exchange, or SAFE, or its local counterpart, and must be approved by the relevant government authorities. Any capital contributions to our China subsidiary must be approved by the Ministry of Commerce or its local counterpart. In addition, under Circular 142, our China subsidiary, as a FIE, may not be able to convert our capital contributions to them into RMB for equity investments or acquisitions in China.

We cannot assure you that we will be able to obtain these government registrations or approvals on a timely basis, if at all, with respect to our future loans or capital contributions to our China subsidiary. If we fail to receive such registrations or approvals, our ability to use the proceeds of this offering and to capitalize our China subsidiary may be negatively affected, which could materially and adversely affect our liquidity and ability to fund and expand our business.

***Our China subsidiary is subject to Chinese labor laws and regulations and Chinese labor laws may increase our operating costs in China.***

The China Labor Contract Law, together with its implementing rules, provides increased rights to Chinese employees. Previously, an employer had discretionary power in deciding the probation period, not to exceed six months. Additionally, the employment contract could only be terminated for cause. Under these rules, the probation period varies depending on contract terms and the employment contract can only be terminated during the probation period for cause upon three days' notice. Additionally, an employer may not be able to terminate a contract during the probation period on the grounds of a material change of circumstances or a mass layoff. The new law also has specific provisions on conditions when an employer has to sign an employment contract with open-ended terms. If an employer fails to enter into an open-ended contract in certain circumstances, the employer must pay the employee twice their monthly wage beginning from the time the employer should have executed an open-ended contract. Additionally an employer must pay severance for nearly all terminations, including when an employer decides not to renew a fixed-term contract. These laws may increase our costs and reduce our flexibility.

***The turnover of direct labor in manufacturing industries in China is high, which could adversely affect our production, shipments and results of operations.***

Employee turnover of direct labor in the manufacturing sector in China is high and retention of such personnel is a challenge to companies located in or with operations in China. Although direct labor costs do not represent a high proportion of our overall manufacturing costs, direct labor is required for the manufacture of our products. If our direct labor turnover rates are higher than we expect, or we otherwise fail to adequately manage our direct labor turnover rates, then our results of operations could be adversely affected.

***An increase in our labor costs in China may adversely affect our business and our profitability.***

A significant portion of our workforce is located in China. Labor costs in China have been increasing recently due to labor unrest, strikes and changes in employment laws. If labor costs in China continue to increase, our costs will increase. If we are not able to pass these increases on to our customers, our business, profitability and results of operations may be adversely affected.

***We may have difficulty establishing and maintaining adequate management and financial controls over our China operations.***

Businesses in China have historically not adopted a western style of management and financial reporting concepts and practices, which includes strong corporate governance, internal controls and computer, financial and other control systems. Moreover, familiarity with U.S. GAAP principles and reporting procedures is less common in China. As a consequence, we may have difficulty finding accounting personnel experienced with U.S. GAAP, and we may have difficulty training and integrating our China-based accounting staff with our U.S.-based

finance organization. As a result of these factors, we may experience difficulty in establishing management and financial controls over our China operations. These difficulties include collecting financial data and preparing financial statements, books of account and corporate records and instituting business practices that meet U.S. public-company reporting requirements. We may, in turn, experience difficulties in implementing and maintaining adequate internal controls as required under Section 404 of the Sarbanes-Oxley Act.

### **Risks Related to This Offering and Our Common Stock**

***There is no existing market for our common stock and we do not know if one will develop to provide our stockholders liquidity for the shares they hold or purchase in this offering.***

There has not been a public trading market for shares of our common stock prior to this offering. An active trading market may not develop or be sustained after this offering. The initial public offering price for the shares of common stock sold in this offering will be determined by negotiations between us, the selling stockholders and representatives of the underwriters. This price may not be indicative of the price at which our common stock will trade after this offering.

***Our principal stockholders, executive officers and directors own a significant percentage of our stock and will continue to have significant control of our management and affairs after the offering, and they can take actions that may be against your best interests.***

Following the completion of this offering, our executive officers and directors, and entities that are affiliated with them, will beneficially own an aggregate of approximately % of our outstanding common stock, on an as-converted basis, based on an assumed initial offering price of \$ per share, the midpoint of the price range set forth on the front cover of this prospectus. As a result, these stockholders, acting together, may have significant influence over our management and affairs and matters requiring stockholder approval, including the election of directors and approval of significant corporate transactions, such as mergers, consolidations or the sale of substantially all of our assets. Consequently, this concentration of ownership may have the effect of delaying or preventing a change in control, including a merger, consolidation or other business combination involving us, or discouraging a potential acquirer from making a tender offer or otherwise attempting to obtain control, even if such a change in control would benefit our other stockholders.

***Our stock price could decline due to the large number of outstanding shares of our common stock eligible for future sale.***

Sales of substantial amounts of our common stock in the public market following this offering, or the perception that these sales could occur, could cause the market price of our common stock to decline. These sales could also make it more difficult for us to sell equity or equity-related securities in the future at a time and price that we deem appropriate.

Upon completion of this offering, we will have an aggregate of shares of common stock outstanding, assuming no exercise of the underwriters' over-allotment option and no exercise of outstanding options or warrants, other than those warrants to purchase shares of common stock that expire upon the completion of this offering. The

shares sold pursuant to this offering will be immediately tradable without restriction. Of the remaining shares:

- shares will be eligible for sale immediately upon completion of this offering; and
- shares will be eligible for sale upon the expiration of lock-up agreements, subject in some cases to volume and other restrictions of Rule 144 and Rule 701 under the Securities Act of 1933, as amended, or the Securities Act.

The lock-up agreements expire 180 days after the date of this prospectus, subject to potential extension in the event we release earning results or material news or a material event relating to us occurs near the end of the lock-up period and in the event that we cease to be an emerging growth company. Raymond James & Associates, Inc. and Piper Jaffray & Co., as representatives of the underwriters, may, in their sole discretion and at any time without notice, release all or any portion of the securities subject to lock-up agreements. After the completion of this offering, we intend to register approximately \_\_\_\_\_ shares of our common stock that have been issued or reserved for future issuance under our stock incentive plans.

***Because our initial public offering price is substantially higher than the pro forma as adjusted net tangible book value per share of our outstanding common stock, new investors will incur immediate and substantial dilution.***

The initial public offering price is substantially higher than the pro forma as adjusted net tangible book value per share of our common stock based on the expected total value of our total assets, less our goodwill and other intangible assets, less our total liabilities immediately following this offering. Therefore, if you purchase shares of our common stock in this offering, you will experience immediate and substantial dilution of \$ \_\_\_\_\_ per share in the price you pay for our common stock compared to the pro forma as adjusted net tangible book value as of March 31, 2013. Furthermore, investors purchasing our common stock in this offering will own only \_\_\_\_\_ % of our shares outstanding even though they will have contributed \_\_\_\_\_ % of the total consideration received by us in connection with our sales of common stock. To the extent outstanding options to purchase common stock are exercised, there will be further dilution. For a further description of the dilution that you will experience immediately after this offering, see the section titled "Dilution."

***We currently do not intend to pay dividends on our common stock and, consequently, your only opportunity to achieve a return on your investment is if the price of our common stock appreciates.***

We currently do not plan to declare or pay dividends on shares of our common stock in the foreseeable future. In addition, the terms of our loan and security agreement with East West Bank restrict our ability to pay dividends. See "Dividend Policy" for more information. Consequently, your only opportunity to achieve a return on the shares you purchase in this offering will be if the market price of our common stock appreciates and you sell your shares at a profit. There is no guarantee that the price of our common stock in the market after this offering will ever exceed the price that you pay.

***Our charter documents, stock incentive plans and Delaware law could prevent a takeover that stockholders consider favorable and could also reduce the market price of our stock.***

Our amended and restated certificate of incorporation and our amended and restated bylaws to be effective immediately prior to closing of this offering and our stock incentive plans contain provisions that could delay or prevent a change in control of our company. These provisions could also make it more difficult for stockholders to elect directors and take other corporate actions. These provisions include:

- providing for a classified board of directors with staggered, three-year terms;
- not providing for cumulative voting in the election of directors;
- authorizing our board of directors to issue, without stockholder approval, preferred stock rights senior to those of common stock;
- prohibiting stockholder action by written consent;
- limiting the persons who may call special meetings of stockholders;
- requiring advance notification of stockholder nominations and proposals; and
- change of control provisions in our stock incentive plans, and the individual stock option agreements, which provide that a change of control may accelerate the vesting of the stock options issued under such plans.

In addition, the provisions of Section 203 of the Delaware General Corporate Law will govern us upon completion of this offering. These provisions may prohibit large stockholders, in particular those owning 15% or more of our outstanding common stock, from engaging in certain business combinations without the approval of substantially all of our stockholders for a certain period of time.

These and other provisions in our amended and restated certificate of incorporation, our amended and restated bylaws and under Delaware law could discourage potential takeover attempts, reduce the price that investors might be willing to pay for shares of our common stock in the future and result in the market price being lower than it would be without these provisions. See "Description of Capital Stock—Preferred stock" and "Description of Capital Stock—Anti-takeover effects of Delaware law."

***Our current loan agreement could make a takeover that stockholders consider favorable more difficult and could also reduce the price an acquiror would be willing to pay of our stock.***

Our current loan agreement with East West Bank contains a provision that prevents us from terminating or replacing our Chief Executive Officer, Chief Financial Officer or other executive level officer without the prior approval from East West Bank. This provision in our loan agreement could also discourage potential takeover attempts or, reduce the price that an acquiror might be willing to pay to acquire the Company in the future.



***Some provisions of our named executive officers' agreements regarding change of control or separation of service contain obligations for us to make separation payments to them upon their termination.***

Certain provisions contained in our employment agreements with our named executive officers regarding change of control or separation of service may obligate us to make lump sum severance payments and related payments upon the termination of their employment with us, other than such executive officer's resignation without good reason or our termination of their employment as a result of their disability or for cause. In the event we are required to make these separation payments, it could have a material adverse effect on our results of operations for the fiscal period in which such payments are made. For a further description of the separation benefits that we may be obligated to pay upon such termination of these executives, see the section titled "Management—Agreements with Executive Officers."

***Our stock price may be volatile and you may be unable to sell your shares at or above the offering price.***

The market price of our common stock could be subject to wide fluctuations in response to, among other things, the risk factors described in this section of this prospectus, and other factors beyond our control, such as fluctuations in the valuation of companies perceived by investors to be comparable to us.

Furthermore, the stock markets have experienced price and volume fluctuations that have affected and continue to affect the market prices of equity securities of many companies. These fluctuations often have been unrelated or disproportionate to the operating performance of those companies. These broad market and industry fluctuations, as well as general economic, political and market conditions, such as recessions, interest rate changes or international currency fluctuations, may negatively affect the market price of our common stock.

In the past, many companies that have experienced volatility in the market price of their stock have been subject to securities class action litigation. We may become the target of this type of litigation in the future. Securities litigation against us could result in substantial costs and divert our management's attention from other business concerns, which could seriously harm our business.

***As an "emerging growth company" within the meaning of the Securities Act, we will utilize certain modified disclosure requirements, and we cannot be certain if these reduced requirements will make our common stock less attractive to investors.***

We are an emerging growth company within the meaning of the rules under the Securities Act. We have in this prospectus utilized, and we plan in future filings with the SEC to continue to utilize, the modified disclosure requirements available to emerging growth companies, including reduced disclosure about our executive compensation and omission of compensation discussion and analysis, and an exemption from the requirement of holding a nonbinding advisory vote on executive compensation and an exemption from the requirement that outside auditors attest as to our internal control over financial reporting. As a result, our stockholders may not have access to certain information they may deem important.

In addition, Section 107 of the JOBS Act also provides that an emerging growth company can utilize the extended transition period provided in Section 7(a)(2)(B) of the Securities Act for complying with new or revised accounting standards. Thus, an emerging growth company can delay the adoption of certain accounting standards until those standards would otherwise apply

to private companies. We have elected to utilize this extended transition period. Our financial statements may therefore not be comparable to those of companies that comply with such new or revised accounting standards as they become applicable to public companies.

We cannot predict if investors will find our common stock less attractive because we will rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile. We could remain an "emerging growth company" for up to five years, or until the earliest of (i) the last day of the first fiscal year in which our annual gross revenue exceed \$1 billion, (ii) the date that we become a "large accelerated filer" as defined in Rule 12b-2 under the Exchange Act, which would occur if the market value of our common stock that is held by non-affiliates exceeds \$700 million as of the last business day of our most recently completed second fiscal quarter or (iii) the date on which we have issued more than \$1 billion in non-convertible debt during the preceding three-year period.

***If research analysts do not publish research about our business or if they issue unfavorable commentary or downgrade our common stock, our stock price and trading volume could decline.***

The trading market for our common stock will depend on the research and reports that research analysts publish about us and our business. The price of our common stock could decline if one or more research analysts downgrade our common stock or if those analysts issue other unfavorable commentary or cease publishing reports about us or our business. If one or more of the research analysts ceases coverage of our company or fails to publish reports on us regularly, demand for our stock could decrease, which could cause our stock price or trading volume to decline.

## **SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS AND INDUSTRY DATA**

This prospectus contains forward-looking statements. All statements other than statements of historical facts contained in this prospectus are forward-looking statements, including statements regarding our future financial position, sources of revenue, business strategy and plans, prospective products, product approvals or products under development, costs, timing and likelihood of success, gross margins, and objectives of management for future operations. In particular, many of the statements under the headings "Prospectus summary," "Risk Factors," "Management's discussion and analysis of financial condition and results of operations" and "Business" constitute forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as "may," "will," "should," "expects," "plans," "anticipates," "believes," "estimates," "predicts," "potential," "continue," the negative of these terms, or by other similar expressions that convey uncertainty of future events or outcomes to identify these forward-looking statements. These statements are only predictions, involving known and unknown risks, uncertainties and other factors that may cause our or our industry's actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements. We discuss many of these factors, risks and uncertainties in greater detail under the heading "Risk Factors" and elsewhere in this prospectus. These factors expressly qualify all oral and written forward-looking statements attributable to us or persons acting on our behalf.

You should not rely on forward-looking statements as predictions of future events. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. Actual results may differ materially from those suggested by the forward-looking statements for various reasons, including those discussed under "Risk Factors" in this prospectus. Except as required by law, we assume no obligation to update forward-looking statements for any reason after the date of this prospectus to conform these statements to actual results or to changes in our expectations.

This prospectus contains market data and certain other statistical information based on independent industry publications, governmental publications, reports by market research firms or other independent sources, including those generated by Akamai, Cisco, Crehan Research Inc., Infonetics and Ovum Limited, as well as our internal research. Some data is also based on our internal estimates. Industry publications, surveys and market research reports generally state that the information contained in them has been obtained from sources believed by the sources' authors to be reliable, but we have not independently verified any of the data from third party sources nor have we investigated the underlying economic assumptions on which such data are based. We commissioned certain Ovum research referenced in the sections "Prospectus Summary" and "Business" in this prospectus and contributed to its preparation. This information involves a number of assumptions and limitations. The markets in which we operate are subject to a high degree of uncertainty and risk due to a variety of factors, including those described in the section of this prospectus titled "Risk Factors."

## USE OF PROCEEDS

We estimate that the net proceeds of the sale by us of our common stock in this offering will be approximately \$      million, based on an assumed initial public offering price of \$      per share, which is the midpoint of the range listed on the cover page of this prospectus, after deducting the underwriting discounts and commissions and estimated offering expenses payable by us. A \$1.00 increase or decrease in the assumed initial public offering price of \$      per share would increase or decrease the net proceeds to us from the offering by \$      million, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the underwriting discounts and commissions and offering expenses payable by us. We may also issue up to      shares of common stock in the offering in the over-allotment option. If we sell shares upon exercise of the over-allotment option, we may receive up to an additional \$      million of net proceeds in the offering. We will not receive any proceeds from the sale of shares by the selling stockholders.

We intend to use the net proceeds from this offering for working capital and other general corporate purposes. We may also use a portion of our net proceeds to repay outstanding indebtedness, which currently has interest rates ranging from 4.375% to 6.875% and maturity dates ranging from July 2013 to November 2014, but we currently have no commitments or specific plans to repay any particular indebtedness in advance of its maturity date. We may also use a portion of net proceeds to expand our current business through strategic alliances with, or acquisitions of, other businesses, products or technologies. Because we currently have no agreements or commitments for any such specific alliances or acquisitions, we have not identified what portion, if any, of the net proceeds will be used for this purpose. Pending any use above, we plan to invest the net proceeds in investment-grade, short-term, interest-bearing securities.

Management will have significant flexibility in applying the net proceeds of the offering. The amount and timing of our actual spending for these purposes may vary significantly from our plans and will depend on a number of factors, including our future revenues, cash generated by operations and other factors described under the heading "Risk Factors." We may find it necessary or advisable to use portions of the proceeds for other purposes.

## DIVIDEND POLICY

We have never declared or paid any cash dividends on our capital stock, and we do not anticipate paying any cash dividends on our common stock for the foreseeable future. We currently intend to retain all available funds and future earnings for use in the operation and expansion of our business. Any future determination to pay cash dividends will be at the discretion of our board of directors and will depend upon our financial condition, results of operations, terms of financing arrangements, applicable Delaware law, capital requirements and such other factors as our board of directors deems relevant. In addition, the terms of our loan agreements governing our long-term debt obligations prohibit us from paying dividends.

## CAPITALIZATION

The following table sets forth our consolidated cash and cash equivalents and capitalization as of March 31, 2013 on:

- an actual basis;
- a pro forma basis to reflect the conversion of all outstanding shares of our preferred stock into an aggregate of 260,800,071 shares of common stock; and
- a pro forma as adjusted basis to reflect the pro forma adjustments described above and the sale by us of \_\_\_\_\_ shares of common stock in this offering, at an assumed initial public offering price of \$ \_\_\_\_\_ per share, the midpoint of the price range set forth on the front cover of this prospectus, after deducting underwriting discounts and commissions and estimated offering expenses.

The information below is illustrative only and our capitalization following the completion of this offering will be adjusted based on the actual initial public offering price and other terms of this offering determined at pricing. The terms of our preferred stock provide that our preferred stock will automatically convert into shares of our common stock upon the closing of our first underwritten public offering under an effective registration statement covering the offering and sale of our common stock for the account of the Company on a firm commitment basis for proceeds of at least \$30 million (for which this offering will qualify). You should read the information in this table together with "Management's Discussion and Analysis of Financial

Condition and Results of Operations" and our consolidated financial statements and the accompanying notes appearing elsewhere in this prospectus.

(in thousands, except share data)	As of March 31, 2013		
	Actual	Pro forma	Pro forma as adjusted (7)
Total debt	\$ 22,064	\$	\$
Stockholders' equity (deficit)			
Redeemable Series A preferred stock, \$0.001 par value, 4,900,000 shares authorized and 4,805,871 shares outstanding, actual; and no shares issued or outstanding pro forma or pro forma as adjusted (1)	\$ 7,105	\$ —	\$ —
Series C preferred stock, \$0.001 par value, 17,500,000 shares authorized and 17,470,093 shares outstanding, actual; and no shares issued or outstanding pro forma or pro forma as adjusted (2)	21,802	—	—
Series D preferred stock, \$0.001 par value, 11,800,000 shares authorized and 11,413,984 shares outstanding, actual; and no shares issued or outstanding pro forma or pro forma as adjusted (3)	14,185	—	—
Series E preferred stock, \$0.001 par value, 11,000,000 shares authorized and 10,338,654 shares outstanding, actual; and no shares issued or outstanding pro forma or pro forma as adjusted (4)	28,055	—	—
Series F preferred stock, \$0.001 par value, 82,000,000 shares authorized and 79,518,352 shares outstanding, actual; and no shares issued or outstanding pro forma or pro forma as adjusted (5)	19,392	—	—
Series G preferred stock, \$0.001 par value, 45,000,000 shares authorized and 42,857,108 shares outstanding, actual; and no shares issued or outstanding pro forma or pro forma as adjusted (6)	14,942	—	—
Common stock, \$0.001 par value: 300,000,000 shares authorized; 7,977,592 shares outstanding, actual; 268,920,162 shares issued and outstanding, pro forma; and shares issued and outstanding pro forma as adjusted	1,103	106,584	
Additional paid-in capital	4,569	4,569	
Accumulated other comprehensive income	2,079	2,079	
Accumulated deficit	(82,911)	(82,911)	
Total stockholders' equity (deficit)	\$ 30,321	\$ 30,321	\$
Total capitalization	\$ 52,385	\$ 52,385	\$

- (1) The 4,805,871 shares of our redeemable Series A preferred stock outstanding on an actual basis will convert into 15,249,353 shares of common stock upon the closing of this offering.
- (2) The 17,470,093 shares of our Series C preferred stock outstanding on an actual basis will convert into 40,366,820 shares of common stock upon the closing of this offering.
- (3) The 11,413,984 shares of our Series D preferred stock outstanding on an actual basis will convert into 28,944,936 shares of common stock upon the closing of this offering.
- (4) The 10,338,654 shares of our Series E preferred stock outstanding on an actual basis will convert into 37,411,163 shares of common stock upon the closing of this offering.

- (5) The 79,974,352 shares of our Series F preferred stock outstanding on an actual basis will convert into 95,970,689 shares of common stock upon the closing of this offering.
- (6) The 42,857,108 shares of our Series G preferred stock outstanding on an actual basis will convert into 42,857,108 shares of common stock upon the closing of this offering.
- (7) A \$1.00 increase (decrease) in the assumed initial public offering price of \$ per share, which is the midpoint of the range listed on the cover page of this prospectus, would increase (decrease) each of pro forma as adjusted additional paid-in capital, total stockholders' equity (deficit) and total capitalization by approximately \$ .

The number of shares of our common stock to be outstanding after this offering is based on 268,920,162 shares of our common stock outstanding as of March 31, 2013. This number of shares does not include:

- 22,219,328 shares of common stock subject to outstanding options as of March 31, 2013, with a weighted average exercise price of \$0.2213 per share;
- 300,000 shares of common stock issuable upon the exercise of outstanding warrants, with a weighted average exercise price of \$0.20 per share;
- 1,730,000 shares of Series F preferred stock issuable upon the exercise of outstanding warrants, with a weighted average exercise price of \$0.21387 per share, which are convertible to 2,076,033 shares of common stock;
- 382,442 shares of Series G preferred stock issuable upon the exercise of outstanding warrants, with a weighted average exercise price of \$0.469261 per share, which are convertible to 382,442 shares of common stock; and
- 24,000,000 shares of common stock available for future sale or issuance under our stock option plans.

## DILUTION

If you invest in our common stock, your interest will be diluted to the extent of the difference between the initial public offering price per share of our common stock and the pro forma net tangible book value per share of our common stock after this offering. We calculate actual net tangible book value per share by dividing the net tangible book value, or tangible assets less total liabilities, by the number of outstanding shares of common stock. Our actual net tangible book value at March 31, 2013, was \$28.9 million, or \$3.55 per share. We calculate pro forma net tangible book value per share by dividing the net tangible book value, tangible assets less total liabilities, by the number of outstanding shares of common stock after giving effect to the assumed conversion of all of our convertible preferred stock. Our pro forma net tangible book value at March 31, 2013, was \$28.9 million, or \$0.11 per share.

After giving effect to the sale of the \_\_\_\_\_ shares of common stock by us at the assumed initial public offering price of \$ \_\_\_\_\_ per share, which is the midpoint of the range listed on the cover page of this prospectus, and after deducting the underwriting discounts and commissions and estimated offering expenses payable by us, our pro forma as adjusted net tangible book value at March 31, 2013, would be \$ \_\_\_\_\_, or \$ \_\_\_\_\_ per share. This represents an immediate increase in the pro forma net tangible book value of \$ \_\_\_\_\_ per share to existing stockholders and an immediate dilution of \$ \_\_\_\_\_ per share to new investors purchasing shares at the initial public offering price of \$ \_\_\_\_\_ per share. The following table illustrates this per share dilution:

Assumed initial public offering price per share	\$	
Actual net tangible book value per share at March 31, 2013	\$	3.55
Dilution per share to existing investors from conversion of preferred stock	\$	3.44
Pro forma net tangible book value per share at March 31, 2013	\$	0.11
Increase per share attributable to new investors	\$	
Pro forma as adjusted net tangible book value per share after this offering	\$	
Dilution per share to new investors in this offering	\$	

If the underwriters' over-allotment option were exercised in full, the pro forma as adjusted net tangible book value per share after the offering would be \$ \_\_\_\_\_ per share, the increase in net tangible book value per share attributable to new investors would be \$ \_\_\_\_\_ per share and the dilution per share to new investors in this offering would be \$ \_\_\_\_\_ per share, in each case assuming an initial public offering price of \$ \_\_\_\_\_ per share.

The following table shows on a pro forma as adjusted basis at March 31, 2013 and after giving effect to this offering the differences between existing stockholders and new investors with respect to the number of shares of common stock purchased from us, the total consideration paid to us and the average price paid per share by existing stockholders and by new investors purchasing common stock in this offering before deducting underwriting



discounts and commissions. The calculation below is based on an assumed initial public offering price of \$      per share:

	Shares purchased		Total consideration		Average price per share
	Number	Percent	Amount	Percent	
Existing stockholders	268,920,162		% \$		% \$
New investors			%		% \$
Total			% \$		% \$

If the underwriters' over-allotment option is exercised in full, the number of shares held by new investors would increase to      , or approximately      % of the total number of shares of our common stock outstanding after completion of this offering.

The number of shares of our common stock to be outstanding after this offering is based on 268,920,162 shares of our common stock outstanding as of March 31, 2013. This number of shares does not include:

- 22,219,328 shares of common stock subject to outstanding options as of March 31, 2013, with a weighted average exercise price of \$0.2213 per share;
- 300,000 shares of common stock issuable upon the exercise of outstanding warrants, with a weighted average exercise price of \$0.20 per share;
- 1,730,000 shares of Series F preferred stock issuable upon the exercise of outstanding warrants, with a weighted average exercise price of \$0.21387 per share, which are convertible to 2,076,033 shares of common stock;
- 382,442 shares of Series G preferred stock issuable upon the exercise of outstanding warrants, with a weighted average exercise price of \$0.469261 per share, which are convertible to 382,442 shares of common stock; and
- 24,000,000 shares of common stock available for future sale or issuance under our stock option plans.

## SELECTED CONSOLIDATED FINANCIAL DATA

The selected consolidated financial data in this section is not intended to replace our consolidated financial statements and the related notes. You should read this summary consolidated financial data together with the sections titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our audited consolidated financial statements and related notes, all included elsewhere in this prospectus. We derived the consolidated statements of operations data for the years ended December 31, 2010, 2011 and 2012 and the consolidated balance sheet data as of December 31, 2011 and 2012 from our consolidated financial statements appearing elsewhere in this prospectus. The consolidated statements of operations data for the three months ended March 31, 2012 and 2013 and the consolidated balance sheet data as of March 31, 2013 have been derived from our unaudited consolidated financial statements included elsewhere in this prospectus. Our historical results are not necessarily indicative of the results to be expected in the future and results of interim periods are not necessarily indicative of results for the entire year.

	Years ended December 31,					Three months ended March 31,	
	2008	2009	2010	2011	2012	2012	2013
	(in thousands, except share and per share data)						
<b>Consolidated Statements of Operations Data:</b>							
Revenue	\$ 31,224	\$ 24,969	\$ 40,489	\$ 47,840	\$ 63,421	\$ 12,506	\$ 14,317
Cost of goods sold (1)	25,562	21,525	27,539	34,468	44,492	8,393	9,732
Gross profit	\$ 5,662	\$ 3,444	\$ 12,950	\$ 13,372	\$ 18,929	\$ 4,113	\$ 4,585
Operating expenses:							
Research and development (1)	7,117	5,707	5,176	6,451	7,603	1,575	2,004
Sales and marketing (1)	2,907	2,018	1,993	2,412	3,135	809	907
General and administrative (1)	10,171	7,298	8,382	8,243	8,012	1,965	2,374
Asset impairment charges	3,651	—	492	—	—	—	—
Total operating expenses	\$ 23,846	\$ 15,023	\$ 16,043	\$ 17,106	\$ 18,750	\$ 4,349	\$ 5,285
Income (loss) from operations	(18,184)	(11,580)	(3,093)	(3,734)	179	(236)	(700)
Interest and other income (expense), net:							
Interest income	12	7	34	15	26	2	20
Interest expense	(983)	(1,038)	(906)	(1,338)	(1,381)	(376)	(306)
Other income (expense), net	(187)	68	585	(271)	231	87	(8)
Total interest and other income (expense), net	\$ (1,159)	\$ (964)	\$ (287)	\$ (1,594)	\$ (1,124)	\$ (287)	\$ (294)
Income (loss) before income taxes	(19,342)	(12,543)	(3,380)	(5,328)	(945)	(523)	(994)
Benefit from (provision for) income taxes	(54)	38	—	—	—	—	—
Net income (loss) attributable to common stockholders	\$ (19,397)	\$ (12,505)	\$ (3,380)	\$ (5,328)	\$ (945)	\$ (523)	\$ (994)
Accretion of redeemable convertible preferred stock and convertible preferred stock							
	—	—	—	—	—	—	—
Net income (loss) attributable to common stockholders	\$ (19,397)	\$ (12,505)	\$ (3,380)	\$ (5,328)	\$ (945)	\$ (523)	\$ (994)
Net income (loss) per share attributable to common stockholders:							
Basic and diluted	\$ (2.25)	\$ (1.61)	\$ (0.44)	\$ (0.67)	\$ (0.12)	\$ (0.07)	\$ (0.12)
Weighted average shares used to compute net income (loss) per share attributable to common stockholders:							
Basic and diluted	7,620,283	7,752,429	7,767,035	7,909,736	7,967,272	7,955,050	7,988,523

- (1) These expenses include stock-based compensation expense. Stock-based compensation expense is accounted for at fair value, using the Black-Scholes option-pricing model. Stock-based compensation expense is recognized over the vesting period of the stock options and was included in cost of goods sold and operating expenses as follows:

	Years ended December 31,					Three months ended March 31,	
	2008	2009	2010	2011	2012	2012	2013
	(in thousands)						
Cost of goods sold	\$ 110	\$ 102	\$ 61	\$ 35	\$ 7	\$ 2	\$ 12
Research and development	143	98	60	50	8	2	11
Sales and marketing	112	119	80	58	9	2	10
General and administrative	668	594	579	420	137	12	78
Total stock-based compensation expense	\$ 1,033	\$ 913	\$ 780	\$ 563	\$ 161	\$ 18	\$ 111

	Years ended December 31,					Three months ended March 31,	
	2008	2009	2010	2011	2012	2012	2013
	(in thousands)						
<b>Consolidated balance sheet data:</b>							
Total cash (1)	\$ 1,395	\$ 2,867	\$ 4,643	\$ 2,074	\$ 11,226		9,343
Working capital (2)	(875)	7,511	(2,322)	(1,911)	13,669		13,270
Total assets	47,405	45,560	52,934	53,723	65,748		61,057
Total debt (3)	23,417	14,300	23,071	22,597	24,584		22,064
Redeemable convertible preferred stock and convertible preferred stock	71,145	90,423	90,423	94,373	105,367		105,481
Common stock and additional paid-in-capital	3,025	3,939	4,723	5,303	5,542		5,672
Total deficit	(59,758)	(72,263)	(75,643)	(80,972)	(81,917)		(82,911)

- (1) Total cash is defined as cash, cash equivalents and restricted cash.
- (2) Working capital is defined as total current assets less total current liabilities.
- (3) Total debt is defined as short-term loans, notes payable and total long-term debt.

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

*You should read the following discussion and analysis of our financial condition and results of operations in conjunction with our consolidated financial statements and the accompanying notes appearing elsewhere in this prospectus. This discussion and other parts of this prospectus contain forward-looking statements that involve risks and uncertainties, such as statements of our plans, objectives, expectations and intentions. Our actual results could differ materially from those discussed in the forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those discussed in "Risk Factors."*

### Overview

We are a leading, vertically integrated provider of fiber-optic networking solutions. We target three networking end-markets: CATV, FTTH and internet data centers. We design and manufacture a range of optical communications solutions at varying levels of integration, from components, subassemblies and modules to complete turn-key equipment. We are primarily focused on the higher-performance segments within the CATV, FTTH and internet data center markets which increasingly demand faster connectivity and innovation. Our vertically integrated manufacturing model provides us several advantages, including rapid product development, fast response times to customer requests and control over product quality and manufacturing costs.

The three end markets we target are all driven by significant bandwidth demand fueled by the growth of network-connected devices, video traffic, cloud computing and online social networking. Within the CATV market, we benefit from a number of ongoing trends including the global build-out of CATV infrastructure, the move to higher bandwidth networks among CATV service providers and the outsourcing of system design among CATV networking equipment companies. In the FTTH market, we benefit from continuing PON deployments and system upgrades among telecommunication service providers. Within the internet data center market, we benefit from the increasing use of higher-capacity optical networking technology as a replacement for copper cables, particularly as speeds reach 10 gigabits per second and above, as well as the movement to open internet data center architectures and the increasing use of in-house equipment design among leading internet companies.

We sell our solutions to leading original equipment manufacturers, or OEMs, in the CATV and FTTH markets as well as internet data center operators. In 2012, our products were used by the five largest CATV equipment OEMs consisting of Arris Group Inc., Aurora Networks, Inc., Cisco Systems, Inc., Harmonic Inc. and Motorola Mobility Holdings, Inc. Our other key customers included Genexis B.V. in the FTTH market and Microsoft Corporation in the internet data center market. In 2012, 78.6% of our revenue was attributable to sales of our solutions into the CATV market, 8.3% of our revenue was attributable to sales of our solutions into the internet data center market, 5.8% of our revenue was attributable to sales of our solutions into the FTTH market and the remaining 7.2% was attributable to other markets (including telecom networking).

Our sales model focuses on direct engagement and close coordination with our customers to determine product design, qualifications, performance and price. Our strategy is to use our direct sales force to sell to key accounts and to expand our use of distributors for increased coverage in certain international markets and certain domestic market segments. We have direct sales personnel that cover the U.S., Taiwan and China focusing primarily on major OEM customers and internet data center operators. Throughout our sales cycle, we work closely with our customers to qualify our solutions into their product lines. As a result, we strive to build

strategic and long-lasting customer relationships and deliver solutions that are customized to our customers' requirements.

Our business depends on winning competitive bid selection processes, known as design wins, to develop components, systems and equipment for use in our customers' products. These selection processes are typically lengthy, and as a result, our sales cycles will vary based on the level of customization required, market served, whether the design win is with an existing or new customer and whether our solution being designed in our customers' product is our first generation or subsequent generation product. We do not have any long-term purchase commitments (in excess of one year) with any of our customers, all of whom purchase our products on a purchase order basis. Once one of our solutions is incorporated into a customer's design, however, we believe that our solution is likely to continue to be purchased for that design throughout that product's life cycle because of the time and expense associated with redesigning the product or substituting an alternative solution.

We believe we have an attractive financial profile, with strong revenue performance and control over our manufacturing costs through our vertically integrated manufacturing model. While we have incurred substantial losses since our inception, and as of December 31, 2012 had an accumulated deficit of \$81.9 million, we achieved profitability (net income on a GAAP basis) in the fourth quarter of 2012. We have grown our revenue at a 36.4% CAGR between 2009 and 2012, including 32.6% growth year-over-year from 2011 to 2012.

### **Factors Affecting Our Performance**

*Increasing Consumer Demand for Bandwidth.* Bandwidth demand in all of our target markets is driving service provider investment in new equipment and in turn generating demand for our products. Increasingly, optical networking technologies are being incorporated into networking equipment, replacing legacy copper-based networking technologies. This shift to optical networking solutions benefits us as a provider of those solutions.

*Pricing, Product Cost and Margins.* Our solution pricing varies depending upon the end market, the complexity of the product and the level of competition. Our product costs also vary with complexity as well as the degree to which we can utilize components designed and manufactured ourselves. We tend to realize higher gross margins on products that incorporate a higher percentage of our own components. We often initially experience lower gross margins on new products, as our pricing is based upon anticipated volume-driven cost reductions over the life of the design win. Thus, if we are unable to realize our expected cost reductions, we may experience declining gross margins on such products.

Our product pricing is established when the product is initially introduced to the market, and thereafter through periodic negotiations with customers. We generally do not agree to periodic automatic price reductions. Furthermore, due to the dynamics in the CATV market and the value of our outsourced design services to our customers, we believe we face less downward price pressure than many of our competitors. We sell a wide variety of products among our three target markets and our gross margin is heavily dependent in any quarter on the product mix achieved during that period.

*Decreasing Customer Concentration within End Markets.* Historically, our revenue has been significantly concentrated within the CATV market and among a few customers within this market. Over the past two years, we have developed new products from design wins within the FTTH and internet data center markets. Furthermore, we have developed additional original design manufacturer, or ODM, relationships with customers in each of our target markets which

should enable us to diversify our revenue. Although we expect the CATV market to remain our largest market for the next several years, we anticipate that sales in the FTTH and internet data center markets will continue to account for a more significant percentage of our total revenue into the future. We believe that our entry into the FTTH and internet data center markets with new customers and with new products will continue to facilitate revenue growth and customer diversification.

*Product Development.* We invest heavily to develop new and innovative products. The majority of our research and development expense is allocated to product development, usually with a specific customer and customer platform in mind. We believe our close coordination with our customers regarding their future product requirements enhances the efficiency of our research and development expenditures.

*Design Wins.* Our long-term revenue prospects are based both on the growth in revenue from existing design wins and our ability to generate new design wins with new and existing customers. We use customer demand forecasts and internal sales forecasts when evaluating the expected time to market and associated revenue potential from each design project undertaken. Our design win cycle, or the time from initial concept to volume production, is often 18 to 24 months, with the design win process typically being more extensive when a product incorporates innovative technology that is not yet broadly deployed. Once a design has been awarded and begins to ship in volume, we typically realize revenue from the product from four to up to ten years. Although design wins affect our long-term revenue, not all design wins lead to the revenue levels anticipated by us, and a certain increase or decrease in the number of design wins does not necessarily correlate to a likely increase or decrease in revenue.

## **Discussion of Financial Performance**

### *Revenue*

We generate revenue through the sale of our products to equipment providers for the CATV, FTTH and internet data center markets. We derive a significant portion of our revenue from our top ten customers, and we anticipate that we will continue to do so for the foreseeable future. We also anticipate that our revenue derived from the FTTH and internet data center markets will increase as a percentage of our revenue as we further penetrate and extend our products into these markets. The following chart provides the revenue contribution from each of the markets we serve for the years ended 2010, 2011 and 2012, and the three month periods ended

March 31, 2012 and 2013, as well as the corresponding percentage of our total revenue for each period:

<u>Market</u>	<u>Years ended December 31,</u>			<u>Three Months Ended March 31,</u>	
	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2012</u>	<u>2013</u>
	(in thousands, except percentages)				
CATV	\$ 32,959	\$ 38,939	\$ 49,842	\$ 9,760	\$ 8,319
Data Center	—	14	5,293	670	3,493
FTTH	1,969	3,314	3,690	1,063	1,001
Other	5,561	5,573	4,596	1,011	1,504
<b>Total</b>	<b>\$ 40,489</b>	<b>\$ 47,840</b>	<b>\$ 63,421</b>	<b>\$ 12,506</b>	<b>\$ 14,317</b>
	<u>Percentage of Revenue</u>				
CATV	81.4%	81.4%	78.6%	78.0%	58.1%
Data Center	0.0%	0.0%	8.3%	5.4%	24.4%
FTTH	4.9%	6.9%	5.8%	8.5%	7.0%
Other	13.7%	11.7%	7.3%	8.1%	10.5%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

In 2010, 2011 and 2012, our top ten customers represented 80.5%, 76.6% and 77.7% of our revenue, respectively. Our largest customer Cisco Systems, Inc. represented 18.9%, 26.8% and 33.2% of our revenue in 2010, 2011 and 2012, respectively. Biogenomics Corp., a distributor, accounted for 13.8%, 11.7% and 11.2%, of our revenue in 2010, 2011 and 2012, respectively. In 2010, Aurora Networks, Inc. accounted for 10.8% of our revenue and Electroline Systems accounted for 10.2% of our revenue. No other customer represented more than 10.0% of our revenue in 2010, 2011 or 2012.

Revenue is recognized when the product is shipped and title has transferred to the customer. We bear all costs and risks of loss or damage to the goods up to that point. On most orders, our terms of sale provide that title passes to the customer upon placement by us with a common carrier (upon shipment). A majority of our annual sales are denominated in U.S. dollars, but some sales from our Taiwan location and China-based subsidiary are denominated in NT dollars and RMB, respectively. For the year ended December 31, 2012, 18.1% of our total revenue was derived from our China-based subsidiary, with \$11.4 million denominated in RMB, and an immaterial amount sold directly by our Taiwan location. We expect a similar portion of our sales to be denominated in foreign currencies in 2013.

During 2012 compared to 2011, our average sales price across our product lines declined less than 8.0%. Certain of our competitors in the optical industry, who may have narrower market focus than us or broader product lines within a market, have publically stated that they typically experience annual price declines of 10-15%. Revenue from period to period is driven by the volume of shipments and may be impacted by pricing pressures, among other factors.

#### *Cost of goods sold and gross margin*

Our cost of goods sold consists of material costs, direct labor, allocated overhead and periodic cost variances, including reserves for excess and obsolete inventory, with each representing approximately 69.5%, 9.3%, 16.1%, and 5.1% of our total cost of goods sold, respectively, in 2012.

Our cost of goods sold is impacted by variances arising from changes in yields and production volume. We typically experience lower yields and higher associated costs on new products. In general, our cost of goods sold for a particular product declines over time as a result of increasing efficiencies in the manufacturing processes, or supply cost declines, as well as yield improvements and testing enhancements.

We manufacture our products in all three of our facilities in the U.S., Taiwan and China. Generally, laser chips and optical components are manufactured in our U.S. facility, optical components and subassemblies are manufactured in our Taiwan facility, and equipment is manufactured in our China facility. Because of our vertical integration model, we utilize our own products in our semi-finished and finished goods that we sell between and among our respective manufacturing operations. We base those internal sales upon established transfer pricing methodologies. However, we eliminate all of those internal sales, and cost of goods sold transactions, to arrive at total revenue and cost of goods sold on a consolidated basis.

We have a global set of suppliers to help balance considerations related to product availability, quality and cost. Components of our cost of goods sold are denominated in U.S. or NT dollars or RMB, depending upon the manufacturing location.

Gross profit as a percentage of total revenue, or gross margin, has been and is expected to continue to be affected by a variety of factors, including the introduction of new products, production volumes, the mix of products sold, changes in the cost and volumes of materials purchased from our suppliers, changes in labor costs, changes in overhead costs, reserves for excess and obsolete inventories and changes in the average selling prices of our products. Although our overall gross margins over the past three years have been between 28.0% and 32.0%, our gross margins vary more broadly on a product-by-product basis. Our newer and more advanced products typically have higher average selling prices and higher gross margins; however, until the product volumes scale, the gross margin from newer and advanced products may initially be lower. Our strategy is to improve our gross margins through vertical integration such as utilization of our own laser chips and optical sub-components in our solutions. We expect that our gross margins are likely to continue to fluctuate from quarter to quarter because of the variety of products we sell and the relative product mix within a quarter.

#### *Operating expenses*

Our operating expenses consist of research and development, sales and marketing, and general and administrative expenses. Personnel costs are the most significant component of operating expenses and include salaries, benefits, bonuses and stock-based compensation. With regard to sales and marketing expense, personnel costs also include sales commissions.

*Research and development.* Research and development, or R&D, expense consists primarily of personnel costs, including stock-based compensation for R&D personnel, and R&D work orders (that include material, direct labor and allocated overhead), as well as allocated development costs, such as engineering services, software and hardware tools, depreciation of capital equipment and facility costs. We record all research and development expense as incurred. Customers rely upon us to assist them with the development of new products and modification of existing products because of our extensive optical design and manufacturing expertise. We work closely with our customers in the critical design phase of product development, and are often reimbursed for those development efforts. By virtue of our overseas R&D operations and by focusing on customer-specific projects, our research and development expenses have tended to represent a lower percentage of revenue compared to some of our competitors. In the future, we



expect research and development expense to increase on a dollar basis, but continue to decline as a percentage of revenue, to the extent our revenue increases over time.

*Sales and marketing.* Sales and marketing expense consists primarily of personnel costs, including stock-based compensation for our sales and marketing personnel, as well as travel and trade show expense, sales commissions and the allocation of overall corporate services and facility costs. We sell our products to customers who either incorporate our products into their offering or resell our products to end customers. Because we sell to a limited number of well-established customers, we employ a limited number of sales professionals who are able to cover large markets. We compensate our sales staff through base salary and commissions, with base salary being the largest component of overall compensation. Total sales commissions to employees amounted to less than one percent of our revenue in 2012. Additionally, we pay commissions to third parties on certain product lines and identified customers, which also amounted to less than one percent of our revenue in 2012. As such, our sales and marketing expense does not directly increase with revenue. In the future, we expect sales and marketing expense to increase on a dollar basis as we incrementally increase our overall sales activities, but expect our sales and marketing expense to decline as a percentage of revenue, to the extent our revenue increases over time.

*General and administrative.* General and administrative expense consists primarily of personnel costs, including stock-based compensation, primarily for our finance, human resources and information technology personnel and certain executive officers, as well as professional services costs related to accounting, tax, banking, legal and information technology services, depreciation of capital equipment and facility costs. We expect general and administrative expense to increase in the short term, as we develop the infrastructure necessary to operate as a public company, including increased audit and legal fees, costs to comply with the Sarbanes-Oxley Act and the rules and regulations applicable to companies listed on a national stock exchange, as well as investor relations expense and higher insurance premiums. In the future, we expect general and administrative expense to increase on a dollar basis but continue to decline as a percentage of revenue, to the extent our revenue increases over time.

*Other income (expense)*

Interest income consists of income earned on our cash, cash equivalents and short-term investments. Interest expense consists of amounts paid for interest on our short-term and long-term debt borrowings.

Other income (expense), net is primarily made up of foreign currency transaction gains and losses. The functional currency of our China subsidiary is the RMB and the foreign currency transaction gains and losses of our China subsidiary primarily result from their transactions in U.S. dollars. The functional currency of our Taiwan location is the NT dollar and the foreign currency transaction gains and losses of our Taiwan location primarily result from their transactions in U.S. dollars.

*Income taxes*

We conduct our business globally. However, our operating income is subject to varying rates of tax in the U.S., Taiwan and China. Consequently, our effective tax rate is dependent upon the geographic distribution of our earnings or losses and the tax laws and regulations in each geographical region. We expect that our income taxes will vary in relation to our profitability and the geographic distribution of our profits. Our effective U.S. federal income tax rate was 0% in the past three years as we have incurred operating losses. At December 31, 2012, our U.S.

accumulated net operating loss, or NOL, was \$66.7 million. As we earn profits in the U.S., we expect to reduce our cash tax obligations by the utilization of NOL carry-forwards. Our NOL benefits expire over the twelve-year period from 2020 to 2032. Under Section 382 of the Internal Revenue Code of 1986, as amended, if a corporation undergoes an "ownership change," the corporation's ability to use its pre-change NOLs, capital loss carry-forwards and other pre-change tax attributes to offset its post-change income may be limited going forward. We believe we have experienced ownership changes in the past as a result of our stock financings. As a result, our ability to use any NOLs and capital loss carry-forwards existing at the time of the change in ownership would limit those loss carry-forwards. We continue to update our analysis to determine the extent of the limitations.

In China, our wholly owned China subsidiary has enjoyed preferential tax concessions as a "high-tech enterprise." Pursuant to China's State Council's Regulations on Encouraging Investment in and Development, our China subsidiary is entitled to full exemption from China's Foreign Enterprise Income Tax, or FEIT, for the first two years and a 50% reduction for the next three years, commencing from the first profit making year after offsetting all tax losses carried forward from the previous five years. In March 2007, China enacted the PRC Enterprise Income Tax Law, or EIT Law, under which, effective January 1, 2008, China adopted a uniform income tax rate of 25% for all enterprises (including foreign invested enterprises) and cancelled several tax incentives enjoyed previously by foreign invested enterprises. For foreign invested enterprises like our China subsidiary that were established before the promulgation of the EIT Law, a five-year transition period is provided during which reduced income tax rates will apply but gradually be phased out. The Chinese government has not yet announced implementation measures for the transitional policy concerning such preferential tax rates, so we are unable at this time to estimate the financial impact of the new tax law. We expect that our income tax liability from China profits will vary based upon the implementation of that tax policy and the utilization of our NOL carry-forwards. At December 31, 2012, our accumulated NOLs for our China subsidiary were \$9.0 million, which expire over a four year period from 2013 to 2016. As we earn profits in China, we expect to reduce our cash tax obligations by the utilization of NOL carry-forwards. The NOL benefits are available to reduce our tax obligations in future periods.

## Results of Operations

The following table set forth our results of operations for the periods presented and as a percentage of our revenue for those periods. The period-to-period comparison of our financial results is not necessarily indicative of our financial results to be achieved in future periods.

	Years ended December 31,			Three months ended March 31,	
	2010	2011	2012	2012	2013
(in thousands, except percentages)					
<b>Consolidated Statements of Operations Data:</b>					
Revenue	\$ 40,489	\$ 47,840	\$ 63,421	\$ 12,506	\$ 14,317
Cost of goods sold (1)	27,539	34,468	44,492	8,393	9,732
Gross profit	\$ 12,950	\$ 13,372	\$ 18,929	\$ 4,113	\$ 4,585
Gross margin	32.0%	28.0%	29.8%	32.9%	32.0%
Operating expenses:					
Research and development (1)	5,176	6,451	7,603	1,575	2,004
Sales and marketing (1)	1,993	2,412	3,135	809	907
General and administrative (1)	8,341	8,197	7,952	1,950	2,357
Amortization of intangible assets	41	46	60	15	17
Asset impairment charges	492	—	—	—	—
Total operating expenses	\$ 16,043	\$ 17,106	\$ 18,750	\$ 4,349	\$ 5,285
Income (loss) from operations	\$ (3,093)	(3,734)	179	(236)	(700)
Interest and other income (expense), net	(287)	(1,594)	(1,124)	(287)	(294)
Income (loss) before income taxes	\$ (3,380)	\$ (5,328)	\$ (945)	\$ (523)	\$ (994)
Benefit from (provision for) income taxes	—	—	—	—	—
Net income (loss)	\$ (3,380)	\$ (5,328)	\$ (945)	\$ (523)	\$ (994)
<b>Additional Financial Data:</b>					
Non-GAAP gross profit (2)	\$ 13,011	\$ 13,405	\$ 18,936	\$ 4,115	\$ 4,597
Non-GAAP income (loss) from operations (2)	(1,923)	(3,000)	441	(203)	(555)
Non-GAAP net income (loss) (2)	(1,780)	(5,027)	(503)	(443)	(686)
Adjusted EBITDA (2)	2,881	(638)	3,734	656	321

(1) These expenses include stock-based compensation expense, which is accounted for at fair value, using the Black-Scholes option-pricing model. Stock-based compensation expense is recognized over the vesting period of the stock options and was included in cost of goods sold and operating expenses as follows:

	Years ended December 31,			Three months ended March 31,	
	2010	2011	2012	2012	2013
(in thousands)					
Cost of goods sold	\$ 61	\$ 35	\$ 7	\$ 2	\$ 12
Research and development	60	50	8	2	11
Sales and marketing	80	58	9	2	10
General and administrative	579	420	137	12	78
Total stock-based compensation expense	\$ 780	\$ 563	\$ 161	\$ 18	\$ 111

- (2) We prepare Adjusted EBITDA and our other non-GAAP measures to eliminate the impact of items that we do not consider indicative of our overall operating performance. To arrive at our non-GAAP gross profit, we exclude stock-based compensation expense from our GAAP gross profit. To arrive at our non-GAAP income (loss) from operations we exclude all amortization of intangible assets, stock-based compensation expense and non-recurring consulting fees, if any, from our GAAP net income (loss) from operations. To arrive at our Adjusted EBITDA, we exclude these same items and, additionally, exclude asset impairment charges, loss (gain) from disposal of idle assets, unrealized exchange loss (gain), interest (income) expense, on a net basis, provision for (benefit from) income taxes and all depreciation expense from our GAAP net income (loss).

We believe that our non-GAAP measures are useful to investors in evaluating our operating performance for the following reasons:

- We believe that elimination of items, such as stock-based compensation expense, adjusted depreciation and amortization, income tax expense and other income, net, is appropriate because treatment of these items may vary for reasons unrelated to our overall operating performance;
- We use non-GAAP measures in conjunction with our GAAP financial measures for planning purposes, including the preparation of our annual operating budget, as a measure of operating performance and the effectiveness of our business strategies and in communications with our board of directors concerning our financial performance;
- We believe that non-GAAP measures provide better comparability with our past financial performance, facilitates better period-to-period comparisons of operational results and also facilitates comparisons with our peer companies, many of which also use similar non-GAAP financial measures to supplement their GAAP reporting; and
- We anticipate that, after consummating this offering, our investor presentations and those of securities analyst will include non-GAAP measures to evaluate our overall operating performance.

Adjusted EBITDA and other non-GAAP measures should not be considered as an alternative to gross profit, income (loss) from operations, net income (loss) or any other measure of financial performance calculated and presented in accordance with GAAP. Our Adjusted EBITDA and other non-GAAP measures may not be comparable to similarly titled measures of other organizations because other organizations may not calculate Adjusted EBITDA or such other non-GAAP measures in the same manner. You are encouraged to evaluate these adjustments and the reason we consider them appropriate. For a reconciliation between GAAP and Non-GAAP measures, see footnote (3) to the table in the section titled "Summary Consolidated Financial Data" on page 9 of this prospectus.

### Comparison of the Three Months Ended March 31, 2013 and 2012

#### Revenue

	Three months ended March 31,		Change	
	2012	2013	Amount	%
Revenue	\$ 12,506	\$ 14,317	\$ 1,811	14.5%

(in thousands, except percentages)

Of our total revenue in the three months ended March 31, 2013, we generated \$8.3 million, or 58.1%, from the CATV market, \$3.5 million, or 24.4%, from the internet data center market, \$1.0 million, or 7.0%, in the FTTH market, and \$1.5 million, or, 0.5%, from other markets.

The increase in revenue was attributable to a \$2.8 million increase from the internet data center market, and a \$0.4 million from the other markets, which increases were partially offset by a \$1.4 million decrease in the CATV market and a \$0.1 million decrease from the FTTH market. Revenues in the internet data center market were driven by increasing sales to new customers acquired late in 2012.

*Cost of goods sold and gross margin*

	Three months ended March 31,					
	2012		2013		Change	
	Amount	% of revenue	Amount	% of revenue	Amount	%
	(in thousands, except percentages)					
Cost of goods sold	\$ 8,393	67.1%	\$ 9,732	68.0%	\$ 1,339	16.0%
Gross margin		32.9%		32.0%		

Cost of goods sold increased by \$1.3 million, or 16.0%, from the three months ended March 31, 2012 to the three months ended March 31, 2013, primarily due to a combination of an \$0.8 million increase in direct material costs and a \$0.4 million increase in labor and overhead costs, both of which were associated with our increase in revenues. The decrease in gross margin was primarily the result of an unfavorable product mix in the CATV market.

*Operating expenses*

	Three months ended March 31,					
	2012		2013		Change	
	Amount	% of revenue	Amount	% of revenue	Amount	%
	(in thousands, except percentages)					
Research and development	\$ 1,575	12.6%	\$ 2,004	14.0%	\$ 429	27.2%
Sales and marketing	809	6.5%	907	6.3%	98	12.1%
General and administrative	1,950	15.6%	2,357	16.5%	407	20.8%
Amortization of intangible assets	15	0.1%	17	0.1%	2	16.7%
Total operating expenses	\$ 4,349	34.8%	\$ 5,285	36.9%	\$ 936	21.5%

*Research and development expense*

Research and development expense increased by \$0.4 million, or 27.2%, from the three months ended March 31, 2012 to the three months ended March 31, 2013. This was primarily due to increases in personnel costs and R&D work order and project costs related to new product development.

*Sales and marketing expense*

Sales and marketing expense increased by \$0.1 million, or 12.1%, from the three months ended March 31, 2012 to the three months ended March 31, 2013. This was primarily due to an increase in personnel costs due to additional sales and marketing staff.

*General and administrative expense*

General and administrative expense increased by \$0.4 million, or 20.8%, from the three months ended March 31, 2012 to the three months ended March 31, 2013. This was primarily due to an increase in personnel costs, professional fees and travel expenses.

*Other income (expense), net*

	<u>Three months ended March 31,</u>					
	<u>2012</u>		<u>2013</u>		<u>Change</u>	
	<u>Amount</u>	<u>% of revenue</u>	<u>Amount</u>	<u>% of revenue</u>	<u>Amount</u>	<u>%</u>
	(in thousands, except percentages)					
Interest income	\$ 2	0.0%	\$ 20	0.1%	\$ 18	1009.9%
Interest expense	(376)	(3.0)%	(306)	(2.1)%	70	(18.6)%
Other income (expense), net	87	0.7%	(8)	(0.1)%	(96)	(109.1)%
Total other income (expense), net	<u>\$ (287)</u>	<u>(2.3)%</u>	<u>\$ (294)</u>	<u>(2.1)%</u>	<u>\$ (8)</u>	<u>2.6%</u>

Total other income (expense), net remained relatively unchanged from the three months ended March 31, 2012 to the three months ended March 31, 2013.

Interest expense decreased for the three months ended March 31, 2012 to the three months ended March 31, 2013 due to the benefit of lower interest rates on relatively unchanged loan balances.

Other income (expense) increased due to government subsidies received in China offset by an unrealized foreign exchange loss recognized resulting from the depreciation of the NT dollar against the U.S. dollar. We qualify as a high-tech enterprise and are paid subsidies from time to time based upon the revenue earned in China by the Chinese government to foster local high-tech manufacturing.

*Benefit from (provision for) income taxes*

	<u>Three Months ended March 31,</u>		
	<u>2012</u>	<u>2013</u>	<u>Change</u>
	(in thousands, except percentages)		
Benefit from (provision for) income taxes	\$ —	\$ —	\$ —
Effective tax rate	0.0%	0.0%	0.0%

Our effective tax rate was 0.0% for the three months ended March 31, 2013 and the three months ended March 31, 2012, as we did not generate positive taxable income.

*Comparison of Years Ended December 31, 2012 and 2011*

*Revenue*

	<u>Years ended December 31,</u>		<u>Change</u>	
	<u>2011</u>	<u>2012</u>	<u>Amount</u>	<u>%</u>
	(in thousands, except percentages)			
Revenue	\$ 47,840	\$ 63,421	\$ 15,581	32.6%

Of our total revenue in 2012, we generated \$49.8 million, or 78.6%, from the CATV market, \$5.3 million, or 8.3%, from the internet data center market, \$3.7 million, or 5.8%, from the FTTH market, and \$4.6 million, or 7.3%, from other markets. Total revenue increased by \$15.6 million, or 32.6%, from 2011 to 2012. The increase in revenue was attributable to an \$11.0 million increase in revenue from our CATV market, a \$5.3 million increase from the internet data center market, and a \$0.4 million increase in the FTTH market, which increases were partially offset by a \$1.0 million decrease from other markets. Our CATV market revenue increased in 2012 primarily due to increased capital expenditures by CATV service providers and increased shipments of our CATV equipment products. Revenues in 2012 were also driven by sales increases from two customers in the internet data center market. Our FTTH market revenue increased primarily because of the sale of new transceiver products to existing customers. Revenue declined in other markets because of a de-emphasis by our sales staff and the decline in sales of certain legacy products within those markets.

#### Cost of goods sold and gross margin

	Years ended December 31,					
	2011		2012		Change	
	Amount	% of revenue	Amount	% of revenue	Amount	%
	(in thousands, except percentages)					
Cost of goods sold	\$ 34,468	72.0%	\$ 44,492	70.2%	\$ 10,024	29.1%
Gross margin		28.0%		29.8%		

Cost of goods sold increased by \$10.0 million, or 29.1%, from 2011 to 2012, primarily due to a combination of an \$8.5 million increase in direct material costs and a \$1.3 million increase in labor and overhead costs, both of which were associated with our increase in revenues. The increase in gross margin was caused by lower direct labor costs and lower overhead from improved efficiency, combined with a reduction in our inventory reserve. The inventory reserves were higher in 2011 primarily due to discontinued products and aging of inventory on hand.

#### Operating expenses

	Years ended December 31,					
	2011		2012		Change	
	Amount	% of revenue	Amount	% of revenue	Amount	%
	(in thousands, except percentages)					
Research and development	\$ 6,451	13.5%	\$ 7,603	12.0%	\$ 1,152	17.9%
Sales and marketing	2,412	5.0%	3,135	4.9%	723	30.0%
General and administrative	8,197	17.1%	7,952	12.5%	(245)	(3.0)%
Amortization of intangible assets	46	0.1%	60	0.1%	14	29.4%
Total operating expenses	\$ 17,106	35.8%	\$ 18,750	29.6%	\$ 1,644	9.6%

#### Research and development expense

Research and development expense increased by \$1.2 million, or 17.9%, from 2011 to 2012, \$0.7 million of which was attributable to R&D material expenses associated with new product development. The remaining \$0.5 million increase was a result of a reallocation of existing personnel costs to R&D work orders and an increase in R&D staffing. Because our R&D staff is

integral to new product development, our R&D staff often rotate between R&D work orders (non-production orders) and production orders. As we shift those personnel from production back to R&D, our R&D expenses vary.

*Sales and marketing expense*

Sales and marketing expense increased by \$0.7 million, or 30.0%, from 2011 to 2012. This was due to a \$0.5 million increase in personnel costs due to additional sales and marketing staff to better serve our customers, and an increase in sales commissions of \$0.2 million because of our revenue growth.

*General and administrative expense*

General and administrative expense decreased by \$0.2 million, or 3.0%, from 2011 to 2012. This was primarily due to a decrease in stock option compensation expense because of the use of a reduced volatility assumption and prior grants becoming fully vested.

*Other income (expense), net*

	Years ended December 31,					
	2011		2012		Change	
	Amount	% of revenue	Amount	% of revenue	Amount	%
	(in thousands, except percentages)					
Interest income	\$ 15	0.0%	\$ 26	0.0%	\$ 11	71.3%
Interest expense	(1,338)	(2.8)%	(1,381)	(2.2)%	(45)	3.3%
Other income (expense), net	(271)	(0.6)%	231	0.4%	502	186.0%
Total Other income (expense), net	\$ (1,594)	(3.3)%	\$ (1,124)	(1.8)%	\$ 470	29.5%

Total net other expense decreased by \$0.5 million, or 29.5%, from 2011 to 2012. Interest expense remained relatively unchanged from 2011 to 2012. While average loan balances increased from 2011 to 2012 by about \$2.0 million, we benefited from a reduction in interest rates in 2012. The net other expense decreased by \$0.5 million from 2011 to 2012 primarily due to foreign currency revaluation gains from U.S. denominated accounts in 2012 when the NT dollar appreciated against the U.S. dollar.

*Benefit from (provision for) income taxes*

	Years ended December 31,		
	2011	2012	Change
	(in thousands, except percentages)		
Benefit from (provision for) income taxes	\$ —	\$ —	\$ —
Effective tax rate	0.0%	0.0%	0.0%

Our effective tax rate was 0.0% for 2011 and 2012, as we did not generate positive taxable income.



**Comparison of Years Ended December 31, 2011 and 2010****Revenue**

	Years ended December 31,		Change	
	2010	2011	Amount	%
	(in thousands, except percentages)			
Revenue	\$ 40,489	\$ 47,840	\$ 7,351	18.2%

Of our total revenue in 2011, we generated \$38.9 million, or 81.4%, from the CATV market, \$3.3 million, or 6.9%, from the FTTH market, \$5.6 million, or 11.6%, from other markets and an immaterial amount from the internet data center market. Total revenue increased by \$7.4 million, or 18.2%, from 2010 to 2011. The increase in revenue was attributable to a \$5.9 million increase in revenue from our CATV market, a \$1.4 million increase in the FTTH market, and immaterial increases from other markets, including the internet data center market. Our CATV market revenue increased in 2011 primarily due to increased capital expenditures by CATV service providers and increased shipments of our CATV equipment products. Our FTTH market revenue increased primarily because of the sale of new transceiver products within our existing customer base. Revenue in other markets was flat because of a de-emphasis by our sales staff on certain legacy products within those markets.

**Cost of goods sold and gross margin**

	Years ended December 31,				Change	
	2010		2011		Amount	%
	Amount	% of revenue	Amount	% of revenue		
(in thousands, except percentages)						
Cost of goods sold	\$ 27,539	68.0%	\$ 34,468	72.0%	\$ 6,930	25.2%
Gross margin		32.0%		28.0%		

Cost of goods sold increased by \$6.9 million, or 25.2%, from 2010 to 2011. The increase was primarily due to higher sales volumes in the CATV market. Cost of goods sold in 2011 was also affected by an increase in inventory reserves of \$0.7 million, including a specific write-off of discontinued products in the fourth quarter of 2011.

The decrease in gross margin was primarily the result of an unfavorable product mix in the CATV market in addition to the \$0.7 million in higher inventory loss reserve through the application of our inventory reserve policy.

*Operating expenses*

	Years ended December 31,					
	2010		2011		Change	
	Amount	% of revenue	Amount	% of revenue	Amount	%
	(in thousands, except percentages)					
Research and development	\$ 5,176	12.8%	\$ 6,451	13.5%	\$ 1,275	24.6%
Sales and marketing	1,993	4.9%	2,412	5.0%	419	21.0%
General and administrative	8,341	20.6%	8,197	17.1%	(145)	(1.7)%
Amortization of intangible assets	41	0.1%	46	0.1%	5	13.3%
Asset impairment charges	492	1.2%	—	0.0%	(492)	(100.0)%
Total operating expenses	16,043	39.6%	17,106	35.8%	1,063	6.6%

*Research and development expense*

Research and development expense increased by \$1.3 million, or 24.6%, from 2010 to 2011. This was primarily due to a \$0.6 million increase in personnel costs and a \$0.4 million increase in R&D work order and project costs.

*Sales and marketing expense*

Sales and marketing expense increased by \$0.4 million, or 21.0%, from 2010 to 2011. The increase was primarily attributable to a \$0.2 million increase in personnel costs from additional sales personnel, and a \$0.2 million increase in shipping and samples expense as we expanded our customer base and markets.

*General and administrative expense*

General and administrative expense decreased by \$0.1 million, or 1.7%, from 2010 to 2011. The decrease was due primarily to a change in accounting for stock-based compensation expense and other savings and lower professional service fees, offset by an increase in personnel costs.

*Asset impairment charges*

In 2010, we recognized a \$0.5 million asset impairment charge related to equipment with carrying values lower than the estimated fair values.

*Other income (expense), net*

	Years ended December 31,					
	2010		2011		Change	
	Amount	% of revenue	Amount	% of revenue	Amount	%
	(in thousands, except percentages)					
Interest income	\$ 34	0.1%	\$ 15	0.0%	\$ (19)	(56.2)%
Interest expense	(906)	(2.2)%	(1,338)	(2.8)%	(431)	47.6%
Other income (expense), net	585	1.4%	(271)	(0.6)%	(857)	(146.3)%
Total Other income (expense), net	\$ (287)	(0.7)%	\$ (1,594)	(3.3)%	\$ (1,307)	455.6%

The increase in interest expense of \$0.4 million, or 47.7%, from 2010 to 2011 was due to additional debt in 2011 related to loans for our China subsidiary and loans from stockholders in 2010.

Other income (expense), net decreased by \$0.9 million, or 146.4%, from 2010 to 2011 primarily related to an unrealized foreign exchange loss recognized resulting from the depreciation of the NT dollar against the U.S. dollar.

*Benefit from (provision for) income taxes*

	Years ended December 31,		
	2010	2011	Change
	(in thousands, except percentages)		
Benefit from (provision for) income taxes	\$ —	\$ —	\$ —
Effective tax rate	0.0%	0.0%	0.0%

Our effective tax rate was 0.0% for 2010 and 2011, as we did not generate positive taxable income.

## Quarterly Results of Operations

The following tables set forth selected unaudited quarterly statements of operations data for our last nine completed fiscal quarters. The information for each of these quarters has been prepared on the same basis as the consolidated financial statements appearing elsewhere in this prospectus and, in the opinion of management, includes all adjustments necessary for the fair presentation of the results of operations for these periods. These data should be read in conjunction with our consolidated financial statements and related notes appearing elsewhere in this prospectus. These quarterly operating results are not necessarily indicative of our operating results for any future period.

	Mar. 31, 2011	Jun. 30, 2011	Sep. 30, 2011	Dec. 31, 2011	Mar. 31, 2012	Jun. 30, 2012	Sep. 30, 2012	Dec. 31, 2012	Mar. 31, 2013
	(in thousands, except percentages)								
Revenue	\$ 9,507	\$ 11,489	\$ 12,094	\$ 14,750	\$ 12,506	\$ 15,638	\$ 16,416	\$ 18,861	\$ 14,317
Cost of goods sold (1)	6,844	7,956	8,297	11,371	8,393	10,938	11,743	13,418	9,732
Gross profit	\$ 2,663	\$ 3,533	\$ 3,797	\$ 3,379	\$ 4,113	\$ 4,700	\$ 4,673	\$ 5,443	\$ 4,585
Gross margin	28.0%	30.8%	31.4%	22.9%	32.9%	30.1%	28.5%	28.9%	32.0%
Operating expenses:									
Research and development (1)	\$ 1,520	\$ 1,396	\$ 1,758	\$ 1,777	\$ 1,575	\$ 1,708	\$ 2,178	\$ 2,144	\$ 2,004
Sales and marketing (1)	492	560	625	736	809	806	759	756	907
General and administrative (1)	2,043	2,064	2,048	2,087	1,965	1,947	1,892	2,213	2,374
Total operating expenses	\$ 4,056	\$ 4,020	\$ 4,431	\$ 4,601	\$ 4,349	\$ 4,460	\$ 4,829	\$ 5,112	\$ 5,285
Income (loss) from operations	\$ (1,392)	\$ (487)	\$ (634)	\$ (1,221)	\$ (236)	\$ 240	\$ (156)	\$ 331	(700)
Interest and other income (expense), net	(279)	(334)	(634)	(347)	(287)	(332)	(225)	(280)	(294)
Net income (loss)	\$ (1,671)	\$ (821)	\$ (1,268)	\$ (1,568)	\$ (523)	\$ (92)	\$ (381)	\$ 51	\$ (994)
<b>Additional Financial Data:</b>									
Non-GAAP gross profit (2)	\$ 2,672	\$ 3,542	\$ 3,806	\$ 3,388	\$ 4,115	\$ 4,702	\$ 4,675	\$ 5,445	\$ 4,597
Non-GAAP income (loss) from operations (2)	(1,160)	(280)	(483)	(1,076)	(203)	278	(108)	474	(555)
Non-GAAP net income (loss) (2)	(1,469)	(832)	(1,340)	(1,385)	(443)	(106)	(215)	262	(686)
Adjusted EBITDA (2)	(432)	255	(214)	(245)	656	953	851	1,275	305

(1) These expenses include stock-based compensation expense as follows:

	Mar. 31, 2011	Jun. 30, 2011	Sep. 30, 2011	Dec. 31, 2011	Mar. 31, 2012	Jun. 30, 2012	Sep. 30, 2012	Dec. 31, 2012	Mar. 31, 2013
	(in thousands)								
Cost of goods sold	\$ 9	\$ 9	\$ 9	\$ 9	\$ 2	\$ 2	\$ 2	\$ 2	\$ 12
Research and development	13	13	13	12	2	2	2	2	11
Sales and marketing	16	16	13	12	2	2	2	2	10
General and administrative	108	108	104	99	12	12	9	104	78
Total stock-based compensation expense	\$ 146	\$ 146	\$ 139	\$ 132	\$ 18	\$ 18	\$ 15	\$ 110	\$ 111

- (2) See footnote 3 to the table in the section titled "Summary Consolidated Financial Data" on page 9 of this prospectus for further discussion regarding Non-GAAP measures. The following table reflects the reconciliation of U.S. GAAP financial measures to non-GAAP financial measures:

	Mar. 31, 2011	Jun. 30, 2011	Sep. 30, 2011	Dec. 31, 2011	Mar. 31, 2012 (in thousands)	Jun. 30, 2012	Sep. 30, 2012	Dec. 31, 2012	Mar. 31, 2013
Gross profits	\$ 2,663	\$ 3,533	\$ 3,797	\$ 3,379	\$ 4,113	\$ 4,700	\$ 4,673	\$ 5,443	\$ 4,585
Non-GAAP adjustment:									
Stock-based compensation expense	9	9	9	9	2	2	2	2	12
Non-GAAP gross profit	\$ 2,672	\$ 3,542	\$ 3,806	\$ 3,388	\$ 4,115	\$ 4,702	\$ 4,675	\$ 5,445	\$ 4,597
Income (loss) from operations	\$ (1,392)	\$ (487)	\$ (634)	\$ (1,221)	\$ (236)	\$ 240	\$ (156)	\$ 331	\$ (700)
Non-GAAP adjustments:									
Amortization of intangible assets	11	11	12	13	15	14	15	16	17
Stock-based compensation expense	146	146	139	132	18	18	15	110	111
Non-recurring consultant fee	75	50	—	—	—	6	18	17	17
Non-GAAP income (loss) from operations	\$ (1,160)	\$ (280)	\$ (483)	\$ (1,076)	\$ (203)	\$ 278	\$ (108)	\$ 474	\$ (555)
Net income (loss)	\$ (1,671)	\$ (821)	\$ (1,268)	\$ (1,568)	\$ (523)	\$ (92)	\$ (381)	\$ 51	\$ (994)
Non-GAAP adjustments:									
Amortization of intangible assets	11	11	12	13	15	14	15	16	17
Stock-based compensation expense	146	146	139	132	18	18	15	110	111
Non-recurring consultant fee	75	50	—	—	—	6	18	17	17
Loss (gain) from disposal of idle assets	—	(9)	(85)	15	(36)	—	(1)	—	—
Unrealized exchange loss (gain)	(30)	(209)	(138)	24	83	(52)	119	68	163
Non-GAAP net income (loss)	\$ (1,469)	\$ (832)	\$ (1,340)	\$ (1,385)	\$ (443)	\$ (106)	\$ (215)	\$ 262	\$ (686)
Net income (loss)	\$ (1,671)	\$ (821)	\$ (1,268)	\$ (1,568)	\$ (523)	\$ (92)	\$ (381)	\$ 51	\$ (994)
Non-GAAP adjustments:									
Amortization of intangible assets	11	11	12	13	15	14	15	16	17
Stock-based compensation expense	146	146	139	132	18	18	15	110	111
Depreciation expense	763	768	752	783	725	724	721	712	722
Non-recurring consultant fee	75	50	—	—	—	6	18	16	—
Loss (gain) from disposal of idle assets	—	(9)	(85)	15	(36)	—	(1)	—	—
Unrealized exchange loss (gain)	(29)	(209)	(138)	24	83	(53)	119	68	163
Interest expense	274	319	374	356	374	336	345	301	286
Adjusted EBITDA	\$ (432)	\$ 255	\$ (214)	\$ (245)	\$ 656	\$ 953	\$ 851	\$ 1,275	\$ 305

The following table provides the unaudited quarterly results as a percentage of revenue.

	Mar. 31, 2011	Jun. 30, 2011	Sep. 30, 2011	Dec. 31, 2011	Mar. 31, 2012	Jun. 30, 2012	Sep. 30, 2012	Dec. 31, 2012	Mar. 31, 2013
Revenue	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100%
Cost of goods sold	72.0%	69.2%	68.6%	77.1%	67.1%	69.9%	71.5%	71.1%	68%
Gross profit	28.0%	30.8%	31.4%	22.9%	32.9%	30.1%	28.5%	28.9%	32.0%
Operating expenses:									
Research and development	16.0%	12.2%	14.5%	12.0%	12.6%	10.9%	13.3%	11.4%	14.0%
Sales and marketing	5.2%	4.9%	5.2%	5.0%	6.5%	5.2%	4.6%	4.0%	6.3%
General and administrative	21.5%	18.0%	16.9%	14.2%	15.7%	12.4%	11.5%	11.7%	16.6%
Total operating expenses	42.7%	35.0%	36.6%	31.2%	34.8%	28.5%	29.4%	27.1%	36.9%
Income (loss) from operations	(14.6)%	(4.2)%	(5.2)%	(8.3)%	(1.9)%	1.5%	(0.9)%	1.8%	(4.9)%
Interest and other income (expense), net	(2.9)%	(2.9)%	(5.2)%	(2.3)%	(2.3)%	(2.1)%	(1.4)%	(1.5)%	(2.1)%
Net income (loss)	(17.6)%	(7.1)%	(10.5)%	(10.6)%	(4.2)%	(0.6)%	(2.3)%	0.3%	(6.9)%
<b>Additional Financial Data:</b>									
Non-GAAP gross profit (1)	28.1%	30.8%	31.5%	23.0%	32.9%	30.1%	28.5%	28.9%	32.1%
Non-GAAP income (loss) from operations (1)	(12.2)%	(2.4)%	(4.0)%	(7.3)%	(1.6)%	1.8%	(0.7)%	2.5%	(3.9)%
Non-GAAP net income (loss) (1)	(15.5)%	(7.2)%	(11.1)%	(9.4)%	(3.5)%	(0.7)%	(1.3)%	1.4%	(4.8)%
Adjusted EBITDA (1)	(4.5)%	2.2%	(1.8)%	(1.7)%	5.2%	6.1%	5.2%	6.8%	2.1%

(1) See footnote 2 to the preceding table.

#### Quarterly revenue trends and seasonality

Our quarterly results reflect seasonality in the sale of our products. Historically, our revenue has been highest in the fourth quarter and lowest in the first quarter. The first quarter of the year has historically been negatively affected by reduced economic activity due to the Chinese New Year holiday and the lower level of deployment of outdoor CATV equipment in cold weather environments. We expect our first quarter revenue to remain the lowest quarter of the year and be lower than the fourth quarter of the prior year.

#### Quarterly gross margin trends

Our gross margin varies quarter to quarter but has been within a range of 28.0% and 32.9% over the past nine quarters, except for the fourth quarter of 2011 when we incurred an additional charge to inventory of \$0.7 million from the application of our inventory reserve policy. Our gross margin varies primarily due to the product mix in a particular quarter, as well as from the level of manufacturing efficiencies, production yields (particularly in the laser chip fabrication process) and overall supply costs.

*Quarterly operating result trends*

Our quarterly operating results are likely to fluctuate due to seasonality and other factors such as:

- general economic, industry and market conditions in our target markets;
- our CATV customers' willingness to outsource more of their internal design and manufacturing;
- changes in the mix of products within a quarter or changes in the volume of products sold within a particular target market;
- our ability to obtain new design wins and the timing of such design wins;
- the level of revenues from our design wins;
- pricing policies by us or our competitors;
- our ability to fulfill sales orders in a timely manner within normal lead times or as otherwise demanded by customers;
- our ability to adjust our production in response to quarter-over-quarter variations in revenue;
- our ability to adjust sales, general and administrative costs in response to changes in revenue; and
- our ability to control costs and capital expenditures.

The occurrence of one or more of these factors could cause our revenue and corresponding operating results to vary widely. As such, we believe that our quarterly levels of revenue and expenses may vary significantly in the future, and that period-to-period comparisons of our results may not be meaningful and should not be relied upon as an indication of future performance.

**Liquidity and Capital Resources**

Since inception, we have financed our operations through private sales of equity securities and cash generated from operations and from various lending arrangements. At March 31, 2013, our cash, cash equivalents and restricted cash totaled \$9.3 million. Cash and cash equivalents were held for working capital purposes and were invested primarily in money market funds. We do not enter into investments for trading or speculative purposes.

The table below sets forth selected cash flow data for the periods presented:

	Years Ended December 31,			Three months ended
	2010	2011	2012	March 31, 2013 (unaudited)
	(in thousands)			
Net cash provided by (used in) operating activities	\$ (3,209)	\$ (4,125)	\$ (358)	\$ 1,321
Net cash used in investing activities	(2,914)	(1,571)	(3,290)	(943)
Net cash provided by (used in) financing activities	8,975	2,836	12,754	(2,666)
Effect of exchange rates on cash and cash equivalents	(621)	136	(150)	142
Net increase (decrease) in cash and cash equivalents	<u>\$ 2,232</u>	<u>\$ (2,724)</u>	<u>\$ 8,956</u>	<u>\$ (2,146)</u>

#### Operating activities

In the three months ended March 31, 2013, net cash provided by operating activities was \$1.3 million. Cash provided by operating activities primarily related to payments from customers from the sale of our products in excess of cash paid to our suppliers. During the three months ended March 31, 2013, we recognized a net loss of \$0.9 million. The net loss incorporated non-cash charges, including depreciation and amortization of \$0.8 million, stock-based compensation expenses of \$0.1 million and non-cash increases to our inventory reserve accounts of \$0.1 million.

In 2012, net cash used in operating activities was \$0.4 million. Cash used in operating activities primarily related to payments to suppliers in excess of cash received from our customers from the sale of our products. During 2012, we recognized a net loss of \$0.9 million. However, that net loss incorporated non-cash charges, including depreciation and amortization of \$2.9 million, stock-based compensation expense of \$0.1 million and non-cash increases to our inventory reserve accounts of \$0.9 million. In addition, we spent \$0.5 million in 2012 to increase our inventories in anticipation of expected increases in sales volumes.

In 2011, net cash used in operating activities was \$4.1 million. Cash used in operating activities primarily related to payments to suppliers in excess of cash received from our customers from the sale of our products. During 2011, we recognized a net loss of \$5.3 million. However, that net loss incorporated non-cash charges, including depreciation and amortization of \$3.1 million, stock-based compensation expense of \$0.6 million and non-cash increases to our inventory reserve accounts of \$1.6 million. In addition, we spent \$1.6 million in 2011 to increase our inventories in anticipation of expected increases in sales volumes.

In 2010, net cash used in operating activities was \$3.2 million. Cash used in operating activities primarily related to payments to suppliers in excess of cash received from our customers from the sale of our products. During 2010, we recognized a net loss of \$3.4 million. However, that net loss incorporated non-cash charges, including depreciation and amortization of \$3.3 million, asset impairment charges of \$0.5 million and stock-based compensation expense of \$0.8 million and non-cash increases to our asset reserve accounts of \$0.6 million.



*Investing activities*

Our investing activities consisted primarily of capital expenditures and purchases of intangible assets.

In the three months ended March 31, 2013, we used \$0.9 million of cash for investing activities for the purchase of additional machinery and equipment to support our research and development efforts and manufacturing activities.

In 2012, we used \$3.3 million of cash for investing activities. We used \$3.2 million of cash for the purchase of additional machinery and equipment to support our research and development efforts and manufacturing activities, partially offset by \$0.1 million of cash provided by the sale of obsolete equipment.

In 2011, we used \$1.6 million of cash for investing activities. We used \$1.8 million of cash for the purchase of property and equipment, partially offset by \$0.4 million of cash provided by the sale of obsolete equipment.

In 2010, we used \$2.9 million of cash for investing activities, including \$3.0 million of capital expenditures associated with the purchase of machinery and equipment and the expansion of our operations in China.

*Financing activities*

Our financing activities consisted primarily of proceeds from the issuance of preferred stock and activity associated with our various lending arrangements.

In the three months ended March 31, 2013, our financing activities used \$2.7 million in cash. We repaid \$2.5 million in bank loans and increased our restricted cash by \$0.3 million, related to the compensating balances required by our loans in China. These decreases were offset by \$0.1 million received from the exercise of stock warrants.

In 2012, our financing activities provided \$12.8 million in cash. We received \$10.2 million in cash from the issuance of preferred stock, \$2.7 million in net borrowings associated with our bank loans and \$0.8 million from the issuance of notes payable, offset in part by \$0.7 million of payments of principal on our term loans and notes payable and \$0.2 million to repay loans from stockholders.

In 2011, our financing activities provided \$2.8 million in cash, primarily resulting from \$2.9 million of cash from the issuance of preferred stock and \$1.6 million in net borrowings associated with our bank loans, offset in part by \$0.2 million of payments of principal on our term loans and notes payable and \$1.2 million to repay loans from stockholders.

In 2010, our financing activities provided \$9.0 million in cash, primarily resulting from \$6.1 million of net borrowings associated with our bank loans, \$0.4 million from the issuance notes payable and \$3.2 million from the proceeds of loans from stockholders. Restricted cash increased during 2010 by \$0.5 million due to less compensating balance required for our loan in China. Such proceeds were offset by \$0.4 million of payments of principal on our term loans and notes payable.

*Loans and commitments*

We have lending arrangements with several financial institutions, including a loan and security agreement with East West Bank in the U.S., several lines of credit arrangements for our China subsidiary and a financing agreement for our Taiwan location.

As of March 31, 2013, our loan and security agreement in the U.S. included a \$10.5 million revolving line of credit which matures on November 15, 2014. Also included with the same bank are two term loans with monthly payments of principal and interest that mature on May 4, 2014. As of March 31, 2013, we had \$6.5 million outstanding under the revolving line of credit and \$0.1 and \$3.2 million outstanding on the term loans. On April 11, 2013, the Company extended the maturity dates of these loans to November 15, 2014.

Our loan and security agreement requires us to maintain certain financial covenants, including a liquidity ratio, and restricts our ability to incur additional debt or to engage in certain transactions and is secured by substantially all of our U.S. assets. As of March 31, 2013, we were in compliance with all covenants contained in this agreement.

As of March 31, 2013, our China subsidiary had a line of credit facility and bank acceptances with China banks totaling \$12.8 million. As of March 31, 2013, a total of \$12.1 million was outstanding under various notes and bank acceptances, each with its own maturity date and each renewing annually from May 2013 to November 2014. The notes that matured from May 2013 until June 2013 were renewed with one-year terms. The notes that begin to mature in July 2013 are expected to be renewed on the same terms and with new one year terms. These loans have renewed each year for the past three years. While there can be no assurance of renewal as each loan matures, we expect these loans to renew this year as they have over the past periods.

As of March 31, 2013, our Taiwan location had a \$0.2 million note payable to a financing company that matured on June 20, 2013, and was fully paid and extinguished.

In 2010, we borrowed \$3.2 million from 12 shareholders under the terms of unsecured promissory note agreements. These notes bore an interest rate of 6.0% with maturity dates that were 18 months from their original note date. All of these notes were extended until December 31, 2012. During 2011 or 2012, all of these note holders converted their respective notes into preferred stock, or the notes were paid and extinguished.

A customary business practice in China is for customers to exchange accounts receivable with notes receivable issued by their bank. From time to time we accept notes receivable from certain of our customers in China. These notes receivable are non-interest bearing and are generally due within six months, and such notes receivable may be redeemed with the issuing bank prior to maturity at a discount. Historically, we have collected on the notes receivable in full at the time of maturity.

Frequently, we also direct our banking partners to issue notes payable to our suppliers in China in exchange for accounts payable. Our China subsidiary's banks issue the notes to vendors and issue payment to the vendors upon redemption. We owe the payable balance to the issuing bank. The notes payable are non-interest bearing and are generally due within six months of issuance. As a condition of the notes payable lending arrangements, we are required to keep a compensating balance at the issuing banks that is a percentage of the total notes payable balance until the notes payable are paid by our China subsidiary. These balances are classified as

restricted cash on our consolidated balance sheets. As of March 31, 2013, our restricted cash totaled \$0.8 million.

#### *Future liquidity needs*

We believe that our existing cash and cash equivalents, and cash flows from our operating activities, will be sufficient to meet our anticipated cash needs for the next 12 to 24 months. Our future capital requirements will depend on many factors including our growth rate, the timing and extent of spending to support our development efforts, the expansion of our sales and marketing activities, the introduction of new and enhanced products, the costs to increase our manufacturing capacity and the continuing market acceptance of our products. In the event that additional financing is required from outside sources, we may not be able to raise it on terms acceptable to us or at all. If we are unable to raise additional capital when desired, our business, operating results and financial condition would be adversely affected.

#### **Contractual Obligations and Commitments**

The following summarizes our contractual obligations as of December 31, 2012:

(in thousands)	Payments due by period				
	Total	Less than 1 Year	1 - 3 Years	3 - 5 Years	More than 5 Years
Notes payable and long-term debt (1)	\$ 24,584	\$ 15,421	\$ 9,163	\$ —	\$ —
Operating leases (2)	635	494	140	—	—
Purchase obligations (3)	62	26	26	9	—
Total commitments	\$ 25,281	\$ 15,941	\$ 9,329	\$ 9	\$ —

- (1) We have several loan and security agreements in China and the U.S. that provide various credit facilities, including lines of credit and term loans. The amount presented in the table represents the principal portion of the obligations.
- (2) We have entered into various non-cancellable operating lease agreements for our offices in Taiwan and the U.S.
- (3) We are obligated to make payments under various arrangements with suppliers for the procurement of goods and services.

#### **Quantitative and Qualitative Disclosures About Market Risk**

##### ***Market Risks***

Market risk represents the risk of loss that may impact our financial statements through adverse changes in financial market prices and rates and inflation. Our market risk exposure results primarily from fluctuations in foreign exchange and interest rates. We manage our exposure to these market risks through our regular operating and financing activities. We have not historically attempted to reduce our market risks through hedging instruments; we may, however, do so in the future.

##### ***Interest Rates***

We are exposed to interest rate fluctuations on our cash and cash equivalents. We had unrestricted cash and cash equivalents of \$4.5 million, \$1.8 million and \$10.7 million at December 31, 2010, 2011 and 2012, respectively. Our cash and cash equivalents are subject to

limited interest rate risk and are primarily maintained in money market funds and bank deposits.

We have entered into various loan agreements with East West Bank in the U.S., China Construction Bank and Shanghai Pu-Dong Development Bank in China and Chailease Finance Co LTD in Taiwan. At December 31, 2012:

- the short-term U.S.-based loans had a principal balance of \$8.6 million, bearing interest at rates based on the prime rate plus a premium of 1.25% or floor rate of 4.5% whichever is higher,
- the term loan with a U.S. bank had a principal balance of \$3.32 million, with monthly payment of principal and interest at prime rate plus 1.25% or swap contract with fixed 5%, maturing May 3, 2014,
- the Chinese-based loan had a principal balance of \$10.5 million, bearing interest at 110%-125% of LIBOR,
- the Chinese bank acceptance notes issued to vendors had a balance of \$1.5 million, bearing no interest rate, and
- the Taiwanese-based loan had \$0.4 million principal balance outstanding, with monthly payment of principal and interest at interest rate of 3.3%, maturing on June 30, 2013.

With respect to our interest expense for the year ended December 31, 2012, an increase or decrease of 1.0% in each of our interest rates would have resulted in an increase or decrease of \$0.2 million in our interest expense for such period.

### ***Foreign Exchange Rates***

We operate on an international basis with a portion of our revenue and expenses being incurred in currencies other than the U.S. dollar. Fluctuations in the value of these foreign currencies in which we conduct our business relative to the U.S. dollar affects our results and will cause U.S. dollar translation of such currencies to vary from one period to another. We cannot predict the effect of exchange rate fluctuations upon our future operating results. The effect on our results of operations from currency fluctuations is reduced, however, because we have revenue and expenses in each of these foreign currencies.

We maintain certain assets, including certain bank accounts, accounts receivables, land and building, in RMB and the NT dollar, which are sensitive to foreign currency exchange rate fluctuations. Additionally, certain of our current and long-term liabilities are denominated in these currencies. As of December 31, 2012, currency changes resulted in assets and liabilities denominated in these currencies being translated into \$0.3 million more U.S. dollars than at December 31, 2011.

Additionally, the value of the RMB against the U.S. dollar and other currencies fluctuates and is affected by, among other things, changes in political and economic conditions in China. The conversion of RMB into foreign currencies, including U.S. dollars, has been based on rates set by the People's Bank of China. On July 21, 2005, the Chinese government changed its policy of pegging the value of the RMB to the U.S. dollar and began allowing modest appreciation of the RMB against the U.S. dollar. Fluctuation of the RMB exchange rate is, however, restricted to a rise or fall of no more than 0.5% per day versus the U.S. dollar, and the People's Bank of

China continues to intervene in the foreign exchange market to prevent significant short-term fluctuations in the RMB exchange rate. Nevertheless, under China's current exchange rate regime, the RMB may appreciate or depreciate significantly in value against the U.S. dollar in the medium to long term. The RMB has appreciated 8.63% against the U.S. dollar from Jan. 1, 2010 to December 31, 2012. There remains international pressure on the Chinese government to adopt a substantial liberalization of its currency policy, which could result in a further and more significant appreciation in the value of the RMB against the U.S. dollar.

We use the U.S. dollar as our functional and reporting currency for our financial statements. All transactions in currencies other than the U.S. dollar during the year are re-measured at the exchange rates prevailing on the respective relevant dates of such transactions. Monetary assets and liabilities existing at the balance sheet date denominated in currencies other than the U.S. dollar are re-measured at the exchange rates prevailing on such date. Exchange differences are recorded in our consolidated income statement. The financial records of our China subsidiary and our Taiwan location are maintained in their respective local currencies, the RMB and the NT dollar, which are the functional currencies for our China subsidiary and our Taiwan location, respectively. Assets and liabilities are translated at the exchange rates at the balance sheet date, equity accounts are translated at historical exchange rates and revenues, expenses, gains and losses are translated using the average rate for the year in 2010, 2011 and using quarterly average rate for 2012. Translation adjustments are reported as cumulative translation adjustments and are shown as a separate component of accumulated other comprehensive income in our statement of stockholders' equity (deficit) and comprehensive income. Transaction gains and losses are recognized in our statements of operations in other income (expenses).

We incurred approximately 51.1% of our operating expenses in currencies other than the U.S. dollar during 2012. As of December 31, 2012, we held the U.S. dollar equivalent of approximately \$1.5 million in RMB and \$0.1 million in NT dollars, included in cash and cash equivalents. Fluctuations in exchange rates directly affect our cost of revenues and net income, and have a significant impact on fluctuations in our operating margins. For example, in 2012, 81.9% of our revenues were generated from sales denominated in U.S. dollars, and 25.5% of our operating costs and expenses were denominated in RMB and 25.6% of our operating costs were denominated in NT dollars. Fluctuations in exchange rates also affect our balance sheet. For example, if we need to convert U.S. dollars into RMB or NT dollars for our operations, appreciation of the RMB or the NT dollar against the U.S. dollar would have an adverse effect on the RMB or NT dollar amount that we receive from the conversion. With respect to our cash and cash equivalents as of December 31, 2012, a 1.0% change in the exchange rates between the RMB and the U.S. dollar would result in an immaterial change in our total cash and cash equivalents, and a 1.0% change in the exchange rates between the NT dollar and the U.S. dollar would result in an immaterial change our total cash and cash equivalents.

Fluctuations in currency exchange rates of the above currencies we hold against the U.S. dollar would have a corresponding impact on the U.S. dollar equivalent of such currencies included in the cash and cash equivalents reported in our financial statements from period to period.

### ***Inflation***

We believe that the relatively low rate of inflation in the U.S. over the past few years has not had a significant impact on our sales or operating results or on the prices of raw materials. To the extent we expand our operations in China and Taiwan, such actions may result in inflation having a more significant impact on our operating results in the future.

### ***Off-Balance Sheet Arrangements***

During 2010, 2011 and 2012, we did not have any relationships with unconsolidated organizations or financial partnerships, such as structured finance or special purpose entities that would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes.

### ***Critical Accounting Policies and Estimates***

Our discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with U.S. GAAP. These principles require us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue, expenses and cash flows, and related disclosure of contingent assets and liabilities. Our estimates include those related to revenue recognition, stock-based compensation expense, impairment analysis of goodwill and long-lived assets, valuation of inventory, warranty liabilities and accounting for income taxes. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. Actual results may differ from these estimates. To the extent that there are material differences between these estimates and our actual results, our future financial statements will be affected.

We believe that of our significant accounting policies, which are described in Note B to our consolidated financial statements appearing elsewhere in this prospectus, the following accounting policies involve a greater degree of judgment and complexity. Accordingly, we believe these are the most critical to fully understand and evaluate our financial condition and results of operations.

#### *Revenue recognition*

We generally employ a direct sales model in North America, and in the rest of the world we use both direct and indirect channels. Our revenue recognition policy is to recognize gross revenue whether our products are sold on a direct or indirect basis, because our reseller customers (indirect channel) take title to our products and honor the same terms and conditions as do our direct sales customers. We recognize revenue from the sale of our products provided that persuasive evidence of an arrangement exists, delivery has occurred, the price is fixed or determinable and collectability is reasonably assured. Contracts or customer purchase orders are used to determine the existence of an arrangement. Shipping documents and customer acceptance, when applicable, are used to verify delivery. We assess whether the price is fixed or determinable based on the payment terms associated with the transaction and whether the sales price is subject to refund or adjustment. We assess collectability based primarily on the creditworthiness of the customer as determined by credit checks and the customer's payment history. Customers are generally extended net 30 credit terms from the date of shipment, with some extension to net 60 credit terms for some more creditworthy customers.

Whether our products are sold on a direct or indirect basis, revenue is recognized when the product is shipped and title has transferred to the customer. We bear all costs and risks of loss or damage to the goods up to that point. On most orders, our terms of sale provide that title passes to the customer upon placement by us with a common carrier (upon shipment). In some cases we may provide for title transfer to the customer upon delivery of the goods to the customer. We determine payments made to third party sales representatives are appropriately recorded to sales and marketing expense and not a reduction of revenue. Shipping and handling costs are included in cost of goods sold. We present revenue net of sales returns and allowances,

sales taxes and any similar assessments. We provided a limited warranty as part of our standard terms and conditions of sale. This warranty provides for the repair or replacement of our products, at our discretion, that we determined (i) are defective in workmanship, material, or not in compliance with the mutually agreed written applicable specification and (ii) has in fact failed under normal use on or before one year from the date of original shipment of the products. Some of our customers are provided limited warranties between three to five years, on certain limited and identified products. Warranty costs associated with returned goods that are repaired or replaced are charged to cost of goods sold.

#### *Stock-based compensation expense*

We issue stock options to employees, consultants and non-employee directors. Stock options are granted at or above fair market value on the date of the grant and generally vest over a four-year period. The fair market value of our stock has been historically determined by our board of directors.

The following stock options were granted in 2012:

<u>Grant date</u>	<u>Stock Option Shares Granted</u>	<u>Exercise price per share</u>	<u>Fair value of underlying security</u>	<u>Fair value of option granted</u>
February 10, 2012	168,800	\$ 0.20	\$ 0.20	\$ 0.168111
May 22, 2012	2,049,500	\$ 0.20	\$ 0.20	\$ 0.167915
November 13, 2012	429,000	\$ 0.20	\$ 0.20	\$ 0.167467
	2,647,300			

In granting options at \$0.20 per share on February 10, 2012, the primary valuation factors considered by our board of directors were:

- the price per share of \$0.25 at which we had sold shares of our Series F preferred stock to third party investors during March 2009, and more recently, the price per share at which we sold our shares of Series G preferred stock during December of 2011 (at a price of \$0.35 per share in 2012);
- the losses that had been incurred in 2010 and increasing losses in 2011, and the likelihood that we would achieve our forecasted revenue during the remainder of 2012; and
- the valuation that had been established as of March 31, 2009 providing for a valuation of \$0.04 per share of common stock, using the Probability Weighted Expected Return, or PWERM method, our estimated weighted average cost of capital and a lack of marketability discount.

The PWERM method estimates the value of the common stock based upon an analysis of future values for the enterprise assuming various future outcomes. The concluded share value is based on the probability weighted present value of expected future investment returns, considering each of the possible future outcomes available to the enterprise as well as the claims of each share class on our equity value. The valuation utilized the income approach (or discounted cash flow method) and the market approach (the guideline public company method and the similar transactions method). Both approaches capture the total value of our operations, including any goodwill or intangible value that may be present.

In the February 10, 2012 valuation of our common stock, our board of directors also considered the additional rights and preferences granted to holders of series F and G preferred stock in comparison to our common stock. Our board of directors took into consideration the negative cash flow that had been sustained in 2011 and the first month of 2012, an increasing debt burden, and the lack of cash available for working capital. Based upon our analysis, and the facts and circumstances as of February 10, 2012, the fair market value of our common stock was determined to be \$0.20 per share.

In granting options on May 22, 2012, the primary valuation factors considered by our board of directors were: the analysis performed as of March 31, 2009, factors considered and the price that had been established for the February 10, 2012 grants; the price per share at which we had sold shares of our Series G preferred stock in early 2012; the price pressure that had been exerted by investors during our Series G preferred stock fundraising efforts; and management's expectations that we would achieve our forecasted revenue during the remainder of 2012. Based upon our analysis, and the facts and circumstances as of May 22, 2012, the fair market value of our common stock was determined to be \$0.20 per share.

In granting options at \$0.20 per share on November 13, 2012, the primary valuation factors considered by our board of directors were: the analysis that was performed as of March 31, 2009; the price that had been established on February 10, 2012 and May 22, 2012; the price per share at which we had sold shares of our Series G preferred stock in September 2012, which was \$0.35 per share; and the revenue, operating profit and net income (loss) derived in prior periods in 2012. Based upon our analysis, and the facts and circumstances as of November 13, 2012, the fair market value of our common stock was determined to be \$0.20 per share.

The following stock options were granted in the three months ended March 31, 2013:

<u>Grant date</u>	<u>Stock Option Shares Granted</u>	<u>Exercise price per share</u>	<u>Fair value of underlying security</u>	<u>Fair value of option granted</u>
January 18, 2013	10,037,000	\$ 0.25	\$ 0.25	\$ 0.157717

To aid in our board of directors' determination of the fair market value of our common stock, in January 2013, we engaged an independent appraisal firm to perform a valuation study to determine the fair market value of our common stock for financial reporting and stock option-pricing purposes. The valuation was to assist with regulations related to Internal Revenue Code 409A, Nonqualified Deferred Compensation and audit requirements related to Accounting Standards Codification, or ASC, 718, Compensation—Stock Compensation. ASC 718 is the new accounting nomenclature for the rules and guidelines previously addressed in Statement of Financial Accounting Standards No. 123R, Share-Based Payment. A detailed report expressing their conclusions of fair market value on a non-controlling, non-marketable basis was issued with a valuation date as of December 31, 2012. Since we contemplated an initial public offering, the appraisal firm utilized the PWERM method for equity allocation, considered more appropriate than the Option-Pricing Method or Current Value Method. Based upon our analyses, and the facts and circumstances as of the valuation date, December 31, 2012, the fair market value of our common stock was estimated to be \$0.25 per share.

In granting options at \$0.25 per share in January 2013, the primary valuation factors considered by our board of directors were:

- an enterprise value of \$80.2 million as of December 31, 2012, which was determined using the PWERM;



- a discount rate of 24.0%, based on our estimated weighted average cost of capital;
- a lack of marketability discount of 30.0%;
- liquidity event scenario probabilities of 60.0% for an initial public offering, 20.0% for a sale or merger and 20.0% for continuing as a private company—these probabilities used a 40.0% probability of an initial public offering occurring by September 2013 and a 20% probability of an initial public offering occurring between September and December 2013, and were based on a sale or merger occurring within three years;
- the price per share at which we had recently sold shares of our Series G preferred stock; and
- management's expectations that we would achieve forecasted revenue for the quarter ended March 31, 2013.

Based upon these and other factors, our board of directors determined that the exercise price for options granted in January of 2013 to be \$0.25 per share.

Our stock-based compensation expense was recorded as follows:

	Years ended December 31,			Three months ended March 31,	
	2010	2011	2012	2012	2013
	(in thousands)				
Cost of goods sold	\$ 61	\$ 35	\$ 7	\$ 2	\$ 12
Research and development	60	50	8	2	11
Sales and marketing	80	58	9	2	10
General and administrative	579	420	137	12	78
<b>Total stock-based compensation expense</b>	<b>\$ 780</b>	<b>\$ 563</b>	<b>\$ 161</b>	<b>\$ 18</b>	<b>\$ 111</b>

We follow ASC 718, the authoritative accounting guidance for stock-based compensation expense, which requires companies to measure the cost of employee stock options at the date of the grant.

Our determination of the fair value of stock-based payment awards on the measurement date utilizes the Black-Scholes option-pricing model, which requires the use of assumptions. For the years ended December 31, 2010, 2011 and 2012, and for the three months ended March 31, 2013, we used the following assumptions to calculate the fair value of stock options:

	Years ended December 31,			Three months ended March 31,
	2010	2011	2012	2013
Expected volatility	74%	70%	70%	70%
Risk-free interest rate	1.72%	2.32%	1.01%	1.05%
Expected term (years)	6.25	6.25	6.25	6.25
Expected dividend yield	—	—	—	—

	Years ended December 31,			Three months ended March 31, 2013
	2010	2011	2012	
Estimated forfeitures	13%	13%	10%	10%

As there was no trading value for our common stock prior to this offering, the expected volatility of stock options granted to date was derived from an analysis of reported data for a peer group of companies that issued stock options with similar terms. The expected volatility has been determined using an average of the expected volatility reported by these peer companies during the period. The expected term of the stock options has been determined utilizing the simplified method, which calculated a simple average based on vesting period and option life. We do not anticipate paying dividends in the near future. Estimated forfeitures are based on historical experience and future work force projections. We will revise the estimates, if necessary, in subsequent periods, if actual forfeitures differ from our estimates.

#### *Long-lived assets*

Depreciation and amortization of the intangible assets and other long-lived assets is provided using the straight-line method over their respective estimated useful lives, reflecting the pattern of economic benefits associated with these assets. Changes in circumstances such as technological advances, changes to our business model, or changes in our capital strategy could cause the actual useful lives of intangible assets or other long-lived assets to differ from initial estimates. In those cases where we determine that the useful life of an asset should be revised, we depreciate the remaining net book value over the new estimated useful life.

Our long-lived assets are evaluated for impairment whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. We obtain appraisals on an asset-by-asset basis and will recognize an impairment loss when the sum of the appraised values is less than the carrying amount of such assets. The appraised values, based on reasonable and supportable assumptions and projections, require subjective judgments. Depending on the assumptions and estimates used, the appraised values projected in the evaluation of long-lived assets can vary within a range of outcomes. The appraisals consider the likelihood of possible outcomes in determining the best estimate for the value of the assets. We did not record any asset impairment charges in 2012 or 2011. During 2010, we recorded an asset impairment charge of \$0.5 million related to equipment in China that was no longer useful in the manufacturing process and therefore without value.

#### *Valuation of inventories*

Inventories are stated at the lower of cost (average-cost method) or market. Work in process and finished goods includes materials, labor and allocated overhead. We assess the valuation of our inventory on a periodic basis and provide an allowance for the value of estimated excess and obsolete inventory based on estimates of future demand. During the years ended December 31, 2012, 2011 and 2010, we recorded excess and obsolete inventory charges of \$0.9 million, \$1.6 million, and \$0.6 million, respectively. Of the \$1.6 million in inventory reserves during 2011, \$1.0 million was recorded in the fourth quarter of 2011 and was associated with the application of our inventory reserve policy.

During 2011, we reviewed our inventory policy to determine if the existing reserve for obsolescence and loss was appropriate. The policy at the time provided reserves on a schedule that weighted inventory over a two year period, but the maximum reserve was 80% of inventory value, regardless of the age of inventory. We modified the policy to account for more distinct

periods, and to fully reserve any inventory that was over two years old. The policy provides for aging of inventory as follows:

- Less than 360 days—10%
- Between 360 and 540 days—50%
- Between 540 and 720—80%
- Over 720 days—100%

We considered the following factors in our determination of the appropriate reserve level: how often we buy material in bulk that lasts for more than 12 months of supply; changes in material costs over a 24 month period; the overall market value of raw material, semi-finished goods and finished goods across our varied product lines and within markets; changes in expected demand for our products; the change in valuations historically; the determined safety stock for key customers; and the likelihood of postponement in delivery schedules for materials already placed in finished goods inventory.

#### *Accounting for income taxes*

We account for income taxes in accordance with the provisions of ASC 740, Income Taxes. The liability method is used to account for deferred income taxes. Under the liability method, deferred tax assets and liabilities are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse. The ability to realize deferred tax assets is evaluated annually and a valuation allowance is provided if it is unlikely that the deferred tax assets will not give rise to future benefits in our tax returns.

#### **Recent Accounting Pronouncements**

*ASU 2011-04.* In May 2011, the FASB issued ASU 2011-04, *Fair Value Measurement (Topic 820): Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and IFRS*. This ASU represents the converged guidance of the FASB and the IASB on measuring fair value and for disclosing information about fair value measurements. The amendments in this ASU clarify our board of directors' intent about the application of existing fair value measurement and disclosure requirements and changes particular principles or requirements for measuring fair value and for disclosing information about fair value measurements. ASU 2011-04 is effective prospectively for interim and annual reporting periods beginning after December 15, 2011. We adopted the provisions of ASU 2011-04 on January 1, 2012, and the adoption of this standard did not have a material impact on our financial position, results of operations, or cash flows.

*ASU 2011-05.* In June 2011, the FASB issued ASU 2011-05, *Comprehensive Income (Topic 220): Presentation of Comprehensive Income*. The amendments in this ASU allow an entity the option to present the total of comprehensive income, the components of net income, and the components of other comprehensive income either in a single continuous statement of comprehensive income or in two separate but consecutive statements. In both choices, an entity is required to present each component of net income along with total net income, each component of other comprehensive income along with a total for other comprehensive income, and a total amount for comprehensive income. This ASU eliminates the option to present the components of other comprehensive income as part of the statement of changes in stockholders' equity. ASU 2011-05 should be applied retrospectively for interim and annual reporting periods

beginning after December 15, 2011 with early adoption permitted. We early adopted the provisions of ASU 2011-05 during the fourth quarter of 2011, and the adoption of this standard did not have a material impact on our financial position, results of operations, or cash flows.

*ASU 2011-12.* In December 2011, the FASB issued ASU 2011-12, *Deferral of the Effective Date for Amendment to the Presentation of Reclassifications of Items Out of Accumulated Other Comprehensive Income (Topic 220): Presentation of Comprehensive Income*. This ASU defers the guidance on whether to require entities to present reclassification adjustments out of accumulated other comprehensive income by component in both the statement where net income is presented and the statement where other comprehensive income is presented for both interim and annual financial statements. ASU 2011-12 reinstated the requirements for the presentation of reclassifications that were in place prior to the issuance of ASU 2011-05 and did not change the effective date of ASU 2011-05. ASU 2011-12 should be applied consistently with ASU 2011-05; accordingly, this ASU is to be applied retrospectively for interim and annual reporting periods beginning after December 15, 2011, with early adoption permitted. We early adopted the provisions of ASU 2011-12 during the fourth quarter of 2011, and the adoption of this standard did not have a material impact on our financial position, results of operations, or cash flows.

## BUSINESS

### Overview

We are a leading, vertically integrated provider of fiber-optic networking solutions. We target three networking end-markets: CATV, FTTH and internet data centers. We design and manufacture a range of optical communications solutions at varying levels of integration, from components, subassemblies and modules to complete turn-key equipment. We are primarily focused on the higher-performance segments within the CATV, FTTH and internet data center markets which increasingly demand faster connectivity and innovation. In 2012, our products were used by the five largest CATV equipment OEMs, consisting of Arris Group Inc., Aurora Networks, Inc., Cisco Systems, Inc., Harmonic Inc. and Motorola Mobility Holdings, Inc. Our key customers in the CATV market in 2012 included Cisco Systems, Inc. and Biogenomics Corp., a distributor. In 2012, our key customers in the FTTH market included Genexis B.V., and our key customers in the internet data center market included Microsoft Corporation.

The three end markets we target are all driven by significant bandwidth demand fueled by the growth of network-connected devices, video traffic, cloud computing and online social networking. According to Cisco Systems' Visual Networking Index, global network traffic is expected to grow at a compound annual growth rate of 29% from 2011 to 2016. To address this increased bandwidth demand, CATV and telecommunications service providers are competing directly against each other by providing bundles of voice, video and data services to their subscribers and investing to enhance the capacity and capability of their networks. The trend of rising bandwidth consumption also impacts the internet data center market, as reflected in the shift to higher speed server connections. According to a 2012 Crehan Research forecast, 10 gigabit ethernet port shipments in 2012 were 13.5 million and are projected to grow to 42.9 million in 2015, representing a 46.9% CAGR. As a result of these trends, fiber-optic networking technology is becoming essential in all three of our target markets, as it is often the only economic way to deliver the required bandwidth.

The CATV market is our largest and most established market, for which we supply a broad array of products including lasers, transmitters and turn-key equipment. Sales of headend, node and distribution equipment have contributed significantly to our growth in recent years as a result of our ability to meet the needs of CATV equipment vendors who have begun to outsource both the design and manufacture of this equipment. While these equipment vendors have relied upon third parties to assemble products for some time, only recently have they started to shift the design of equipment to other parties due in part to the sophisticated engineering expertise needed to perform this work. We believe that our extensive high-speed optical, mixed-signal semiconductor and mechanical engineering capabilities position us well to benefit from it.

Our vertically integrated manufacturing model provides us several advantages, including rapid product development, fast response times to customer requests and better control over product quality and manufacturing costs. We design, manufacture and integrate our own analog and digital lasers using a proprietary MBE fabrication process, which we believe is unique in our industry. The lasers we manufacture are proven to be reliable over time and highly tolerant of changes in temperature and humidity, making them well-suited to the CATV and FTTH markets where networking equipment is often installed outdoors. We believe the superior performance of our lasers is evidenced by our leading share of lasers installed in CATV networks today.

We are based in Sugar Land, Texas, where we design and fabricate our lasers, and conduct most of our research and development efforts. At our facilities in Ningbo, China, and Taipei, Taiwan, we complete the assembly of our lasers and photodiodes and also design and assemble

our module and equipment products, utilizing a combination of advanced automation and skilled labor. In addition to our global sales team in the U.S., we also have regional sales teams located in China and Taiwan.

Our revenues in 2012 were \$63.4 million and our gross margin was 29.8%. We have grown our revenue at a CAGR of 36.4% from 2009 to 2012. In the years ended December 31, 2010, 2011 and 2012 and the three months ended March 31, 2012 and 2013, we incurred net losses of \$3.4 million, \$5.3 million, \$0.9 million, \$0.5 million and \$0.9 million, respectively, and our accumulated deficit at December 31, 2012 and March 31, 2013 was \$81.9 million and \$82.9 million, respectively.

## **Industry Background**

Our three target markets of CATV, FTTH and internet data centers share a common trend of a significant growth in bandwidth consumption, and the corresponding need for network infrastructure improvement to support it. Within the CATV and FTTH markets, the speed of a broadband connection determines the types and quality of services that can be offered, and competitive pressure among service providers is spurring ever faster broadband connectivity. According to the Akamai State of the Internet report for the fourth quarter of 2012, the number of 10 megabit or faster broadband connections in the U.S. rose 90% year-over-year. Akamai reported that, globally, the average connection speed increased 25% over the prior year, including growth in nine out of the top 10 countries.

Government encouragement and sponsorship of enhanced broadband service is contributing to investment in access networks. For instance, in January 2013, the U.S. Federal Communications Commission announced the "Gigabit City Challenge," setting a goal of at least one community per state with 1 gigabit per second broadband by 2015. Similarly, according to Infonetics, China's State Agency for Radio, Film, and Television (SARFT) announced a \$30 billion Next Generation Broadband (NGB) stimulus program in 2009 to support the construction of critical networking infrastructure and promote the delivery of enhanced voice, video and data services between 2009 and 2015.

The commercial opportunity to provide ultra-high speed broadband services is also attracting private sector interest. For example, in 2010 Google announced plans to build a network, known as Google Fiber, to deliver up to 1 gigabit per second service to residences, approximately 100 times faster than the current average peak rate in the U.S. The network became operative late in 2012 in Kansas City, and Google has announced that additional cities are to be activated in 2013 and 2014. We are not aware of our products currently being used in the Kansas City network. To deliver this dramatically greater bandwidth, Google is utilizing very advanced optical networking technology. The Google Fiber network demonstrates the ability to deliver dramatically more bandwidth to an end user, and may prompt traditional network service providers to accelerate investment in advanced optical networking solutions.

Based upon data prepared by Ovum, we estimate that our CATV, FTTH and internet data center target markets represented an annual revenue opportunity of \$2.2 billion in 2012.

### *Trends in the CATV Market*

CATV service providers have been upgrading their hybrid fiber coaxial networks, which use a combination of optical fiber and coaxial cable, to support high speed, two-way communications. According to Infonetics, CATV service providers have spent approximately \$41 billion in the past five years on upgrades and extensions to their networking infrastructure,

including \$25 billion spent in North America. Broadcast video services remain the primary offering for CATV service providers, who compete in part on the breadth of high definition, or HD, TV content and on-demand programming they offer. CATV network operators can leverage an upgraded network to deliver additional services such as enhanced voice and broadband connectivity. Enhanced broadcast video and data connectivity services have had a profound effect on CATV network architecture, as they require substantially greater bandwidth to a home (the "forward path"), and two-way communications (introducing a "return path" from the home). Infonetics estimates 53 million broadband subscribers in North America, or 54% of total North American broadband subscribers, received their service through a CATV network at the end of 2012.

Outside of the U.S., the opportunity for CATV growth is significant. For instance, China's installed cable infrastructure is significantly larger than that of the U.S., with over 190 million cable television subscribers. Nearly half of China's cable television subscribers are served by relatively low capacity, one-way cable networks today, and China has implemented a government stimulus program to upgrade broadband infrastructure. As a result, we believe that the Chinese CATV service providers will invest significantly in coming years.

Consolidation among CATV equipment companies has continued in recent years, putting pressure on the largest companies to streamline their operations, improve profitability and focus their resources. In response, many of these CATV equipment companies have begun to outsource not only the manufacturing of equipment, but more important to us, they have begun to outsource the system design function as well. Outsourcing of system design is significantly more challenging than simply shifting the assembly of equipment to a third party manufacturer. The complex interworking of optical, radio frequency and electrical technologies, as well as the physical challenges imposed by the harsh and unregulated conditions in which the CATV equipment is installed, requires deep technical knowledge of high-speed optical, mixed-signal semiconductor and mechanical engineering. Field failure of equipment is costly and problematic for CATV network operators, so they expect equipment providers to provide extremely reliable and durable solutions. As a result, the decision by a major CATV equipment company to outsource design and manufacture to a third party is made carefully, and once an outsourced design partner is selected, CATV equipment companies are typically very reluctant to change vendors. Moreover, once the design function is outsourced to a third party, the reallocation of internal resources previously performing that function makes it difficult for the equipment company to return to internally designing equipment.

Based upon data prepared by Ovum, we estimate that our CATV target market represented an annual revenue opportunity of \$850 million in 2012.

#### *Trends in the FTTH Market*

The FTTH market generally refers to the Passive Optical Networks, or PONs, that telecommunications service providers are deploying. PONs take their name from the use of passive splitters to divide the optical signal provided to each residential user over a shared fiber-optic cable from a service provider's central office. The equipment in the service provider's central office is called an optical line terminal, or OLT, and the equipment at the end user is an optical network unit, or ONU. A PON supports significantly greater bandwidth than does the legacy copper wire network, although the connection speed to a user (the "downstream" speed) is higher than the connection speed from the user (the "upstream" speed). In the U.S., Verizon's FIOS service and AT&T's uVerse offering are examples of PON deployments, and PONs have been widely deployed in Japan, Korea and selected cities in Europe as well. According to Infonetics, worldwide FTTH subscribers are expected to grow from 39 million in 2011 to

112 million in 2016, representing a CAGR of 23%, with the growth of higher speed FTTH connections among those subscribers being greater than the overall growth of FTTH connectivity.

Over time, the technology used in PONs has evolved to meet the increased bandwidth demand from users. At present, the most commonly deployed PON technology is GPON, or Gigabit PON, which delivers up to 2.5 gigabits per second of data downstream, split among subscribers, and 1.5 gigabits per second upstream. Due to the splitting of the bandwidth among multiple users—often as many as 32—the actual bandwidth delivered to an individual subscriber is far less than the 2.5 gigabits per second supported by the GPON equipment. To deliver more bandwidth to a subscriber, a service provider can reduce the split ratio or change the PON technology. Reducing the number of subscribers supported by a single OLT may be less expensive for modest, incremental upgrades, but may not be the most economical solution to deliver the significant increases in bandwidth needed to support 1 gigabit per second service to the home, as encouraged by the FCC's Gigabit Challenge.

One approach that does support 1 gigabit per second service to the home connection is WDM-PON, or wavelength division multiplexing PON. Well-proven in other areas of the network for decades, WDM technology enables the transmission of multiple wavelengths of data over a single fiber-optic strand, thus significantly increasing the bandwidth of the physical fiber connection. Due to this significant increase in bandwidth supported with WDM-PON, the cost per bit delivered to a subscriber is lower than that for GPON—at faster connection speeds. In addition to providing more bandwidth, WDM-PON offers a subscriber superior privacy and the service provider better scalability because each subscriber has a dedicated wavelength rather than a shared one.

Based upon data prepared by Ovum, we estimate that our FTTH target market represented an annual revenue opportunity of \$704 million in 2012.

#### *Trends in the Internet Data Center Market*

An internet data center is structured in a layered format, with rows of servers within multiple racks, and each server and rack connecting through a switch. These rack switches then connect to each other, and ultimately to the service provider's network. The connections between these top-of-rack switches, and to the service provider's network, are increasingly done with higher-capacity optical networking technology. Legacy copper cables can carry signals at distances adequate to meet most needs within an enterprise or internet data center at speeds up to about 1 gigabit per second. However, at speeds of 10 gigabits per second and above, the signals sent over copper cables experience increasing attenuation and dispersion over distances common in large internet data center environments, making copper much less effective as a transmission medium. According to a 2012 Crehan Research forecast, 10 gigabit ethernet port shipments were 13.5 million in 2012 and are projected to grow to 42.9 million in 2015, representing a 46.9% CAGR.

In recent years, a number of leading internet companies such as Amazon.com Inc., Facebook, Inc., Google Inc. and Microsoft Corporation have begun to adopt more open internet data center architectures, using a mix of systems and components from a variety of vendors, and in some cases designing their own equipment. For these companies, compatibility of new networking equipment with legacy infrastructure is not as important, and as a consequence, these companies are more willing to work with non-traditional equipment vendors. Non-traditional equipment vendors generally permit companies to source optical modules from any vendor, thus creating an open and growing opportunity for optical device vendors.



Based upon data prepared by research firm Ovum, we estimate that our internet data center target market represented an annual revenue opportunity of \$638 million in 2012.

## Key Challenges in Our Markets

The key challenges that we experience in our markets include:

- **Continuous pressure for innovation.** To enhance their competitiveness and improve the financial returns on their infrastructure investments, CATV and FTTH network operators seek to regularly introduce new service offerings, increase the bandwidth provided to each user and reduce their operating costs. These operators work with their equipment and optical device suppliers to develop innovative technology that enables desired enhancements. Within the internet data center market, industry-leading technology companies such as Google, Facebook, Microsoft and Amazon are internally designing and developing internet data centers to deliver cloud-based solutions. These companies are, in many cases, working with third parties to design custom data-center equipment to improve their internet data center performance and differentiate their services from other vendors.
- **Demand for highly integrated solutions.** CATV and FTTH network operators are seeking integrated and customized solutions that meet specific design and performance requirements. Furthermore, network equipment manufacturers are seeking to simplify their supply chains and lower their costs by working with optical device vendors who can provide a broad range of products, including integrated modules and subsystems rather than simply supplying discrete optical components.
- **Need for reliable performance in harsh and demanding environments.** Unlike optical devices deployed in the long haul and metro segments of the telecom network, optical devices deployed in CATV and FTTH networks are typically installed outdoors, and occasionally in remote locations. As a result, these devices are subject to a wide range of temperatures and highly variable environmental conditions, and maintenance can be difficult. As a result of the difficulties associated with outdoor deployment, product quality and reliability are essential.
- **Demand for production of high-quality devices in large volumes.** Due to the high number of optical devices deployed in CATV and FTTH networks as well as in internet data centers, network equipment manufacturers seek vendors that can provide cost-effective and high-quality optical devices in large volumes. As the required bandwidth in CATV and FTTH networks increases and the shift to fiber-optic technologies continues in order to meet the bandwidth needs, the number of optical devices deployed in CATV and FTTH networks should continue to increase.
- **Need for mixed signal communications expertise.** As CATV network operators continue to shift from primarily broadcast-video content providers to data-connectivity providers, the networks they utilize to offer these services are evolving. For example, many newer networks are being designed with digital return-path capabilities. In this type of network, signals traveling from the cable office headend to the user residence, including digital video and data services, continue to be transported as analog signals, whereas signals traveling in the opposite direction, from the residence to the cable office headend, may now be carried as digital signals. This combination of analog and digital signaling creates unique challenges, which require high-performance networking equipment and optical technology.

## Our Solutions

We are a leading, vertically integrated provider of fiber-optic networking solutions. We are primarily focused on the higher-performance segments within the CATV, FTTH and internet data center markets which increasingly demand faster connectivity and new technologies. Our products include a broad range of optical communications-based solutions at varying levels of integration from components to complete turn-key systems that we design and manufacture for leading networking equipment companies. The key benefits of our solutions include:

- **Enable customers to deliver innovative products.** We leverage our deep expertise in high-speed optical, mixed-signal semiconductor and mechanical engineering and our proprietary MBE laser fabrication process to deliver technologically advanced solutions to our customers. Our solutions enable our customers to offer a wide variety of innovative products that meet their desired performance needs and cost requirements. Similar to other competitors who have a vertically-integrated structure, our comprehensive manufacturing capabilities give us significant time-to-market advantages as well as the flexibility and agility to respond to changing customer needs.
- **Enhance efficiency and cost effectiveness of our customers' supply chain.** We design and sell products at the level of integration desired by a customer, from components to turn-key equipment providing our customers a more dependable, cost-effective and simplified supply chain. By leveraging our vertical integration, proprietary expertise and our broad range of products, we can often design and manufacture new solutions rapidly and cost-effectively for our customers. For example, our integration capabilities have enabled us to benefit from the trend of outsourced design and manufacturing among CATV equipment vendors.
- **Deliver high quality, reliable products in high volume.** As a vertically integrated supplier, we are able to monitor and maintain quality control throughout the production process, using our internally produced components where possible for our final products. By leveraging this greater degree of control throughout the entire production process, our proprietary MBE laser fabrication process and packaging technology, and our extensive facilities, we are able to deliver high-quality, highly-reliable and stable products in high volume.
- **Provide sophisticated design solutions to our customers.** We believe our expertise in analog and digital optical engineering, as well as radio frequency and high-speed electronics differentiates us from many competitors, as other vendors tend to focus on a limited number of these disciplines. Our mixed-signal expertise enables us to design solutions that meet many of the different network architectures and protocols used today. We offer our customers an advantage by providing them a comprehensive solution.

## Our Strengths

Our key competitive strengths include the following:

- **Industry-leading position in the CATV market.** We are the leading provider of optical components and the second largest provider of subsystems to the CATV market, according to Ovum. In 2012, our products were used by the five largest CATV equipment OEMs consisting of Arris Group Inc., Aurora Networks, Inc., Cisco Systems, Inc., Harmonic Inc. and Motorola Mobility Holdings, Inc. These OEMs are extremely demanding on their suppliers with respect to product performance, reliability, cost and

vendor service level. We believe these customer relationships benefit us with other customers who view our selection by these leading OEMs as validation of our expertise and product excellence.

- **Proprietary technological expertise and track record of innovation.** We continue to develop innovative solutions as evidenced by our 38 design wins since 2010 which collectively account for a significant portion of our revenue today. We believe our proprietary laser manufacturing, or MBE process, allows us to produce more reliable and cost-effective solutions than our competitors who typically employ MOCVD processes. We own fundamental IP in MBE technology and the manufacturing process. We have 138 issued and pending patents. In addition we have amassed substantial manufacturing, process, design and testing domain expertise that we retain as documented trade secrets.
- **Highly customized products.** Most of our products have some level of customization, and in some cases our product is the only one that can meet our customers' specifications. These factors make it more difficult for our customers to rapidly switch to another supplier, and, we believe, contribute to longer product lifecycles and more stable product pricing relative to the pricing trends experienced in many telecommunications optical component categories.
- **Proven system design capabilities.** Our customers rely on us to design their customized, complex and integrated equipment due to our deep expertise in high-speed optical, mixed-signal semiconductor and mechanical engineering. As a result of these capabilities, we believe that we are well positioned to take advantage of the continuing shift to outsourced design and manufacturing among CATV equipment vendors.
- **Vertically integrated, geographically distributed manufacturing model.** Our vertically integrated design and manufacturing process encompasses all steps from laser wafer design and fabrication to complete optical system design and assembly. Furthermore, we have geographically distributed our manufacturing model by strategically locating our operations in the U.S., China and Taiwan to reduce development time and production costs and to help protect our intellectual property. Our comprehensive capabilities allow us to offer our customers a dependable supply of quality optical components, modules and equipment. Additionally, similar to other competitors who have a vertically-integrated structure, these capabilities give us significant time-to-market, time-to-volume and cost advantages as well as the ability to respond more rapidly to changing market and customer requirements. Furthermore, these capabilities allow us to provide fully integrated solutions and capture a larger portion of the bill of materials within the optical value chain.

## Our Strategy

We seek to be the leading global provider of optical components, modules and equipment designed for each of our three target markets, CATV, FTTH and internet data centers. All of our target markets are growing due to the increasing demand for bandwidth, but each of our markets is also being driven by independent factors. As a result, our overall growth is not dependent upon a single market or a single trend. Our strategy includes the following key elements:

- **Extend our leadership in CATV networking.** We intend to maintain our position as the leading producer of optical components used in CATV networks, and to capture an increasing share of the CATV equipment market as the major equipment vendors continue to outsource the design and manufacturing of such products. We believe that

our comprehensive design expertise, proven ability to handle increased system-level responsibility and vertically integrated manufacturing model position us well to capture a meaningful share of this opportunity.

- **Continue to penetrate FTTH and internet data center markets.** We believe our WDM-PON technology is a cost-effective solution for delivering substantially greater bandwidth to a residence. As the residential access market migrates to higher bandwidth connections, we expect that our solutions will become increasingly attractive. In the internet data center market, we target operators who have adopted an open system architecture—one in which the optical connectivity solutions can be provided by a different vendor than the vendor which provides their servers and switches. We believe this segment of the market will grow meaningfully in coming years, and that we are well positioned to capture this business as an independent optics vendor.
- **Continue to invest in our capabilities and infrastructure.** Product and process innovations have been important elements in our growth and commercial success. For instance, our leading position in the CATV market is a result of our research and development efforts to address the need for climate-tolerant, low-cost and highly reliable lasers, components and equipment. We believe our vertically integrated manufacturing model and our ability to design and manufacture the fundamental optical devices that are deployed throughout a network give us a significant competitive advantage. We intend to continue to invest in new products, new technology and our production infrastructure and facilities to maintain and strengthen our competitive position.
- **Selectively pursue other opportunities that leverage our existing expertise.** The proven performance of our lasers in harsh climate conditions and our expertise in designing and manufacturing outdoor plant equipment for the CATV industry provide us an advantage in pursuing applications that are also characterized by having varying and demanding environments. We have sold and plan to continue to sell products into the telecom networking market, such as for wireless and wireline telecom infrastructure. We have also selectively sold products into the industrial robotics, aerospace and defense, and oil and gas exploration markets. We will continue to seek ways to capitalize on our research and development investments and leverage our high-speed optical, mixed-signal semiconductor and mechanical engineering expertise in these and other markets.
- **Pursue complementary acquisition and strategic alliance opportunities.** While we prefer to use our components whenever possible, we will evaluate and selectively pursue acquisition opportunities or strategic alliances that we believe will enhance or complement our current product offerings, augment our technology roadmap, or diversify our revenue base.

## Technology

We believe that we have technology leadership in four key areas: semiconductor laser manufacturing, electronic technologies that enhance the performance of our lasers, optical hybrid integration and mixed-signal semiconductor design.

- **Differentiated semiconductor laser manufacturing.** We use a MBE fabrication process to make our lasers, rather than MOCVD, the technique most commonly used in optical chip manufacturing by traditional communications optics vendors. Among the differentiators of MBE relative to MOCVD fabrication are a lower process temperature and the use of solid phase materials rather than gaseous sources to grow wafers and the

growth of more highly strained crystals. These factors contribute to longer operating lives of our lasers, improved laser efficiency and threshold current, among other performance attributes that make them well-suited to our target markets. While we believe that these advantages of MBE are important, MBE does have disadvantages including the inability to use certain dopant materials (for example Iron), difficulty in certain types of regrowth, and the necessity to maintain complex ultra-high vacuum equipment. As a result of some of these challenges, production yields, and the performance attributes of laser devices, are highly variable and optimizing these characteristics requires numerous enhancements and modifications to standard MBE equipment and the MBE process. To our knowledge, we are unique in using an MBE process to produce communications lasers in high volume, and believe it would be difficult, and time-consuming, for other vendors to replicate our production technology.

- **Laser enhancement technology.** Certain properties of the semiconductor lasers predominantly used in traditional communications devices, such as chirp and wavelength drift, negatively affect their ability to transmit signals over long fiber distances or prevent them from transmitting signals with acceptable fidelity in certain applications. We have developed laser enhancement circuitry that can correct many of these deficiencies. We believe that our technology will become more essential with wider deployment of higher capacity CATV and FTTH systems, which place more stringent demands on laser performance.
- **Optical hybrid-integration technology.** Reducing the size, power consumption and complexity of optical devices is essential for achieving the price and performance targets of our customers. Our ability to integrate multiple optical networking functions into a single device, and to co-package multiple devices into smaller form factors helps us meet customer requirements and we believe can also create new opportunities. For instance, installing new fiber-optic cable is expensive and difficult, and in some situations prohibitively so for a network service provider. As a consequence, network operators seek to maximize the utilization of their installed fiber plant. In long-haul and metropolitan networks, service providers deployed WDM technology as fiber utilization rose. Fiber utilization in access networks is rising, but the use of WDM technology in the access segment has been problematic due to the relatively high cost and power consumption of the requisite optical devices. We have developed proprietary miniaturized optical packaging, electronic control circuitry and testing algorithms to create a hybrid WDM-PON solution that addresses these historical impediments that we believe will make WDM-PON a cost-effective alternative for deployment.

WDM-PON is a term used for a variety of multi-wavelength PON architectures. Various technologies have been utilized by several companies to deploy WDM-PON networks in the past. These existing technologies are generally believed to be too costly to deploy or suffer from operational limitations that limit their use to only certain deployment scenarios. By contrast, we believe our optical hybrid-integration technology can be deployed in a wide range of circumstances due to its lower cost per bit delivered, and as the market migrates to higher bandwidth connections we expect that our solutions will become increasingly attractive. In the internet data center market, we target operators who have adopted an open system architecture—one in which the optical connectivity solutions can be provided by a different vendor than the vendor which provides their servers and switches. We believe this segment of the market will grow meaningfully in coming years, and that we are well positioned to capture this business as an independent optics vendor.

- **Mixed-signal design.** As CATV providers continue to evolve from primarily broadcast-video content providers to a mixture of HD video content together with data-connectivity providers, the networks they utilize to offer these services must evolve as well. Older analog networks are giving way to hybrid networks that incorporate both analog and digital signals. For example, many newer networks are being designed with "digital return-path" capabilities. In this type of network, signals traveling from the head-end to the residence are transported as analog signals, whereas signals traveling in the opposite direction (that is, originating at the residence and being transmitted towards the head-end) are carried as digital signals. This combination of analog and digital signaling creates unique design challenges. Our engineers have many years of experience in developing equipment, modules and components that are well suited to these sorts of mixed-signal architectures. We believe that having deep experience in both digital and analog signaling allows us to offer superior solutions to our customers, compared with companies who have expertise in only one of these signal types.

## **Our Products**

Our products include an array of optical communications solutions at varying levels of integration. We begin from the fundamental building blocks of lasers and laser components. From these foundational products, we design and manufacture a wide range of products from optical modules to complete turn-key equipment. We design our products to target customers in our identified markets to meet their needs and specifications.

Our components often incorporate one or more of our optical laser chips inside a precision housing that provides mechanical protection as well as standardized electrical contacts. More complex optical components may also include optical filters (for example, for use in WDM) or other optical elements by which optical signals are routed internally within the component. These more advanced components may also include coolers, heaters and sensors that allow the temperature of the laser chip to be measured and controlled. We manufacture the majority of the laser chips and optical components that are used in our own products.

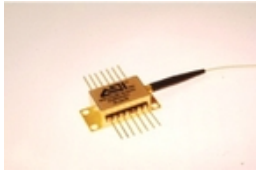


At the next level of integration, our module or sub-assembly products typically contain one or more of our optical components and some additional control circuitry. Examples of modules include our transceiver line primarily used in internet data center markets and FTTH markets.

At the highest level of integration and complexity, our equipment products typically contain one or more optical components, modules and additional electronic control circuitry required to enable these subsystems to operate independently. For example, our CATV transmitter equipment requires utilization of our optical components and assembly onto a circuit board and to an external housing. Examples of equipment include our CATV transmitter and CATV nodes.



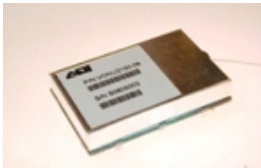
Our products mainly differ from each other by their end market, intended use and level of integration. We have over 12,800 product stock-keeping units, or SKUs, including approximately 6,500 component product SKUs, approximately 3,600 module product SKUs and approximately 2,700 equipment product SKUs. The following tables provide a view of our some of our various components, modules and equipment grouped by the markets they serve.

Selected CATV Products

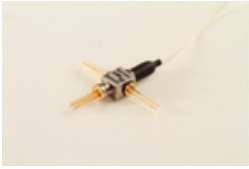

<u>Representative Picture</u>	<u>Product Family</u>	<u>Product Level</u>	<u>Description</u>
	CATV transmitters	Equipment	Equipment for transmitting data and video signals from the office or hub site of a multiple system operator, or MSO, to the consumer.  Compliant with the emerging DOCSIS 3.1 standard.
	CATV nodes	Equipment	Equipment used for receiving optical signals and re-transmitting them over the coaxial cable portion of a CATV network. May also include return-path functions for receiving signals from the consumer and re-transmitting them as optical signals.  Compliant with the emerging DOCSIS 3.1 standard.
	CATV return-receivers	Equipment	Equipment used in the office or hub site of an MSO to receive signals transmitted from a node.
	Ethernet over Coax Access Points	Equipment	Used primarily in China for deployment of fiber-to-the-home services over the CATV infrastructure.
	SFP Transmitter/Receiver	Module	Pluggable transmitter or receiver for digital return-path CATV architecture.  Up to 90° Celsius operating temperature.

<u>Representative Picture</u>	<u>Product Family</u>	<u>Product Level</u>	<u>Description</u>
	Cooled laser diodes	Component	Laser diodes incorporating integrated coolers to maintain consistent performance over wide ambient temperature ranges.  Up to 90° Celsius operating temperature.
	Uncooled laser diodes	Component	Laser diodes without coolers.  Up to 90° Celsius operating temperature.
	Photodiodes	Component	Used to receive optical signals transmitted from a laser diode or other optical transmitter.




**Selected FTTH Products**

<u>Representative Picture</u>	<u>Product Family</u>	<u>Product Level</u>	<u>Description</u>
	WDM-PON OLT module	Module	Transmission, multiplexing, demultiplexing and reception of multiple WDM optical signals.  16 Gbps transceiver modules.
	Gigabit Ethernet SFF	Module	Small Form Factor transmit/receive module for Gigabit Ethernet FTTH.
	Video receiver modules	Module	Reception of video signals in an FTTH network.



<u>Representative Picture</u>	<u>Product Family</u>	<u>Product Level</u>	<u>Description</u>
	Bi-directional and tri-port optical blocks	Component	Optical devices incorporating wavelength division multiplexing functionality allowing multiple signal types on a single optical fiber.
	Laser chips	Component	Standard GPON optical chips used by other manufacturers in specialized applications.

**Selected Internet Data Center Products**

<u>Representative Picture</u>	<u>Product Family</u>	<u>Product Level</u>	<u>Description</u>
	10 gigabit small form factor pluggable, or SFP+, transceivers	Module	Used for 10 Gigabit Ethernet optical interconnections.
	Small form-factor pluggable, or SFP, transceivers	Module	Used for Gb Ethernet, or GbE, SONET OC-3 to OC-48, FiberChannel.
	Active Optical Cable	Module	10 and 40 Gbps fiber-optic cable incorporating laser diode drive electronics into the cable assembly.

**Intellectual Property**

We rely on a combination of patent, copyright, trademark and trade secret laws, as well as confidentiality and licensing arrangements, to establish and protect our intellectual property. We employ various methods to protect these intellectual property rights, including maintaining a technological infrastructure with significant security measures, limiting disclosure and restricting access to only those individuals with an operational need for such information, and having employees, consultants and suppliers execute confidentiality agreements with us. While we expect our intellectual property to provide competitive advantages, we also find meaningful value from unpatented proprietary process knowledge, know-how and trade secrets.

## Patents

As of March 31, 2013, we owned 57 issued patents in the U.S., 20 issued patents in China and 27 issued patents in Taiwan and had 37 additional patents pending, of which 23 were pending in the U.S., three were pending in China and 11 were pending in Taiwan, in addition to various counterpart applications pending pursuant to the Patent Cooperation Treaty and in Europe. Our issued patents will expire between 2018 and 2028.

Our portfolio of patents and patent applications covers several different technology families including:

- laser structure and design;
- optical signal conditioning and laser control;
- laser fabrication;
- photodiode and optical receiver design and fabrication;
- optical device and module designs;
- optical device packaging equipment and techniques; and
- optical network enhancements.

## Trademarks

We have registered the trademarks APPLIED OPTOELECTRONICS, INC., AOI and our logo with the U.S. Patent and Trademark Office on the Principal Register. These marks are also registered in, or have applications for registration pending in, various foreign trademark offices.

## Research and Development

To maintain our growth and competitiveness, we engage in an active research and development program to develop new products and enhance existing products. As a result of these efforts, we anticipate releasing various new or enhanced products over the next several years. Over the past three years, we released an average of over 1,000 product SKUs per year. Our research and development expenses were approximately \$5.2 million, \$6.5 million, \$7.6 million, \$1.6 million and \$2.0 million for the years 2010, 2011 and 2012 and the three month periods ended March 31, 2012 and 2013, respectively.

As of March 31, 2013, we had a total of 170 engineers working in production and R&D, including 13 with Ph.D. degrees. We had 84 of those engineers dedicated to R&D, with 15 located in the U.S. and 69 located in Asia. We continue to recruit talented engineers to further enhance our research and development capabilities. We have research and development departments in our facilities in Texas, China and Taiwan. Our research and development teams collaborate on joint projects, and by co-locating with our manufacturing operations enable us to achieve an efficient cost structure and improve our time to market.

A key factor in our research and development success is our highly collaborative process for new product development. Particularly in our equipment and module businesses, we often collaborate very closely with our customers from a very early stage in product development. By

purposefully fostering this close collaboration, we believe that we can more rapidly develop leading solutions meeting the needs of our customers.

## **Manufacturing and Operations**

We have three manufacturing sites: Sugar Land, Texas, Ningbo, China and Taipei, Taiwan. Our research and development functions are partnered with our manufacturing locations. In our U.S. facility, we manufacture laser chips (utilizing our MBE process), sub-assemblies and components. The sub-assemblies are used in the manufacture of components by our other manufacturing facilities or sold to third parties as modules. We manufacture our laser chips only within our U.S. facility, where our laser design team is located. In our Taiwan location, we manufacture optical components, such as our butterfly lasers, which incorporate laser chips, sub-assemblies and components manufactured within our U.S. facility. In addition, in our Taiwan location, we manufacture transceivers for the FTTH, internet data center and other markets. In our China facility we take advantage of lower labor costs and manufacture certain more labor intensive components and optical equipment systems, such as CATV transmitters (at the headend) and CATV outdoor equipment (at the node). Each facility conducts testing on the components, modules or subsystems it manufactures and each facility is certified to ISO 9001:2000.

Our products are sold to our customers worldwide and also supply our internal component needs for the transceivers and equipment we manufacture. With a vertically integrated manufacturing process, we produce many of our own laser chips and other parts required to manufacture our optical components. Through this model, we are able to reduce development time and product costs as well as enhance quality control. We incorporate our own components into our transceivers, subsystems and equipment products wherever possible. In instances where we do not produce components ourselves, we source them from external suppliers and regularly evaluate these relationships in an attempt to reduce risk and lower cost.

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

## **Customers**

Our customers are primarily CATV and telecommunications equipment manufacturers and internet data center operators. We generally employ a direct sales model in North America and in the rest of the world we use both direct and indirect sales channels. In 2010, 2011 and 2012, we obtained 82.9%, 84.3% and 85.4% of our revenue, respectively, through our direct sales efforts and the remainder of our revenue through our indirect sales channels. Our sales channel partners provide logistical services and day-to-day customer support. Where we sell through an indirect sales channel, we work with the end customer to establish technological specifications for our products. Our equipment customers typically offer our equipment under their brand-name and our equipment is often customized with unique design or performance criteria by each of these customers. We also from time to time offer design or manufacturing services to

customers to assist them in more effectively using our products and realizing time-to-market advantages.

In 2012, our products were used by the five largest CATV equipment OEMs consisting of Arris Group Inc., Aurora Networks, Inc., Cisco Systems, Inc., Harmonic Inc. and Motorola Mobility Holdings, Inc. Our other key customers included Genexis B.V. in the FTTH market and Microsoft Corporation in the internet data center market.

We support our sales efforts by attendance at industry trade shows, technical conferences, advertising in various trade journals and magazines and other promotional efforts. These efforts are aimed at attracting new customers and enhancing our existing customer relationships.

### **Backlog**

We generally make sales pursuant to short-term purchase orders without deposits and subject to rescheduling, revision or cancellation on short notice. We accordingly believe that purchase orders are not an accurate indicator of our future sales and any backlog of purchase orders is not a reliable indicator of our future revenue.

### **Competition**

The optical networking market is intensely competitive. Because of the broad nature of our product offerings, we do not believe that we face a single major competitor across all of our markets. We do, however, experience intense competition in each product area from a number of manufacturers and we anticipate that competition will increase. Our major competitors in one or more of our markets include Avago, Inc., EMCORE Corporation, Finisar Corporation, JDS Uniphase Corporation, Mitsubishi, NeoPhotonics Corporation, Oclaro, Inc. and Sumitomo Electric Industries, Ltd.

Many of our competitors are larger than we are and have significantly greater financial, marketing and other resources. In addition, several of our competitors have large market capitalizations or cash reserves and are much better positioned to acquire other companies to gain new technologies or products that may displace our products. Network equipment providers, who are our customers, and network service providers, who are supplied by our customers, may decide to manufacture the optical subsystems incorporated into their network systems in-house. We also encounter potential customers that, because of existing relationships, are committed to the products offered by these competitors.

We believe the principal competitive factors in our target markets include the following:

- use of internally manufactured components;
- product breadth and functionality;
- timing and pace of new product development;
- breadth of customer base;
- technological expertise;
- reliability of products;

- product pricing; and
- manufacturing efficiency.

We believe that we compete favorably with respect to the above factors based on our MBE processes, our vertically integrated model, the performance and reliability of our product offerings and the compelling value we offer to our customers.

## Employees

As of March 31, 2013, we employed 808 full-time employees, of which 22 held Ph.D. degrees in a science or engineering field. Of our employees, 176 are located in the U.S., 445 are in China, and 187 are in Taiwan. None of our employees are represented by any collective bargaining agreement, but certain employees of our China subsidiary are members of a trade union. We have never suffered any work stoppage and believe that we have satisfactory relations with our employees.

## Facilities

We maintain manufacturing, research and development, sales and administrative offices in the U.S., China and Taiwan. Our corporate headquarters is located at our facility in Sugar Land, Texas. The table below provides information regarding our facilities.

<u>Location</u>	<u>Owned or Lease Expiration Date</u>	<u>Approximate Square Footage</u>	<u>Use</u>
Sugar Land, Texas (1)	Owned	23,850	Administration, sales, manufacturing, research and development
Sugar Land, Texas	May 31, 2014	6,062	Research and development
Ningbo, China	Owned (2)	458,849	Administration, sales, manufacturing, research and development
Taipei, Taiwan	March 31, 2014 (3) April 9, 2014 (3)	42,903	Administration, sales, manufacturing, research and development

(1) The property is subject to a mortgage in favor of East West Bank, securing our long-term debt obligations.

(2) Our China subsidiary acquired the land use rights to the real property on which our new facility is located from the Chinese government. The land use rights expire on March 8, 2054. Our China subsidiary owns the facility located on the property.

(3) Leases covering two floors expire on March 31, 2014 and the lease covering the other floor expires on April 9, 2014.

We believe that our existing facilities are adequate to meet our current needs and that we will be able to obtain additional commercial space as needed.

## Environmental Matters

Our research and development and manufacturing operations and our products are subject to a variety of federal, state, local and foreign environmental, health and safety laws and regulations, including those governing discharges of pollutants to air and water, the use, storage, handling and disposal of hazardous materials, employee health and safety, and the hazardous material content in our products. Our environmental management systems in our facilities in Ningbo and Taipei are both certified to meet the requirements of ISO14001:2004. However, there

can be no assurance that violations of applicable laws at any of our facilities will not occur in the future as a result of human error, accident, equipment failure or other causes. We use, store and dispose of hazardous materials in our manufacturing operations and hazardous materials are present in our products. We incur costs to comply with environmental, health and safety requirements, and any failure to comply, or the identification of contamination for which we are found liable, could cause us to incur substantial costs, including cleanup costs, monetary fines, or civil or criminal penalties, and subject us to property damage and personal injury claims, and result in the suspension of production, alteration of our manufacturing processes, redesign of our products, or curtailment of sales and adverse publicity. Liability under environmental, health and safety laws can be joint and several and without regard to fault or negligence. For example, pursuant to environmental laws and regulations, including but not limited to the Comprehensive Environmental Response Compensation and Liability Act, or CERCLA, we may be liable for the full amount of any remediation-related costs at properties we currently own or formerly owned, such as our currently owned Sugar Land, Texas facility, or at properties at which we operated, as well as at properties we will own or operate in the future, and properties to which we have sent hazardous substances, whether or not we caused the contamination.

We expect that our operations and products will be affected by new environmental requirements on an ongoing basis. Environmental, health and safety requirements have become more stringent over time, and changes to existing requirements could restrict our ability to expand our facilities, require us to acquire costly pollution control equipment, or cause us to incur other significant expenses or to modify our manufacturing processes or the hazardous material content of our products. Identification of presently unidentified environmental conditions, more vigorous enforcement by a governmental authority, enactment of more stringent legal requirements or other unanticipated events could give rise to adverse publicity, restrict our operations, affect the design or marketability of our products or otherwise cause us to incur material environmental costs.

We face increasing complexity in our product design and procurement operations as we adjust to new and upcoming requirements relating to the materials composition of our products. Some jurisdictions in which our products are sold have enacted requirements regarding the hazardous material content of certain products. For example, member states of the European Union and China are among a growing number of jurisdictions that have placed restrictions on the use of lead, among other chemicals, in electronic products, which affect the composition and packaging of our products. The passage of such requirements in additional jurisdictions, or the tightening of standards or elimination of certain exemptions in jurisdictions where our products are already subject to such requirements, could cause us to incur significant expenditures to make our products compliant with new requirements, or could limit the markets into which we may sell our products. Other governmental regulations may require us to reengineer our products to use components that are more environmentally compatible, resulting in additional costs to us.

### **Export Regulations**

The Bureau of Industry and Security (BIS) of the U.S. Department of Commerce is responsible for regulating the export of most commercial items that are so called dual-use goods that may have both commercial and military applications. A limited number of our products are exported by license under the Export Control Classification Number, or ECCN, of 5A991. Export Control Classification requirements are dependent upon an item's technical characteristics, the destination, the end-use, and the end-user, and other activities of the end-user. Should the ECCN change, then the export of our products to certain countries would be restricted. However, we

currently do not export our products to any countries on the restricted list, and therefore a change in the ECCN would not materially impact our business.

**Legal Proceedings**

We anticipate that we will from time to time be subject to various claims and legal actions during the ordinary course of our business. We are not aware of any material claims or legal actions to which we, our properties or our officers or directors are subject.

## MANAGEMENT

### Executive Officers and Directors

The following table sets forth certain information regarding our executive officers and directors as of April 30, 2013.

<u>Name</u>	<u>Age</u>	<u>Position(s)</u>
Chih-Hsiang (Thompson) Lin	50	President, Chief Executive Officer and Director
James L. Dunn, Jr.	51	Chief Financial Officer
Stefan J. Murry	40	Chief Strategy Officer
Hung-Lun (Fred) Chang	49	Senior Vice President of Optical Component Business Unit
Klaus Alexander Anselm	44	Vice President of Semiconductor Products
Shu-Hua (Joshua) Yeh	47	Senior Vice President of Network Equipment Module Business Unit
Chung-Yao (Ford) Li	51	Senior Vice President, Asia General Manager
Juen-Sheng (Andrew) Kang	62	Director, Chairman of the Board of Directors
William H. Yeh (1)(3)	60	Director, Compensation Committee Chairman
Richard B. Black (1)(2)	79	Director, Audit Committee Chairman
Alan Moore (2)	52	Director
Min-Chu (Mike) Chen (1)(3)	63	Director
Alex Ignatiev (2)(3)	68	Director, Nominating and Corporate Governance Committee Chairman

(1) Member of the compensation committee.

(2) Member of the audit committee.

(3) Member of the nominating and corporate governance committee.

**Chih-Hsiang (Thompson) Lin, Ph.D.**, founded Applied Optoelectronics, Inc. in February 1997 and has been President and Chief Executive Officer since our inception. He currently serves as a director on our board of directors, and he served as Chairman of our board of directors from May 2000 through September 2002, and again from June 2008 through October 2009. Dr. Lin has also served as a research associate professor and senior research scientist at the University of Houston. Dr. Lin holds a BS degree in Nuclear Engineering from National Tsing Hua University in Taiwan and an MS degree and a Ph.D. in Electrical and Computer Engineering from University of Missouri-Columbia.

The board of directors believes that Dr. Lin is qualified to serve as a director based on his extensive background in business management, his role as founder, President and Chief Executive Officer and his years of service on our board.

**James L. Dunn, Jr.**, has served as our Chief Financial Officer since December 2012. Prior to joining us, Mr. Dunn served as the Chief Financial Officer of GET Enterprises, LLC, a private equity backed distributor of restaurant tableware, from March to December 2012. Mr. Dunn also served as Chief Financial Officer and in-house counsel of Polymics, Ltd., a global manufacturer of high temperature plastics, from 2009 to 2012. Mr. Dunn served as the Chief Financial Officer



and General Counsel of iLinc Communications, Inc. (Amex:ILC), a provider of web conferencing software, from 1998 to 2009. Mr. Dunn received a BBA in Accounting from Texas A&M University and a JD from Southern Methodist University School of Law.

**Stefan J. Murry, Ph.D.**, has served as our Chief Strategy Officer since December 2012. Previously, Dr. Murry served as our Vice President of Sales and Marketing from June 2004 until December 2012, our Director of Sales and Marketing from January 2000 to June 2004 and as a Senior Engineer of Device Packaging from February 1997 to January 2000. He also previously served as Research Associate and Mission Control Specialist with the Space Vacuum Epitaxy Center in Houston, TX. Dr. Murry has been issued multiple patents in the optoelectronics industry, as well as in various related and complimentary industries. Dr. Murry received BS and MS degrees in Physics and a Ph.D. in Electrical Engineering from the University of Houston.

**Hung-Lun (Fred) Chang, Ph.D.**, has served as Senior Vice President of our Optical Component Business Unit since October 2012. Previously, Dr. Chang served as Vice President of our Optical Module Division from March 2005 until October 2012, our Director of Manufacturing from June 2002 to March 2004, and as our Deputy Packaging Manager from April 2001 to May 2002. Dr. Chang has held numerous positions in the optoelectronics industry throughout his career. His most recent position prior to joining us was Deputy Manager of the Optical Active Component Group at Hon-Hai Precision Industry Co., Ltd., which is based in Taiwan. He was also a researcher and project manager of the Optoelectronic Module Technology group at Chunghwa Telecom Co., Ltd. from 1996 to 2000. Dr. Chang received a BS degree in Electrophysics and a Ph.D. in Electro-Optical Engineering from National Chiao Tung University in Taiwan.

**Klaus Alexander Anselm, Ph.D.**, has served as our Vice President of Semiconductor Products since 2009. Previously, Dr. Anselm served as our Senior Director of Semiconductor Products from October 2007 to 2009, as our Director of Semiconductor Products from 2004 until September 2007, and as our Processing Department Manager from 1999 to 2004. Dr. Anselm received a BS degree in Electrical Engineering from Rice University, and an MS degree and Ph.D. in Electrical Engineering from the University of Texas at Austin.

**Shu-Hua (Joshua) Yeh** has served as Senior Vice President of our Network Equipment Module Business Unit since November 2012. Previously, Mr. Yeh served as our General Manager of our Video Equipment Division of Global Technology Inc., our China subsidiary, since its acquisition by us in March 2006 and had served as its President and Chief Executive Officer from April 2002 until the acquisition. From May 1995 to April 2002, Mr. Yeh served as a Vice President of Sales and Marketing of Twayway CATV Technology Inc. Mr. Yeh received a BS degree in Mechanical Engineering and an MS in Automatic Control Science from National Chung Shing University in Taiwan.

**Chung-Yao (Ford) Li** has served as our Senior Vice President since November 2011 and as our Asia General Manager since July 2011. From 2007 to 2011, Mr. Li served as a general manager in Shanghai, China for Pegatron Corporation, an electronics and computing design and manufacturing company. Mr. Li served in various operational management capacities of Wistron Infocomm Corporation from 2005 until 2007. From 2002 to 2005, Mr. Li also served as an Assistant Vice President of Quanta Computer Inc., in Shanghai, China. Mr. Li received an MS degree in Engineering Manufacturing Management from University of South Australia.

**Juen Sheng (Andrew) Kang** has served as a director on our board of directors since May 2000 and currently serves as the Chairman of the our board of directors, a position he has held since October 2009. Mr. Kang also served as our Chairman of our board of directors from October

2002 through May 2008. He is a director, the Managing Director and a co-founder of Technology Associates Management Co. Ltd., a strategic investment company, a position he has held since 1997. Before founding Technology Associates Management Company Ltd. in 1997, Mr. Kang was the founder and President of a venture capital company, Technology Associates Corporation, in Taiwan from 1990 to 1997. Mr. Kang currently serves as a director of Asia Star, a position he has held since September 2012, and as a director Techgains Pan Pacific Corporation and Techgains Global Corporation, positions he has held 2000. Mr. Kang also currently serves as a director and Chairman of Intelligent Expitaxy Technology, Inc., a publicly-held company in Taiwan, and as a director and Chief Executive Officer of Natural Polymer International Corporation, positions he has held since 1997. Mr. Kang has also served as a director of HelixMicro Inc. from 2007 to March 2013, Techgains International Corporation from 1999 to March 2013, and GobiTech, Inc. from 1998 to 2011. Mr. Kang received an MS in Management from Arthur D. Little School of Management, and BA and MA degrees in Economics from Soochow University in Taiwan.

The board of directors believes that Mr. Kang is qualified to serve as a director based on his business management and leadership experience, his service on other private company and publicly-held boards of directors and his years of service as the Chairman of our board of directors.

**William H. Yeh** has served as a director on our board of directors since May 2000. He is the current Chief Executive Officer and President of Hungyeh Investment, Ltd., a hospitality real estate investment and management company, a position he has held since 2000. Mr. Yeh has also served as president of Gold Star Investment since 1997. He was a Senior Vice President of United Central Bank overseeing the Houston region and Vice Chairman of Central Bancorp, Inc. from 1997 to 2012. He is also currently a director of Central Bancorp, Inc., the holding company of United Central Bank, a position which he has held since 1997. Mr. Yeh received a BS degree from National Cheng Kung University in Taiwan an MS degree from University of Houston–Clear Lake.

The board of directors believes that Mr. Yeh is qualified to serve as a director based on his business and financial management and leadership experience and his years of service on our board.

**Richard B. Black** has served as a director on our board of directors since August 2001. He is the President and Chief Executive Officer of ECRM, Incorporated, a worldwide supplier of laser based imaging devices, a position he has held since 2002, and has been the chairman of the board of directors of ECRM, Incorporated since 1983. Beginning in 1989, Mr. Black was a director of Oak Technology, Inc., a manufacturer of semi-conductors for optical storage, and then became President in 1998 and vice chairman of the board of directors in 1999 until its merger with Zoran, Inc. in 2003. Mr. Black has served as President and CEO of AM International from 1980 to 1982 and Maremont Corporation from 1967 to 1979. He served as a director and chairman of the audit committee of GSI Group, a manufacturer of lasers, laser systems, semi-conductor equipment, from 1998 to 2012, and was its chairman of its board of directors from 2006 to 2012. He currently serves as a director and chairman of the audit committee of Alliance Fiber Optics Products, Inc. (Nasdaq: AFOP), a position he has held since 2002, and TREX Enterprises, Inc., a position he has held since 2000. Mr. Black has served as trustee of the Institute for Advanced Study at Princeton since 1990, and became its vice chairman in 2006. He has served as a trustee of the American Indian College Fund, Beloit College, Bard College, and serves on the Visiting Committee for the Physical Sciences Division of the University of Chicago. Mr. Black received a BS degree in Engineering from Texas A&M University, an MBA from Harvard University and an honorary Ph.D. from Beloit College.

The board of directors believes that Mr. Black is qualified to serve as a director based on his extensive business and financial management and leadership experience, and his service on other private company and publicly-held boards of directors.

**Alan Moore** has served as a director on our board of directors since March 2013. Since 2007, Mr. Moore has served as Manager of Silver Tree Fund II Management, LLC, a real estate investment fund, since 1999, he has served as the Treasurer of Silver Tree Partners, Inc., a real estate development company, and since 1995, he has served as the President of Red Oak Capital, a private equity company. From May 2004 until December 2011, Mr. Moore served as Manager of Silver Tree Fund Management, LLC, also a real estate investment fund, and from March 1998 to October 1999, Mr. Moore served as the Chief Financial Officer of Window on WallStreet (sold to Trade Station Group, Inc. in 1999). Previously, Mr. Moore was a co-founder of Fossil, Inc. (Nasdaq: FOSL). Mr. Moore received an MS degree in Accounting and a BA degree in Business Control Systems from the University of North Texas.

The board of directors believes that Mr. Moore is qualified to serve as a director based on his extensive background in business and financial management and his role as co-founder of a publicly-held company.

**Min-Chu (Mike) Chen, Ph.D.** has served as a director on our board of directors since February 27, 2013. Since January 2013, Dr. Chen has served as a member of the board of directors of Nanning Baota Biowin Technologies Co. Ltd., a real estate management company, since January 2012, he has served as an executive director of FGel Nanotek, Inc., a food and beverage additive company, since November 2011, he has served as the Asia Pacific Director for U.S. Flow Control Group Pte. Ltd., a petroleum equipment manufacturer and services company, since 2010, he has served as a director of Iecont Technology Inc., and since 2001, he has been a partner and member of the board of directors of EverRich Capital Inc., a consulting company. From September 2008 to April 2010, Dr. Chen served as the Chief Executive Officer of SilverPAC, Inc., a consumer electronics business, and from March 1994 to June 2002, Dr. Chen served as a board member of PCTEL, Inc. (Nasdaq: PCTI). Dr. Chen received a Ph.D. in Ocean Engineering from Oregon State University.

The board of directors believes that Dr. Chen is qualified to serve as a director based on his business management experience, his service on other private company boards of directors and his prior service on the board of a publicly-held company.

**Alex Ignatiev, Ph.D.** has served as a director on our board of directors since February 2013, and previously served as a director on our board of directors from June 2008 to October 2009 and from May 2001 to August 2002. Since March 2013, Dr. Ignatiev has served as the Chief Science Officer of Smart Grid Intelligent Management, Inc., which develops operating systems and alternative energy source integration, since February 2009, he has served as the Chief Technology Officer of Quarius Technologies, LP, a renewable energy company, since February 2006, he has served as a vice president and Chief Technology Officer at Nano EnerTex, Inc., a nanomaterials company, since January 2005, he has served as a Vice President of Virtual Vision LLP, which develops artificial retinas, and since May 2002, he has served as the Chief Technology Officer of Metal Oxide Technologies, Inc., which develops, manufactures and sells superconducting wire. Dr. Ignatiev was a director of the Space Vacuum Epitaxy Center at the University of Houston from 1987 until 2002 after which he became director of the Texas Center for Superconductivity and Advanced Materials until 2005. From 2005 until the present he has served as a director of the Center for Advanced Materials at the University of Houston. Dr. Ignatiev has also served a task leader for the Texas Center for Superconductivity from 1987 to 2008. Dr. Ignatiev has served since 2010 as the Hugh Roy and Lillie Cranz Cullen professor of

physics, chemistry and electrical and computer engineering at the University of Houston, and has been elected to the International Academy of Astronautics and to the Kazakhstan National Academy of Sciences. Dr. Ignatiev received a Ph.D. in Materials Science from Cornell University.

The board of directors believes that Dr. Ignatiev is qualified to serve as a director based on his business management experience, broad technology industry experience and his past service on our board.

Our executive officers are elected by, and serve at the discretion of, our board of directors. There are no family relationships among any of our directors or executive officers.

### **Board Composition**

Our amended and restated certificate of incorporation to be in effect immediately prior to the closing of this offering will provide that the number of authorized directors will be determined from time to time by resolution of the board of directors and any vacancies in our board of directors and newly created directorships may be filled only by our board of directors. Any additional directorships resulting from an increase in the number of directors will be distributed among the three classes, so that, as nearly as possible, each class will consist of one-third of the total number of directors. Our amended and restated certificate of incorporation will further provide for the removal of a director only for cause and by the affirmative vote of the holders of 66<sup>2</sup>/<sub>3</sub>% or more of the shares then entitled to vote at an election of our directors. We currently have seven directors.

Following the closing of this offering, our board of directors will be divided into three classes with members of each class of directors serving for staggered three-year terms as follows:

- Class I directors, Alan Moore and Alex Ignatiev, whose initial terms will expire at the annual meetings held in 2014;
- Class II directors, William H. Yeh and Juen-Sheng (Andrew) Kang, whose initial terms will expire at the annual meetings held in 2015; and
- three Class III directors, Chih-Hsiang (Thompson) Lin, Richard B. Black and Min-Chu (Mike) Chen, whose initial terms will expire at the annual meetings held in 2016.

Our classified board could have the effect of making it more difficult for a third party to acquire us. We have determined that each of William H. Yeh, Richard B. Black, Alex Ignatiev, Alan Moore and Min-Chu (Mike) Chen qualify as independent directors under the NASDAQ rules.

### **Director Compensation**

In 2012 non-employee directors were eligible to receive \$1,500 for each board meeting attended in person. In addition, a \$300 meeting fee was payable for each board or committee meeting attended by telephone. If a committee meeting occurred at the same site as a scheduled board meeting, no additional compensation was paid. Employee directors did not receive any compensation other than their employee compensation for their service as directors. Directors were reimbursed for out-of-pocket expenses incurred in the course of their service on the board of directors or its committees.

Non-employee directors continuing in office following each annual meeting of stockholders were eligible to receive an option to acquire 40,000 shares. The Chairman of the board of directors was eligible to receive an option for an additional 10,000 shares and each chair of a committee was eligible to receive an option for an additional 5,000 shares. All options granted to directors vest in equal monthly amounts over the first twelve months following the date of grant and expire, subject to early termination in accordance with their terms, on the tenth anniversary of the date of grant.

The table below sets forth, for each person who served as a non-employee director during 2012, information regarding compensation for service on our board of directors during 2012.

<u>NAME</u>	<u>Fees Earned or Paid in Cash (1)</u>	<u>Option Awards (2)</u>	<u>All Other Compensation</u>	<u>Total</u>
Juen-Sheng (Andrew) Kang	\$ 1,500	\$ 10,048	\$ —	\$ 11,548
William H. Yeh	1,500	8,792	—	10,292
Richard B. Black	1,500	6,280	—	7,780
Nancy T. Chang (3)	1,500	5,861	25,000	32,361
Benjamin C M Jen (4)	1,500	5,861	—	7,361
Chih-Kai (C.K.) Cheng (5)	1,500	5,024	—	6,524
Hsiang-Teh (Steven) Ho (5)	1,500	—	—	—

- (1) Reflects the aggregate dollar amount of fees earned or paid in cash for services as a non-employee director, including committee service fees, fees for serving as a committee chairperson, and board and committee meeting fees.
- (2) Represents the aggregate grant date fair value computed in accordance with FASB ASC Topic 718. The assumptions used in calculating the grant date fair value of the stock options reported in Note M to the consolidated financial statements included in this prospectus. The amounts reported in this column reflect the accounting cost for these stock options and do not correspond to the actual economic value that may be received by the named executive officers for the stock options.
- (3) Resigned as a member of our board of directors on March 22, 2013. Reflects payment of \$25,000 to Chang Office, LLC under our consulting agreement with Chang Office, LLC. Under the consulting agreement, Chang Office, LLC agreed to provide certain consulting services for the benefit of our audit committee, including the evaluation of our internal controls. Ms. Chang is the President and sole member of Chang Office, LLC.
- (4) Resigned as a member of our board of directors on February 27, 2013.
- (5) Resigned as a member of our board of directors on February 20, 2013.

### Board Committees

Our board of directors directs the management of our business and affairs, as provided by Delaware law, and conducts its business through meetings of the board of directors. Upon completion of this offering our board of directors will have three standing committees: an audit committee, a compensation committee and a nominating and corporate governance committee. Our board of directors may establish other committees to facilitate the management of our business.

### Audit Committee

Our audit committee currently consists of Richard B. Black, Alan Moore and Alex Ignatiev. Our board of directors has determined that Messrs. Black, Moore and Ignatiev each satisfy the

independence and financial literacy requirements under the applicable rules and regulations of the SEC and NASDAQ. Mr. Black serves as the chairman of this committee, and our board of directors has determined that he qualifies as an "audit committee financial expert" as that term is defined in the rules and regulations established by the SEC and has the requisite financial sophistication as defined under the applicable NASDAQ rules. The functions of this committee include, but are not limited to:

- meeting with our management periodically to consider the adequacy of our internal controls and the objectivity of our financial reporting;
- meeting with our independent auditors and with internal financial personnel regarding these matters;
- appointing, compensating, retaining and overseeing the work of our independent auditors;
- pre-approving audit and non-audit services of our independent auditors;
- reviewing our audited financial statements and reports and discussing the statements and reports with our management, including any significant adjustments, management judgments and estimates, new accounting policies and disagreements with management;
- Establishing procedures for the receipt, retention and treatment of complaints we receive regarding accounting, internal accounting controls or auditing matters, as well as for the confidential, anonymous submission by our employees of concerns regarding questionable accounting or auditing matters;
- reviewing the independence and quality control procedures of the independent auditor and the experience and qualifications of the independent auditor's senior personnel that are providing us audit services;
- reviewing all related-party transactions for approval; and
- reviewing and reassessing the adequacy of the audit committee's charter at least annually and recommending any changes to our board of directors.

Both our independent auditors and internal financial personnel regularly meet privately with our audit committee and have unrestricted access to this committee.

#### **Compensation Committee**

Our compensation committee currently consists of William H. Yeh, Richard B. Black and Min-Chu (Mike) Chen, each of whom is not an employee and is otherwise "independent" as that term is defined in the current applicable NASDAQ rules. Mr. Yeh serves as the chairman of this committee. Pursuant to its charter, our compensation committee has responsibility for overseeing our compensation policies and programs, including developing compensation policies and providing oversight in the implementation of all applicable policies and benefit plans. Specifically, the compensation committee recommends the compensation payable to our non-employee directors, evaluates and sets compensation for the Chairman of our board of directors and our executive officers and monitors all general compensation programs. In

accordance with its charter, the compensation committee's responsibilities include, but are not limited to:

- reviewing and approving all compensation for the Chief Executive Officer, including incentive-based and equity-based compensation;
- reviewing and approving annual performance objectives and goals relevant to compensation for the Chief Executive Officer and evaluating the performance of the Chief Executive Officer;
- reviewing and approving incentive-based or equity-based compensation plans in which our executive officers participate;
- reviewing and approving all compensation for executive officers, including incentive-based and equity-based compensation, and overseeing the evaluation of management;
- approving all employment, severance, or change-in-control agreements, special or supplemental benefits, or provisions including the same, applicable to executive officers;
- periodically reviewing and advising our board of directors concerning both regional and industry-wide compensation practices and trends in order to assess the adequacy and competitiveness of our compensation programs for executive officers relative to comparable companies in our industry;
- reviewing and reassessing the adequacy of the compensation committee charter and recommending any changes to our board of directors on an annual basis; and
- reviewing and evaluating the compensation committee's own performance periodically.

The compensation committee may delegate its authority to a subcommittee to make grants of stock, stock options and other equity securities to executive officers and other employees, provided that these grants are made within established guidelines. In addition, the compensation committee may obtain advice or assistance from compensation consultants, legal counsel or other advisors to perform its duties, provided that the compensation committee shall periodically assess the independence of any such compensation consultant as required by NASDAQ rules and applicable law.

#### **Nominating and Corporate Governance Committee**

Our nominating and corporate governance committee currently consists of William H. Yeh, Alex Ignatiev and Min-Chu (Mike) Chen. Mr. Ignatiev serves as the chairman of this committee. Our nominating and corporate governance committee oversees and advises the board of directors with respect to corporate governance matters, assists the board of directors in identifying and recommending qualified candidates for nomination to the board of directors, makes recommendations to the board of directors with respect to assignments to committees of the board of directors and oversees the evaluation of the board of directors. The functions of this committee include, but are not limited to:

- making recommendations to the board of directors regarding all nominees for board membership, whether for the slate of director nominees to be proposed by the board of directors to the stockholders or any director nominees to be elected by the board of directors to fill interim director vacancies;

- considering director candidates submitted by stockholders and determining the procedure to be followed by stockholders in submitting such recommendations;
- recommending board of director committee structure and responsibilities to be included in the charter of each committee of the board of directors to be submitted to full board of directors for consideration;
- recommending directors to serve on each board committee and suggesting rotations for chairpersons of the board committees as the nominating and corporate governance committee deems appropriate;
- recommending corporate governance standards to the board of directors;
- evaluating and recommending any revisions to board of directors and board committee meeting policies;
- reviewing the effectiveness of the operation of the board of directors and board committees, including the corporate governance and operating practices;
- reviewing and reassessing the adequacy of the nominating and corporate governance committee charter and recommending any changes to the board of directors; and
- periodically reviewing the compensation paid to non-employee directors and make recommendations to our board of directors for any adjustments.

#### **Compensation Committee Interlocks and Insider Participation in Compensation Decisions**

None of our executive officers serves as a member of our compensation committee or as a member of the board of directors or any other committee serving an equivalent function of any other entity that has one or more of its executive officers serving as a member of our board of directors or compensation committee.

#### **Code of Business Conduct**

Our board of directors has adopted a code of business conduct. The code of business conduct applies to all of our employees, officers and directors. Upon the effectiveness of the registration statement of which this prospectus is a part, the full text of our code of business conduct will be posted on our website at [www.ao-inc.com](http://www.ao-inc.com) under the Investor Relations section. We intend to disclose future amendments to certain provisions of our code of business conduct, or waivers of such provisions, at the same location on our website identified above and also in public filings.

#### **Risk Assessment of Compensation Programs**

We do not believe that our compensation programs create risks that are reasonably likely to have a material adverse effect on our company. We believe that the combination of different types of compensation as well as the overall amount of compensation, together with our internal controls and oversight by the board of directors, mitigates potential risks.



**Tax and Accounting Considerations**

Section 162(m) of the Internal Revenue Code generally disallows public companies a tax deduction for compensation in excess of \$1,000,000 paid to their Chief Executive Officer and certain other executive officers unless certain performance and other requirements are met. As one of the factors in its consideration of compensation matters, the compensation committee also considers the anticipated tax treatment to our company and to the executive officers of various payments and benefits, including the effect of Section 162(m). The compensation committee retains discretion, however, to implement executive compensation programs that may not be deductible under Section 162(m) if the compensation committee believes the programs are nevertheless appropriate to help achieve our primary objective of ensuring that compensation paid to our executive officers is reasonable, performance-based and consistent with the goals of our company and its stockholders. We do not believe that Code Section 162(m) will limit our tax deductions for our last completed fiscal year.

## EXECUTIVE COMPENSATION

### Summary Compensation Table

The following table presents summary information regarding the total compensation awarded to, earned by, and paid to our principal executive officer, principal financial officer and other two most highly compensated executive officers who were serving as executive officers at the end of the fiscal year ended December 31, 2012. These officers are referred to as our named executive officers. The information included in this table reflects compensation for the years ended December 31, 2011 and 2012.

Name and Principal Position	Year	Salary (1) \$	Bonus \$	Stock Awards \$	Option Awards (2) \$	Non-Equity Incentive Plan Compensation \$	Nonqualified deferred compensation earnings \$	All Other Compensation (3) \$	Total \$
<b>Chih-Hsiang (Thompson) Lin</b>	2012	318,689	—	—	53,733	—	—	4,632	377,054
President and Chief Executive Officer	2011	306,886	—	—	6,879	—	—	4,347	318,112
<b>James L. Dunn, Jr. (4)</b>	2012	3,654	—	—	—	—	—	113	3,767
Chief Financial Officer	2011	—	—	—	—	—	—	—	—
<b>Stefan J. Murry</b>	2012	201,872	—	—	21,829	—	—	1,540	225,241
Chief Strategy Officer	2011	190,256	—	—	2,635	—	—	1,255	194,146
<b>Hung-Lun (Fred) Chang</b>	2012	177,285	—	—	15,112	—	—	1,540	193,937
Senior Vice President of Optical Module Division	2011	172,033	—	—	1,844	—	—	1,255	175,132

- (1) Includes amounts earned but deferred at the election of the named executive officers, such as salary deferrals under our 401(k) Plan established under Section 401(k) of the Code.
- (2) Represents the aggregate grant date fair value computed in accordance with FASB ASC Topic 718. The assumptions used in calculating the grant date fair value of the stock options reported in the Option Awards column are set forth in Note M to the consolidated financial statements included in this prospectus. The amounts reported in this column reflect the accounting cost for these stock options and do not correspond to the actual economic value that may be received by the named executive officers for the stock options.
- (3) Includes life insurance premiums paid by us for the benefit of the named executive officers.
- (4) Mr. Dunn joined us on December 12, 2012 as Chief Financial Officer. His base annualized salary for 2012 was \$192,000.

**Outstanding Equity Awards at Fiscal Year-end**

The following table sets forth certain information regarding outstanding equity awards at fiscal year-end for our named executive officers for the year ended December 31, 2012.

Name	Number of Shares Underlying Unexercised Options		Option Exercise Price \$	Option Expiration Date	
	Exercisable	Unexercisable			
Chih-Hsiang (Thompson) Lin	62,500 (1)	—	\$ 0.165	July 31, 2014	
	103,125 (2)	—	\$ 0.25	June 9, 2015	
	131,250 (3)	—	\$ 0.20	October 19, 2019	
	6,664 (4)	—	\$ 0.20	October 19, 2019	
	350,000 (5)	—	\$ 0.20	June 5, 2017	
	28,333 (6)	—	\$ 0.20	August 3, 2017	
	250,000 (7)	—	\$ 0.20	February 12, 2018	
	20,000 (8)	—	\$ 0.20	May 29, 2019	
	422,500 (9)	422,500 (9)	\$ 0.20	August 23, 2020	
	228,462 (10)	293,738 (10)	\$ 0.20	March 4, 2021	
	—	320,000 (11)	\$ 0.20	May 22, 2022	
James L. Dunn, Jr.	—	—	—	—	
Stefan J. Murry	27,000 (12)	—	\$ 0.10	December 31, 2014	
	85,000 (1)	—	\$ 0.15	July 31, 2014	
	41,100 (13)	—	\$ 0.15	December 31, 2014	
	60,000 (3)	—	\$ 0.20	October 19, 2019	
	80,000 (5)	—	\$ 0.20	October 19, 2019	
	80,000 (7)	—	\$ 0.20	February 12, 2018	
	115,000 (9)	115,000 (9)	\$ 0.20	August 23, 2020	
	87,499 (10)	112,501 (10)	\$ 0.20	March 4, 2021	
	—	130,000 (11)	\$ 0.20	May 22, 2022	
	Hung-Lun (Fred) Chang	22,518 (14)	—	\$ 0.10	December 31, 2014
		85,000 (1)	—	\$ 0.15	July 31, 2014
12,000 (15)		—	\$ 0.25	June 9, 2015	
41,000 (3)		—	\$ 0.20	October 19, 2019	
65,000 (7)		—	\$ 0.20	October 19, 2019	
60,000 (5)		—	\$ 0.20	October 19, 2019	
90,000 (9)		90,000 (9)	\$ 0.20	August 23, 2020	
61,249 (10)		78,751 (10)	\$ 0.20	March 4, 2021	
—		90,000 (11)	\$ 0.20	May 22, 2022	

- (1) The amounts reported reflect shares of common stock underlying stock options granted in calendar year 2004 under our 2000 Incentive Share Plan. The stock options vest over a four-year period with respect to one-forty-eighth (1/48) of the shares as of the first day of the calendar month following the vesting start date, subject to continued service through each applicable vesting date.
- (2) The amounts reported reflect shares of common stock underlying stock options granted in calendar year 2005 under our 2004 Incentive Share Plan. The stock options vest over a four-year period with respect to one-sixteenth (1/16) of the shares as of each three-month period following the vesting start date, subject to continued service through each applicable vesting date.

- (3) The amounts reported reflect shares of common stock underlying stock options granted in calendar year 2006 under our 2006 Incentive Share Plan. The stock options vest over a four-year period with respect to one-sixteenth (1/16) of the shares as of each three-month period following the vesting start date, subject to continued service through each applicable vesting date.
- (4) The amounts reported reflect shares of common stock underlying stock options granted in calendar year 2006 under our 2006 Incentive Share Plan. The stock options vest over a one year period with respect to one-twelfth (1/12) of the shares as of the first day of the calendar month beginning after the vesting start date, subject to continued service through each applicable vesting date.
- (5) The amounts reported reflect shares of common stock underlying stock options granted in calendar year 2007 under our 2006 Incentive Share Plan. The stock options vest over a four-year period as follows: 25% of the shares underlying the stock option vest on the first anniversary of the vesting start date with the remainder vesting 25% each twelve month period over the remaining three years, subject to continued service through each applicable vesting date.
- (6) The amounts reported reflect shares of common stock underlying stock options granted in calendar year 2007 under our 2006 Incentive Share Plan. The stock options vest over a seventeen month period with respect to one-seventeenth (1/17) of the shares as of the first day of the calendar month beginning after the vesting start date, subject to continued service through each applicable vesting date.
- (7) The amounts reported reflect shares of common stock underlying stock options granted in calendar year 2008 under our 2006 Incentive Share Plan. The stock options vest over a four-year period as follows: 25% of the shares underlying the stock option vest on the first anniversary of the vesting start date and the remaining shares shall become exercisable with respect to one-thirty-sixth (1/36) of the remaining shares as of the first day of the calendar month following the first anniversary of the vesting start date, subject to continued service through each applicable vesting date.
- (8) The amounts reported reflect shares of common stock underlying stock options granted in calendar year 2009 under our 2006 Incentive Share Plan. The stock options vest over a one year period with respect to one-twelfth (1/12) of the shares as of the first day of the calendar month beginning after the vesting start date, subject to continued service through each applicable vesting date.
- (9) The amounts reported reflect shares of common stock underlying stock options granted in calendar year 2010 under our 2006 Incentive Share Plan. The stock options vest over a four-year period as follows: 25% of the shares underlying the stock option vest on the first anniversary of the vesting start date with the remaining shares vesting 12.5% each six months over the remaining three years, subject to continued service through each applicable vesting date.
- (10) The amounts reported reflect shares of common stock underlying stock options granted in calendar year 2011 under our 2006 Incentive Share Plan. The stock options vest over a four-year period as follows: 25% of the shares underlying the stock option vest on the first anniversary of the vesting start date and the remaining shares shall become exercisable with respect to one-thirty-sixth (1/36) of the remaining shares as of the first day of the calendar month following the first anniversary of the vesting start date, subject to continued service through each applicable vesting date.
- (11) The amounts reported reflect shares of common stock underlying stock options granted in calendar year 2012 under our 2006 Incentive Share Plan. The stock options vest over a four-year period as follows: 25% of the shares underlying the stock option vest on the first anniversary of the vesting start date with the remaining shares vesting 12.5% each six months over the remaining three years, subject to continued service through each applicable vesting date.
- (12) The amounts reported reflect shares of common stock underlying stock options granted in calendar year 2001 under our 2000 Incentive Share Plan. The stock options vest over a five-year period with respect to one-twentieth (1/20) of the shares as of the first day of the calendar quarter (three-month period) following the vesting start date, subject to continued service through each applicable vesting date.
- (13) The amounts reported reflect shares of common stock underlying stock options granted in calendar year 2000 under our 1998 Incentive Share Plan. The stock options vest over a four-year period as follows: 25% of the shares underlying the stock option vest immediately and the remaining shares shall become exercisable with respect to one-thirty-sixth (1/36) of the remaining shares as of the first day of the calendar month following the first anniversary of the vesting start date, subject to continued service through each applicable vesting date.
- (14) The amounts reported reflect shares of common stock underlying stock options granted in calendar year 2002 under our 2000 Incentive Share Plan. The stock options vest over a four-year period as follows: 25% of the shares underlying the stock option vest on the first anniversary of the vesting start date with the remainder vesting one-sixteenth (1/16) as of the first day of the calendar quarter (three-month period) following the vesting start date, subject to continued service through each applicable vesting date.

- (15) The amounts reported reflect shares of common stock underlying stock options granted in calendar year 2005 under our 2000 Incentive Share Plan. The stock options vest over a four-year period with respect to one-sixteenth (1/16) of the shares as of each three-month period following the vesting start date, subject to continued service through each applicable vesting date.

## **Agreements with Executive Officers**

### *Change of Control or Separation of Service Agreements with Chief Executive Officer and Other Executive Officers*

Each of Mr. Lin, Mr. Murry and Mr. J. Yeh has an agreement regarding change of control or separation of service with our company, which provides that, if our board of directors terminates his employment for any reason other than Cause or if he resigns for Good Reason before the occurrence of a Change in Control, as defined below, he will be entitled to receive (i) a payment equal to one year's base salary plus \$15,000, (which may be used for benefit continuation under COBRA or for any other purpose), (ii) a payment equal to his target bonus and (iii) in the case of Mr. Murry, a lump sum equal to Mr. Murry's four most recent commission payments. The severance benefits that may arise as a result of a termination prior to a Change of Control will be paid periodically in installments over the 12 months following his separation from service, subject to certain limitations including his execution of a release agreement. The release agreement would include a reasonable agreement to cooperate for a period of six months following the employment termination date and a mutual non-disparagement clause. In consideration of these benefits, he has agreed to be subject to a non-compete provision for a period of 12 months following his separation from service and would agree to maintain the confidentiality of company information. Mr. Dunn's and Mr. Chang's employment agreement do not provide for the above benefits.

Each employment agreement generally defines "Cause" as, following written notice to the executive and the executive's failure to cure such occurrence(s): (i) conviction or plea of nolo contendere to any felony offense or to a crime of moral turpitude; (ii) commission of willful misconduct or violation of law in connection with the performance of his duties, including (a) misappropriation of funds or property, (b) attempting to secure personally any profit in connection with any transaction entered into on behalf of our company, or (c) making any material misrepresentation to our board of directors, our company or its affiliates; (iii) material violation or failure to comply with our company policy; (iv) material breach of the employment agreement; or (v) the willful and continued failure or neglect to substantially perform his duties with our company. "Good Reason" is defined to include: (i) the executive's assignment to duties inconsistent with his position or title; (ii) reduction in his base compensation, except as part of an overall cost reduction program that affects all senior executives and does not disproportionately affect executive; (iii) any purported termination of the executive by our company other than for disability or Cause or a voluntary resignation initiated by the executive, except for a voluntary termination for Good Reason; (iv) failure of any successor entity to our company to expressly assume the employment agreement; and (v) material breach by our company of the agreement.

Each of Mr. Lin, Mr. Murry, Mr. J. Yeh, Mr. Dunn and Mr. Chang have provisions in their employment agreements that provide if, within one year after a Change of Control or within six months prior to a Change of Control, the executive's employment is terminated by the executive for Good Reason or by our company other than for Cause, the executive will instead be entitled to receive severance benefits consisting of: (i) a lump sum payment equal to one year's base salary plus \$10,000 (\$15,000 for Mr. Dunn and Mr. Chang) which may be used for benefit continuation under COBRA or for any other purpose; (ii) a lump sum payment equal to his target bonus; and (iii) accelerated vesting of the executive's stock options, with all vested options becoming exercisable for an extended period following termination of employment. The severance benefits that may arise as a result of termination within one year following a Change of Control will be paid on the later of the 60th day after the effective date of the executive's separation from service or six months and one day after executive's separation from service if the executive is, at the time of termination, a "specified employee" as defined under Section 409A of the Internal Revenue Code, as amended. Additionally, Mr. Lin's employment agreement provides him with a tax gross-up payment to make him whole for any excise taxes that he would owe resulting from the application of the 20% excise tax provisions under Section 280G of the Internal Revenue Code of 1986, as amended, that apply when certain "parachute payments" are paid to Mr Lin as the result of a Change of Control. None of the other employment agreements with our executive officers provide them with any right to a tax gross-up.

A "Change in Control" is deemed to occur if: (i) individuals who constitute the board of directors of our company on the date of the employment agreement (Incumbent Directors) cease to constitute at least a majority of our board of directors; provided, that any individual whose election or nomination for election by the stockholders was approved by a majority of the then Incumbent Directors shall be considered an Incumbent Director, with certain exceptions; or (ii) the stockholders of our company approve (1) any merger, consolidation or recapitalization of our company or any sale of substantially all of its assets where (a) the stockholders of our company prior to the transaction do not, immediately thereafter, own at least 51% of both the equity and voting power of the surviving entity or (b) the Incumbent Directors at the time of the approval of the transaction would not immediately thereafter constitute a majority of the board of directors of the surviving entity, or (2) any plan of liquidation or dissolution of our company.

## **Equity Compensation Plans**

### ***2013 Long-Term Incentive Plan***

Our board of directors and stockholders have adopted and approved our 2013 Long-Term Incentive Plan, or the 2013 Plan, which will become effective immediately prior to the closing of this offering. The following is a brief summary of the material terms of our 2013 Plan.

#### *Purpose*

The purpose of our 2013 Plan is to attract and retain employees, directors and consultants by providing them with additional incentives, and to promote the success of our company's business.

*Administration*

Our board of directors or one or more committees appointed by our board of directors will administer the 2013 Plan. For this purpose our board of directors has delegated general administrative authority for the 2013 Plan to the compensation committee. A committee may delegate some or all of its authority with respect to the 2013 Plan to another committee of directors and may delegate certain limited award grant authority to one or more officers of our company. (The appropriate acting body, be it our board of directors, a committee within its delegated authority, or an officer within his or her delegated authority, is referred to in this summary as the "Administrator.") The Administrator determines the number of shares that are subject to awards and the terms and conditions of such awards, including the price (if any) to be paid for the shares or the award. Along with other authority granted to the Administrator under the 2013 Plan, the Administrator may (i) determine fair market value, (ii) select recipients of awards, (iii) determine the number of shares subject to awards, (iv) approve form award agreements, (v) determine the terms and conditions of awards, (vi) reduce the exercise price of outstanding awards without participant consent, (vii) amend outstanding awards, and (viii) allow participants to satisfy withholding tax obligations through a reduction of shares.

*Eligibility*

Persons eligible to receive awards under the 2013 Plan include our officers, employees, consultants and member of our board of directors. The Administrator determines from time to time the participants to whom awards will be granted.

*Authorized shares; limits on awards*

The maximum number of common shares that may be issued or transferred pursuant to awards under the 2013 Plan equals 24,000,000, which number includes shares remaining available under our prior plans as described below and shares subject to outstanding awards forfeited back to our prior plans, all of which may be subject to incentive stock option treatment. The maximum aggregate number of common shares that may be issued pursuant to all awards under the 2013 Plan shall increase annually on the first day of each fiscal year following the adoption of the 2013 Plan by the number of common shares equal to the lesser of (i) 10,000,000 shares, (ii) 2% of the total issued and outstanding common shares on the first day of such fiscal year, or (iii) such lesser amount determined by our board of directors. Additionally, the maximum number of shares subject to those options and stock appreciation rights that are granted during any calendar year to any individual under the 2013 Plan is 18,000,000 shares.

To the extent that an award is settled in cash or a form other than shares, the shares that would have been delivered had there been no such cash or other settlement will not be counted against the shares available for issuance under the 2013 Plan. To the extent that shares are delivered pursuant to the exercise of a stock appreciation right or stock option, or to satisfy the tax withholding obligations under an award, then only the shares actually issued shall be counted against the applicable share limits. Shares that are subject to or underlie awards that expire or for any reason are cancelled or terminated, are forfeited, fail to vest, or for any other reason are not paid or delivered under the 2013 Plan will again be available for subsequent awards under the 2013 Plan. Additionally, shares that are exchanged by a participant or withheld by our company as full or partial payment in connection with any award under the 2013 Plan, as well as any shares exchanged by a participant or withheld by our company to satisfy the tax withholding obligations related to any award under the 2013 Plan, will be available for subsequent awards under the 2013 Plan and are not counted against the applicable share limits.

As is customary in incentive plans of this nature, the number and kind of shares available under the 2013 Plan and the then outstanding stock-based awards, as well as exercise or purchase prices, performance targets under certain performance-based awards and share limits, are subject to adjustment in the event of certain reorganizations, mergers, combinations, consolidations, recapitalizations, dividends, stock splits, a split-up or a spin-off, repurchases or exchange, or other similar events, or extraordinary dividends or distributions of property to the stockholders.

#### *Incentive awards*

The 2013 Plan authorizes stock options, stock appreciation rights, or SARs, restricted stock, restricted stock units, performance shares and performance units, as well as other awards (described in the 2013 Plan) that are responsive to changing developments in management compensation. The 2013 Plan retains the flexibility to offer competitive incentives and to tailor benefits to specific needs and circumstances. Any award may be paid or settled in cash. An option or SAR will expire, or other award will vest in accordance with the schedule set forth in the applicable award agreement.

- **Stock option.** A stock option is the right to purchase common shares at a future date at a specified price per share generally equal to, but no less than, the fair market value of a share on the date of grant. An option may either be an Incentive Stock Option, or ISO, or a nonstatutory stock option, or NSO. ISO benefits are taxed differently from NSOs, as described under "Federal Income Tax Treatment of Awards under the 2013 Plan," below. ISOs also are subject to more restrictive terms and are limited in amount by the Code and the 2013 Plan. Full payment for shares purchased on the exercise of any option must be made at the time of such exercise in a manner approved by the Administrator.
- **SAR.** A SAR is the right to receive payment of an amount equal to the excess of the fair market value of a common share on the date of exercise of the SAR over the base price of the SAR. The base price will be established by the Administrator at the time of grant of the SAR but will not be less than the fair market value of a share on the date of grant. SARs may be granted in connection with other awards or independently.
- **Restricted stock award.** A restricted stock award is typically for a fixed number of common shares subject to restrictions. The Administrator specifies the price, if any, the participant must pay for such shares and the restrictions (which may include, for example, continued service and/or performance standards) imposed on such shares. A stock bonus may be granted by the Administrator to any eligible person to reward exceptional or special services, contributions or achievements in the manner and on such terms and conditions (including any restrictions on such shares) as determined from time to time by the Administrator. The number of shares so awarded shall be determined by the Administrator and may be granted independently or in lieu of a cash bonus.
- **Restricted stock unit.** A restricted stock unit is similar to a SAR except that it entitles the recipient to receive an amount equal to the fair market value of a common share.



- **Performance-based award.** A performance-based award is designed to satisfy the requirements for deductibility under Section 162(m) of the Code (in addition to other awards expressly authorized under the 2013 Plan which may also qualify as performance-based) and may be based on the performance of our company and/or one or more of our subsidiaries, divisions, segments, or units. The business criteria from which performance goals will be established are listed in the 2013 Plan under the term "Performance Goals." Performance goals may be adjusted to reflect certain changes, including reorganizations, liquidations and capitalization and accounting changes, to the extent permitted by Section 162(m). Performance-based awards may be stock-based (payable in stock only or in cash or stock) or may be cash-only awards (in either case, subject to the limits described under the heading "Authorized Shares; Limits on Awards" above). Before any performance-based award is paid, the Administrator must certify that the performance goals have been satisfied. The Administrator has discretion to determine the performance goals and restrictions or other limitations of the individual awards and reserves discretion to reduce payments below maximum award limits.

The Administrator may grant stock unit awards and permit deferred payment of awards, and may determine the form and timing of payment, vesting and other terms applicable to stock units or deferrals.

*Acceleration of awards; possible early termination of awards*

Upon a change in control of our company, outstanding awards under the 2013 Plan will be assumed or substituted on the same terms. However, if the successor corporation does not assume or substitute the outstanding awards, then vesting of these awards will fully accelerate, and in the case of options or stock appreciation rights, will become immediately exercisable. For this purpose a change in control is defined to include certain changes in the majority of our board of directors, the sale of all or substantially all of our company's assets and the consummation of certain mergers or consolidations.

*Transfer restrictions*

Subject to certain exceptions, awards under the 2013 Plan are not transferable by the recipient other than by will or the laws of descent and distribution and are generally exercisable, during the recipient's lifetime, only by him or her.

*Termination of or changes to the 2013 Plan*

Our board of directors may amend or terminate the 2013 Plan at any time and in any manner. Unless required by applicable law or listing agency rule, stockholder approval for any amendment will not be required. Unless previously terminated by our board of directors, the 2013 Plan will terminate on \_\_\_\_\_, 2023. Generally speaking, outstanding awards may be amended, subject, however, to the consent of the holder if the amendment materially and adversely affects the holder.

*Federal income tax treatment of awards under the 2013 Plan*

Federal income tax consequences (subject to change) relating to awards under the 2013 Plan are summarized in the following discussion. This summary is not intended to be exhaustive and, among other considerations, does not describe the deferred compensation provisions of Section 409A of the U.S. Internal Revenue Code to the extent an award is subject to and does not satisfy those rules, nor does it describe state, local, or international tax consequences.

For "NSOs," our company is generally entitled to deduct (and the optionee recognizes taxable income in) an amount equal to the difference between the option exercise price and the fair market value of the shares at the time of exercise. For ISOs, our company is generally not entitled to a deduction nor does the participant recognize income at the time of exercise. The current federal income tax consequences of other awards authorized under the 2013 Plan generally follow certain basic patterns: SARs are taxed and deductible in substantially the same manner as NSOs; nontransferable restricted stock subject to a substantial risk of forfeiture results in income recognition equal to the excess of the fair market value over the price paid (if any) only at the time the restrictions lapse (unless the recipient elects to accelerate recognition as of the date of grant); bonuses and performance share awards are generally subject to tax at the time of payment; cash-based awards are generally subject to tax at the time of payment; and compensation otherwise effectively deferred is taxed when paid. Our company will generally have a corresponding deduction at the time the participant recognizes income. However, as for those awards subject to ISO treatment, our company would generally have no corresponding compensation deduction.

If an award is accelerated under the 2013 Plan in connection with a change in control (as this term is used under the Code), our company may not be permitted to deduct the portion of the compensation attributable to the acceleration ("parachute payments") if it exceeds certain threshold limits under the Code (and certain related excise taxes may be triggered). Furthermore, the aggregate compensation in excess of \$1,000,000 attributable to awards which are not "performance-based" within the meaning of Section 162(m) of the Code, or do not fall within any other applicable exception, may not be permitted to be deducted by our company in certain circumstances.

#### ***Various Incentive Share Plans***

Our board of directors previously adopted, and our stockholders previously approved, the 1998 Share Incentive Plan, the 2000 Share Incentive Plan, the 2004 Share Incentive Plan and the 2006 Share Incentive Plan, which are referred to collectively as our Prior Plans. As of April 30, 2013, we had 22,316,816 shares of common stock subject to outstanding stock options under our Prior Plans with a weighted average exercise price of \$0.2216. Following this offering and in connection with the effectiveness of our 2013 Plan, no further awards will be granted under the Prior Plans. However, all outstanding awards under the Prior Plans will continue to exist and will continue to be governed by their existing terms. Upon a change in control of our company, as described in each of the Prior Plans, the vesting of stock options and other outstanding awards under the Prior Plans will be accelerated and all unexercised awards will terminate upon the change in control to the extent the acquirer does not assume the outstanding stock options.

#### ***Section 401(k) Plan***

We maintain a tax-qualified retirement plan that provides eligible employees with an opportunity to save for retirement on a tax-advantaged basis. All participants' interests in their contributions are 100% vested when contributed. Historically, we have not made any matching contributions to the Section 401(k) plan. Pre-tax contributions are allocated to each participant's individual account and are then invested in selected investment alternatives according to the participants' directions. The retirement plan is intended to qualify under Sections 401(a) and 501(a) of the Code.

## **Indemnification of Directors and Officers and Limitation of Liability**

As permitted by Delaware General Corporation Law, we have adopted provisions in our amended and restated certificate of incorporation and amended and restated bylaws to be in effect immediately prior to the closing of this offering that limit or eliminate the personal liability of our directors. Consequently, a director will not be personally liable to us or our stockholders for monetary damages for breach of fiduciary duty as a director, except for liability for:

- any breach of the director's duty of loyalty to us or our stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- any unlawful payments related to dividends or unlawful stock repurchases, redemptions or other distributions; or
- any transaction from which the director derived an improper personal benefit.

These limitations of liability do not alter director liability under the federal securities laws and do not affect the availability of equitable remedies such as an injunction or rescission. In addition, our amended and restated bylaws to be in effect immediately prior to the closing of this offering provide that:

- we will indemnify, to the fullest extent permitted by law, any person who is or was a party or is threatened to be made a party to any action, suit or proceeding by reason of the fact that he or she is or was one of our directors or officers or is or was serving at our request as a director or officer of another corporation, partnership, joint venture, trust, or other enterprise;
- we may indemnify to the fullest extent permitted by law any person who is or was a party or is threatened to be made a party to any action, suit, or proceeding by reason of the fact that he or she is or was one of our employees or agents or is or was serving at our request as an employee or agent of another corporation, partnership, joint venture, trust, or other enterprise; and
- we must advance expenses incurred by or on behalf of a director or officer in advance of the final disposition of any action or proceeding, subject to very limited exceptions.

## **Indemnification Agreements**

We have entered into agreements that indemnify each of our directors and certain of our executive officers, in addition to the indemnification provided for in our amended and restated certificate of incorporation and amended and restated bylaws that will be in effect immediately prior to the closing of this offering. These agreements, among other things, provide for indemnification for judgments, fines, settlement amounts and expenses, including attorneys' fees incurred by the director or executive officer in any action or proceeding, including any action by or in our right, arising out of the person's services as a director or executive officer, or any other company or enterprise to which the person provides services at our request. We believe that these provisions and agreements are necessary to attract and retain qualified persons as directors and executive officers.

The limitations on liability and indemnification provisions in our amended and restated certificate of incorporation and amended and restated bylaws upon our completion of this offering may discourage stockholders from bringing a lawsuit against our directors for breach of their fiduciary duty and may reduce the likelihood of derivative litigation against our directors and officers, even though a derivative action, if successful, might otherwise benefit us and our stockholders. A stockholder's investment in us may be adversely affected to the extent we pay the costs of settlement or damage awards against our directors and officers under these indemnification provisions.

At present, there is no pending litigation or proceeding involving any of our directors or officers in which indemnification is sought, nor are we aware of any threatened litigation that may result in claims for indemnification.

## CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Other than compensation agreements and other arrangements which are described as required under "Management" and the transactions described below, since January 1, 2010, there has not been, and there is not currently proposed, any transaction or series of similar transactions to which we were or will be a party in which the amount involved exceeded or will exceed \$120,000 and in which any director, executive officer, holder of five percent or more of any class of our capital stock, or any member of their immediate family had or will have a direct or indirect material interest. Our audit committee will be responsible for approving all future transactions between us and our officers, directors and principal stockholders and their affiliates.

### Loans from Stockholders

On February 3, 2010, we entered into a promissory note with Lina Yeh in the principal amount of \$200,000 at an interest rate of 6%. Lina Yeh is the wife of William Yeh, a member of our board of directors. The principal balance of \$200,000 was converted to acquire 571,427 shares of Series G preferred stock in August 2012 at a price of \$0.35 per share, and the remaining interest amount of \$7,715 under the promissory note was paid off in September 2012. In connection with the promissory note, Lina Yeh was also issued warrants to acquire 96,000 shares of Series F preferred stock at a price of \$0.25 per share, and 23,555 shares of Series G preferred stock at a price of \$0.60 per share. The warrants expire upon the closing of this offering.

On February 8, 2010, we entered into (i) a promissory note with Techgains Global Corporation in the aggregate principal amount of \$150,000 at an interest rate of 6% and (ii) a promissory note with Techgains Pan Pacific Corporation in the aggregate principal amount of \$150,000 at an interest rate of 6%. Juen-Sheng (Andrew) Kang, the Chairman of our board of directors, is a shareholder and a member of the board of directors of both Techgains Global Corporation and Techgains Pan Pacific Corporation. The remaining principal balance and the remaining interest of \$319,159 under the two promissory notes was converted to acquire 911,882 shares of Series G preferred stock in September 2012 at a price of \$0.35 per share. In connection with the promissory notes, Techgains Global Corporation and Techgains Pan Pacific Corporation each received warrants to acquire (i) 72,000 shares of Series F preferred stock at a price of \$0.25 per share and (ii) 26,666 shares of Series G preferred stock at a price of \$0.60. The warrants expire upon the closing of this offering.

On February 11, 2010, we entered into (i) a promissory note with Budworth Investments Limited in the aggregate principal amount of \$175,000 at an interest rate of 6% and (ii) a promissory note with Harbinger III Venture Capital Corp. in the aggregate principal amount of \$75,000 at an interest rate of 6%. Chih-Kai (C.K.) Chen, a former member of our board of directors, is a shareholder, co-founder and general partner of both Budworth Investments Limited and Harbinger III Venture Capital Corp. The principal balance and interest owed under the two promissory notes were paid off in September 2011. In connection with the promissory notes, Budworth Investments Limited and Harbinger III Venture Capital Corp. received warrants to acquire an aggregate of 120,000 shares of Series F preferred stock at a price of \$0.25 per share. The warrants expire upon the closing of this offering.

We entered into (i) a promissory note with Robinhood III, LP on February 25, 2010 in the aggregate principal amount of \$300,000 at an interest rate of 6% and (ii) a promissory note with Robinhood III, LP on April 21, 2010 in the aggregate principal amount of \$550,000 at an interest rate of 6%. Nancy T. Chang, a former member of our board of directors is the sole beneficiary and the President of the general partner of Robinhood III, LP, and entities affiliated with

Robinhood III, LP beneficially own more than five percent of any class of our capital stock. The principal balance and interest owed under one promissory note was paid off in August 2011 and the principal balance and interest owed under the other promissory note was paid off in November 2011. In connection with the promissory notes, Robinhood III, LP received warrants to acquire an aggregate of 408,000 shares of Series F preferred stock at a price of \$0.25 per share. The warrants expire upon the closing of this offering.

On April 23, 2010, we entered into a promissory note with Helix Micro, Inc. the aggregate principal amount of \$1,000,000 at an interest rate of 6%. Juen-Sheng (Andrew) Kang, the Chairman of our board of directors, is a shareholder and the former chairman of the board of directors of Helix Micro, Inc. The remaining principal balance of \$1,000,000 under the promissory note was initially converted to acquire 1,666,666 shares of Series G preferred stock in December 2011 at a price of \$0.60 per share, which number of shares was subsequently adjusted to an aggregate of 2,857,142 shares of Series G preferred stock at a price of \$0.35 per share in September 2012 as a result of the second closing of our Series G private placement. The remaining interest of \$102,445 owed under the promissory note was paid off in January 2012. In connection with the promissory note, Helix Micro, Inc. was issued warrants to acquire (i) 480,000 shares of Series F preferred stock at a price of \$0.25 per share and (ii) 22,222 shares of Series G preferred stock at a price of \$0.60. The warrants expire upon the closing of this offering.

### **Consulting Services**

On April 1, 2009, William H. Yeh, a member of our board of directors, began providing us with certain financial consulting services. The compensation arrangement for such services was formalized on October 19, 2009 through a letter agreement that we entered into with Mr. Yeh. Pursuant to this letter agreement, we agreed to grant Mr. Yeh 4,000 shares of common stock as compensation for each month of such services that Mr. Yeh rendered to us. As a result, we granted Mr. Yeh 64,000 shares of common stock on August 1, 2010 for 16 months of services rendered and 40,000 shares of common stock on June 1, 2011 for 10 months of services rendered. As of May 31, 2011, Mr. Yeh ceased to render such services.

### **Private Placement of Securities**

On December 31, 2011, we issued and sold an aggregate of 6,676,916 shares of Series G preferred stock to twenty-five investors, at a price of \$0.60 per share, in the initial closing of our Series G private placement. On September 7, 2012, we issued and sold an additional 31,410,977 shares of Series G preferred stock to fifty-four investors, at a price of \$0.35 per share, in the second closing of our Series G private placement. In connection with the second closing of our Series G private placement, we agreed to amend the per share price of our Series G preferred stock issued under the initial closing of our Series G private placement from \$0.60 per share to \$0.35 per share and, as a result, an additional 4,769,215 shares of Series G preferred stock were issued to the investors in connection with the initial closing of our Series G private placement.

On December 31, 2011, we also issued warrants to purchase 1,001,536 shares of Series G preferred stock, with exercise price of \$0.60 per share in connection with the initial closing of our Series G private placement to the investors in the private placement. However, those warrants were terminated as a result of the second closing of our Series G private placement. None of these warrants were exercised prior to their termination.

Of the aggregate 42,857,108 shares of Series G preferred stock issued in the Series G private placement, 10,457,931 shares were sold for an aggregate price of \$3,660,277.90 to investors that,

at such time, were beneficially owned by either directors, executive officers, holders of five percent or more of any class of our capital stock, or members of their immediate families, consisting of 2,857,142 shares sold to Helix Micro, Inc., 1,027,369 shares sold to Techgains Global Corporation, 1,598,798 shares sold to Techgains Pan Pacific Corporation, 714,285 shares sold to Techgains Pacific Century Fund, 571,428 shares sold to Technology Associates Management Company, Ltd., 3,016,196 shares sold to Robinhood III, LP, 29,154 shares sold to Heather B. Black, 72,132 shares sold to Richard B. Black and 571,427 shares sold to William H. Yeh. In connection with the closing of this offering, it is expected that the outstanding shares of Series G preferred stock will convert into 42,857,108 shares of our common stock. See "Principal and Selling Stockholders" for more detail on the shares of our stock held by these investors.

### **Registration Rights**

We provided registration rights to our holders of common stock and redeemable Series A preferred stock in connection with this offering, including Chih-Hsiang (Thompson) Lin, an executive officer, director and holder of five percent or more of our common stock, Stefan J. Murry, Hung-Lun (Fred) Chang, Klaus Alexander Anselm, Richard B. Black and Alex Ignatiev, who are certain of our executive officers and directors, and entities associated with Techgains Global Corporation and Techgains Pan Pacific Corporation, Shiu-Mei Lin Chou, Yaun-Chung Hsu, Wei-Chien Wu and Yuanpin Hsu, each of which is a holder of five percent or more of a class of our capital stock. Such rights are subject to conditions and limitations at the sole discretion of our board of directors.

Additionally, we entered into registration rights agreements with our investors in connection with our Series C, D, E, F and G preferred stock private placements. As a result, following the closing of this offering, the holders of approximately      shares of our common stock will be eligible to exercise certain rights with respect to the registration of such shares under the Securities Act. See "Description of Capital Stock—Registration rights."

### **Stockholders' Agreement**

Beginning in 2000, we entered into a shareholders' agreement with stockholders who purchased shares of our preferred stock, which agreement has been amended to include additional investors and to make other changes at the time of each of our preferred stock private placements. The shareholders' agreement was most recently amended on January 14, 2011. The shareholders' agreement contains rights of first refusal and information rights and will terminate in accordance with its terms upon the closing of this offering.

### **Indemnification and Change in Control Agreements**

We have agreed to indemnify our directors and our executive officers under certain circumstances and have purchased directors' and officers' liability insurance. The indemnification agreements and our amended and restated certificate of incorporation and amended and restated bylaws require us to indemnify our directors and officers to the fullest extent permitted by Delaware law. See "Management—Indemnification of directors and officers and limitation of liability" and "—Indemnification agreements. We have also entered into change in control agreements with our executive officers. See "Management—Agreements with Executive Officers."

## **Stock Option Awards**

For information regarding stock option awards to our named executive officers and directors in 2012, see "Executive Compensation—Summary Compensation Table" and "Executive Compensation—Outstanding equity awards at fiscal year-end." In addition, on January 18, 2013, our board of directors granted a stock option for 2,740,000 shares of our common stock to Chih-Hsiang (Thompson) Lin, a stock option for 520,000 shares of our common stock to Stefan J. Murry, a stock option for 380,000 shares of our common stock to Hung-Lun (Fred) Chang and a stock option for 300,000 shares of our common stock to James L. Dunn, Jr., each with an exercise price of \$0.25 per share.

On April 12, 2013, our board of directors approved a plan to grant stock options to Mr. Lin, to be effective upon the completion of the offering, to be exercisable for a number of shares of our common stock such that Mr. Lin will hold stock and stock options for an aggregate of 6% of our outstanding securities on an as-converted and on an as-exercised basis, as of the closing of the offering. On April 12, 2013, our board of directors also approved a plan to grant stock options to members of our management team, including our other executive officers, to be effective upon the completion of the offering, which stock options are to be exercisable for shares of our common stock equal to, in the aggregate, 1% of our common stock, of our outstanding securities on an as-converted and on an as-exercised basis, as of the closing of the offering. Our board of directors has yet to allocate these stock options to specific members of our management team. Such stock options for Mr. Lin and other members of our management team will have an exercise price equal to the closing price of our common stock on the NASDAQ Global Market on the closing date of the offering.

Each of the stock options described above vest over a four year period, with 25% of the shares subject to each such option vesting on the first anniversary of the vesting commencement date and one sixth of the remaining shares vesting on the first day of each succeeding six month period, in each case subject to the optionee's continued service. Such vesting is subject to acceleration in the event of our change of control or the optionee's death, disability or retirement.

## **Review, Approval and Ratification of Transactions with Related Parties**

Prior to this offering, our board of directors reviewed and approved transactions with directors, officers and holders of five percent or more of our common stock of any class of our capital stock, each of whom is a related party. Prior to our board of directors' consideration of a transaction with a related party, the material facts as to the related party's relationship or interest in the transaction were disclosed to our board of directors, and the transaction was approved by our board of directors unless a majority of the directors who were not interested in the transaction approved the transaction. In March 2013, we adopted a new audit committee charter and put into place a related party transactions policy that will require, among other items, that such transactions must be approved by our audit committee.



## PRINCIPAL AND SELLING STOCKHOLDERS

The following table sets forth the beneficial ownership information of our common stock as of April 30, 2013, and as adjusted to reflect the sale of the shares of common stock in this offering, for:

- each person known to us to be the beneficial owner of more than 5% of our common stock outstanding, on an as-converted basis;
- each named executive officer;
- each of our directors;
- all of our executive officers and directors as a group; and
- each selling stockholder.

We have determined beneficial ownership in accordance with the rules of the SEC. These rules generally attribute beneficial ownership of securities to persons who possess sole or shared voting power or investment power with respect to those securities and include stock options and warrants that are immediately exercisable or exercisable within 60 days. Except as indicated by the footnotes below, we believe, based on the information furnished to us, that the persons and entities named in the table below have sole voting and investment power with respect to all shares of common stock beneficially owned by them, subject to applicable community property laws. This information is not necessarily indicative of beneficial ownership for any other purpose.

In computing the number of shares of common stock beneficially owned by a person and the percentage ownership of that person, we deemed to be outstanding shares of common stock and preferred stock subject to options or warrants held by that person that are currently exercisable or exercisable within 60 days of April 30, 2013 on an as-converted basis. We did not deem these shares outstanding, however, for the purpose of computing the percentage ownership of any other person. Beneficial ownership representing less than 1.0% is denoted with an asterisk (\*).

Percentage ownership calculations for beneficial ownership before this offering are based on 269,068,697 shares of common stock outstanding, on an as-converted basis assuming the conversion of all of the outstanding preferred stock. Percentage ownership calculations for beneficial ownership after this offering also include shares we are offering hereby. This table assumes no exercise of the underwriters' option to purchase additional shares in the offering.

Names of Beneficial owner	Shares beneficially owned before the offering		Shares being offered		Shares beneficially owned after the offering	
	Number	Percent	Number	Percent	Number	Percent
<b>Other 5% or Greater Stockholders:</b>						
Entities associated with Technology Associates Management Company, Ltd. (1)	23,389,001	8.7%				
Entities associated with Robinhood II, LP (2)	20,111,914	7.5%				
<b>Certain Other Selling Stockholders:</b>						
<b>Directors and Named Executive Officers:</b>						
Chih-Hsiang (Thompson) Lin (3)	3,487,195	1.3%				
Juen-Sheng (Andrew) Kang (1)	23,389,001	8.7%				
William H. Yeh (4)	2,737,956	1.1%				
Richard B. Black (5)	991,595	*				
Alex Ignatiev	136,869	*				
Min-Chu (Mike) Chen	57,428	*				
Alan Moore	2,975,593	1.1%				
Hung-Lun (Fred) Chang (6)	576,749	*				
Stefan J. Murry (7)	728,749	*				
Klaus Alexander Anselm (8)	492,562	*				
All executive officers and directors as a group (13 persons) (9)	58,470,394	21.7%				

(1) Includes (i) stock options to purchase 178,334 shares of common stock held by Juen-Sheng (Andrew) Kang, (ii) warrants to purchase 72,000 shares of Series F preferred stock convertible to 86,401 shares of common stock and 26,666 shares of Series G preferred stock convertible to 26,666 shares of common stock held by Techgains Global Corporation on an as-converted basis and (iii) warrants to purchase 72,000 shares of Series F preferred stock convertible to 86,401 shares of common stock and 26,666 shares of Series G preferred stock convertible to 26,666 shares of common stock held by Techgains Pan Pacific Corporation on an as-converted basis assuming the conversion of all of the outstanding preferred stock, which in each case is exercisable within 60 days of April 30, 2013. Also includes (a) 5,887,041 shares held of record by Techgains Global Corporation, (b) 4,676,658 shares held of record by Techgains Pacific Century Fund, LP, (c) 11,849,406 shares held of record by Techgains Pan Pacific Corporation and (d) 571,428 shares held of record by Technology Associates Management Company, Ltd., in each case on an as-converted basis assuming the conversion of all of the outstanding shares of preferred stock. Mr. Kang has the power to direct investments and/or has the sole power to vote the securities owned by Technology Associates Management Company, Ltd., as its managing director. Mr. Kang also has the sole power to vote the securities owned by Techgains Pan Pacific Corporation, Techgains Global Corporation and Techgains Pacific Century Fund LP, pursuant to investment management arrangements with these entities. The principal address of the entities associated with Technology Associates Management Company, Ltd. is 5052 Tennyson Parkway, Suite 100 Plano, Texas 75024. Mr. Kang disclaims any and all pecuniary interests and beneficial ownership interests in the shares of the Company held by the foregoing entities. Tekkang Management Consulting Inc., the majority shareholder of Technology Associates Management Company Ltd., holds of record 6,776,463 shares of our common stock, on an as-converted basis. Tekkang Management Consulting Inc. does not have any power, whether by itself or shared with others, to direct investments or to vote the securities of the Company held by Techgains Pan Pacific Corporation, Techgains Global Corporation and Techgains Pacific Century Fund LP. Mr. Kang is not a shareholder, director or officer of the majority shareholder of Tekkang Management Company Inc., and has no voting or investment control over the shares held of record by such majority shareholder. Tekkang Management Company Inc.

disclaims any and all pecuniary interests and beneficial ownership interests in the shares of the Company held by Techgains Pan Pacific Corporation, Techgains Global Corporation and Techgains Pacific Century Fund LP.

- (2) Includes stock options to purchase 109,664 shares of common stock held by Nancy T. Chang that are exercisable within 60 days of April 30, 2013. Also includes (a) 12,632,238 shares held of record by Robinhood II, LP, (b) 7,333,343 shares held of record by Robinhood III, LP and (c) 36,669 shares held of record by Ms. Chang. Ms. Chang resigned as a member of our board of directors on March 22, 2013. Ms. Chang has the power to direct investments and/or has the sole power to vote the securities owned by Robinhood II, LP and Robinhood III, LP, as the sole beneficiary and president of the general partner of such entities. The principal address of the entities associated with Robinhood II, LP is 101 Wescott St. #603, Houston, Texas 77007.
- (3) Includes stock options to purchase 1,853,734 shares of common stock that are exercisable within 60 days of April 30, 2013.
- (4) Includes stock options to purchase 163,164 shares of common stock, and warrants held by Lina Yeh to purchase 96,000 shares of Series F preferred stock convertible to 115,201 shares of common stock and 23,555 shares of Series G preferred stock convertible to 23,555 shares of common stock, which in each is exercisable within 60 days of April 30, 2013. Also includes 414,800 shares of common stock held of record by Ms. Yeh. Ms. Yeh is Mr. Yeh's spouse.
- (5) Includes stock options to purchase 37,500 shares of common stock that are exercisable within 60 days of April 30, 2013. Also includes 244,995 shares of common stock held of record by Heather Black. Ms. Black is Mr. Black's spouse.
- (6) Includes stock options to purchase 499,267 shares of common stock that are exercisable within 60 days of April 30, 2013.
- (7) Includes stock options to purchase 661,849 shares of common stock that are exercisable within 60 days of April 30, 2013.
- (8) Includes stock options to purchase 382,562 shares of common stock that are exercisable within 60 days of April 30, 2013.
- (9) Includes (i) stock options to purchase 4,488,573 shares of common stock that are exercisable within 60 days of April 30, 2013, (ii) warrants to purchase 240,000 shares of Series F preferred stock convertible to 288,003 shares of common stock that are exercisable within 60 days of April 30, 2013 and (iii) warrants to purchase 76,887 shares of Series G preferred stock convertible to 76,887 shares of common stock within 60 days of April 30, 2013.

## DESCRIPTION OF CAPITAL STOCK

### General

The following description of our capital stock is intended as a summary only and is qualified in its entirety by reference to our amended and restated certificate of incorporation and amended and restated bylaws to be in effect immediately prior to the closing of this offering, which are filed as exhibits to the registration statement, of which this prospectus forms a part.

Upon completion of this offering, our authorized capital stock will consist of 45,000,000 shares of common stock, par value \$0.001 per share, and 5,000,000 shares of undesignated preferred stock, par value \$0.001 per share.

### Common Stock

As of March 31, 2013, there were 268,920,162 shares of our common stock outstanding and held of record by 353 stockholders, on an as-converted basis assuming the conversion of all outstanding shares of preferred stock. Holders of our common stock are entitled to one vote for each share of common stock held of record for the election of directors and on all matters submitted to a vote of stockholders. Holders of our common stock are also entitled to receive dividends ratably, if any, as may be declared by our board of directors out of legally available funds, subject to any preferential dividend rights of any preferred stock then outstanding. Upon our dissolution, liquidation or winding up, holders of our common stock are entitled to share ratably in our net assets legally available after the payment of all our debts and other liabilities, subject to the preferential rights of any preferred stock then outstanding. Holders of our common stock have no subscription, preemptive, redemption or conversion rights. The rights, preferences and privileges of holders of common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock that we may designate and issue in the future. Except with respect to the election of directors (which shall be determined by our stockholders by a plurality of the votes cast by the stockholders entitled to vote on the election) and as described below in "Provisions of our Certificate of Incorporation and Bylaws and Delaware Anti-Takeover Law," a majority vote of common stockholders is generally required to take action under our amended and restated certificate of incorporation and amended and restated bylaws.

### Preferred Stock

Upon the completion of this offering, our board of directors will be authorized, without action by the stockholders, to designate and issue up to an aggregate of 5,000,000 shares of preferred stock in one or more series. The board of directors can fix the rights, preferences and privileges of the shares of each series and any of its qualifications, limitations or restrictions. Our board of directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of common stock. The issuance of preferred stock, while providing flexibility in connection with possible future financings and acquisitions and other corporate purposes could, under certain circumstances, have the effect of delaying, deferring or preventing a change in control of our company and might harm the market price of our common stock.

Our board of directors will make any determination to issue such shares based on its judgment as to our company's best interests and the best interests of our stockholders. We have no current plans to issue any shares of preferred stock.

## Warrants

As of March 31, 2013, we had outstanding warrants to purchase:

- 300,000 shares of our common stock with an exercise price of \$0.20 per share. This warrant will automatically convert upon the closing of this offering, unless earlier exercised by the holder, into a number of common shares determined by dividing (i) the aggregate fair market value of the underlying shares less the aggregate cost of those shares (using the exercise price of \$0.20) by (ii) the then fair market value of one share. The fair market value of the shares are determined by either the closing price of the shares if traded on an exchange or the board of directors of the Company, if not traded on an exchange.
- 1,080,000 shares of our Series F preferred stock with an exercise price of \$0.25 per share. These warrants will automatically convert upon the closing of this offering, unless earlier exercised by the holder, into a number of common shares determined by dividing (i) the aggregate fair market value of the underlying shares less the aggregate cost of those shares (using the exercise price of \$0.25) by (ii) the then fair market value of one share. The fair market value of the shares are determined by either the closing price of the shares if traded on an exchange or the board of directors of the Company, if not traded on an exchange.
- 650,000 shares of our Series F preferred stock with a weighted average exercise price of \$0.38462 per share of which 250,000 shares are exercisable under a warrant issued to our U.S. lender with an exercise price of \$0.60 per share. If these warrants have not been exercised prior to the closing of the offering, then, pursuant to their terms, the warrants shall automatically adjust to be exercisable for an aggregate of 780,011 shares of common stock at a weighted average exercise price of \$0.32051 per share.
- 182,442 shares of our Series G preferred stock with an exercise price of \$0.60 per share. These warrants will automatically convert upon the closing of this offering, unless earlier exercised by the holder, into a number of common shares determined by dividing (i) the aggregate fair market value of the underlying shares less the aggregate cost of those shares (using the exercise price of \$0.60) by (ii) the then fair market value of one share. The fair market value of the shares are determined by either the closing price of the shares if traded on an exchange or the board of directors of the Company, if not traded on an exchange.
- 200,000 shares of our Series G preferred stock with an exercise price of \$0.35 per share. If this warrant has not been exercised prior to closing of the offering, then pursuant to its terms, the warrant shall automatically adjust to be exercisable for 200,000 shares of common stock at \$0.35 per share.

## Registration Rights

Our board of directors approved giving certain registration rights to holders of our common stock and our redeemable Series A preferred stock in connection with this offering which rights are subject to conditions and limitations at the sole discretion of our board of directors, which rights are subject to conditions and limitations at the sole discretion of our board of directors. We have also entered into agreements with holders of our Series C, D, E, F and G preferred stock that give certain registration rights to such holders. Following the completion of this offering, there will be \_\_\_\_\_ shares of our common stock, issued upon conversion of our preferred stock,

entitled to such registration rights, excluding the shares issuable upon the exercise of warrants for our preferred stock. The registration rights granted under these registration rights agreements are subject to conditions and limitations, including our right to limit the number of shares included in such a registration upon advisement of the managing underwriter and our right not to effect a requested registration if the aggregate price to the public is less than \$2,000,000.

*Demand registration rights*

At any time more than 180 days after the effective date of this offering, the holders of a majority of the shares of common stock issued upon conversion of our Series C, D, E, F and G preferred stock, subject to exceptions, are entitled to demand registration of all or any of such shares and require us to file a registration statement under the Securities Act at our expense.

*S-3 demand registration rights*

Following the closing of this offering, the holders of the shares of common stock issued upon conversion of our Series C, D, E, F and G preferred stock, subject to exceptions, are entitled to demand registration rights pursuant to which they may require us to file, as soon as practicable, one registration statement under the Securities Act on Form S-3 in any 12-month period with respect to these shares. We have the ability to delay the filing of a registration statement under specified conditions, such as if we are in possession of material non-public information that would not be in our best interests to disclose.

*Piggyback registration rights*

If we propose to register any of our securities under the Securities Act for our own account or the account of any other holder, the holders of the shares of common stock issued upon conversion of our Series C, D, E, F and G preferred stock are entitled to notice of such registration and are entitled to include these shares in the registration, subject to exceptions, including our right to limit the number of shares included in the registration.

We will pay all registration expenses, other than underwriting discounts and commissions and certain other expenses (including all fees and expenses of the consultants, advisors, attorneys, special experts and other third parties engaged by the holders of the shares of common stock issued upon conversion of our common stock and Series A, C, D, E, F and G preferred stock, and all relevant taxes, including transfer taxes), related to the foregoing demand, S-3 or piggyback registration rights. The registration rights agreements contain customary cross-indemnification provisions, pursuant to which we are obligated to indemnify the selling stockholders in the event of material misstatements or omissions in the registration statement attributable to us, and they are obligated to indemnify us for material misstatements or omissions attributable to them.

**Provisions of Our Certificate of Incorporation and Bylaws and Delaware Anti-Takeover Law**

Our amended and restated certificate of incorporation and amended and restated bylaws will, immediately prior to the closing of this offering, include a number of provisions that may have the effect of encouraging persons considering unsolicited tender offers or other unilateral takeover proposals to negotiate with our board of directors rather than pursue non-negotiated takeover attempts. These provisions include the items described below.

*Board composition and filling vacancies*

In accordance with our amended and restated certificate of incorporation, our board of directors is divided into three classes serving staggered three year terms, with one class being elected each year. Our amended and restated certificate of incorporation also provides that directors may be removed only for cause and then only by the affirmative vote of the holders of 66<sup>2</sup>/<sub>3</sub>% or more of the shares then entitled to vote at an election of directors. Furthermore, any vacancy on our board of directors, however occurring, including a vacancy resulting from an increase in the size of our board of directors, may only be filled by the affirmative vote of a majority of our directors then in office even if less than a quorum.

*No written consent of stockholders*

Our amended and restated certificate of incorporation provides that all stockholder actions are required to be taken by a vote of the stockholders at an annual or special meeting, and that stockholders may not take any action by written consent in lieu of a meeting.

*Meetings of stockholders*

Our amended and restated bylaws provide that only a majority of the members of our board of directors then in office, the Chairman of the board of directors or the Chief Executive Officer may call special meetings of stockholders and only those matters set forth in the notice of the special meeting may be considered or acted upon at a special meeting of stockholders. Our amended and restated bylaws limit the business that may be conducted at an annual meeting of stockholders to those matters properly brought before the meeting.

*Advance notice requirements*

Our amended and restated bylaws establish advance notice procedures with regard to stockholder proposals relating to the nomination of candidates for election as directors or new business to be brought before meetings of our stockholders. These procedures provide that notice of stockholder proposals must be timely given in writing to our corporate secretary before the meeting at which the action is to be taken. Generally, to be timely, notice must be received at our principal executive offices not less than 90 days or more than 120 days before the first anniversary date of the annual meeting for the preceding year. The notice must contain certain information specified in the amended and restated bylaws.

*Amendment to bylaws and certificate of incorporation*

As required by the Delaware General Corporation Law, any amendment of our amended and restated certificate of incorporation must first be approved by a majority of our board of directors and, if required by law or our amended and restated certificate of incorporation, thereafter be approved by a majority of the outstanding shares entitled to vote on the amendment, and a majority of the outstanding shares of each class entitled to vote thereon as a class, except that the amendment of the provisions relating to stockholder action, directors, limitation of liability and the amendment of our amended and restated bylaws and amended and restated certificate of incorporation must be approved by not less than 66<sup>2</sup>/<sub>3</sub>% of the outstanding shares entitled to vote on the amendment, and not less than 66<sup>2</sup>/<sub>3</sub>% of the outstanding shares of each class entitled to vote thereon as a class. Our bylaws may be amended by the affirmative vote of a majority vote of the directors then in office, subject to any limitations set forth in the bylaws; and may also be amended by the affirmative vote of at least 66<sup>2</sup>/<sub>3</sub>% of the outstanding shares entitled to vote on the amendment, or, if the board of directors recommends that the stockholders approve the

amendment, by the affirmative vote of the majority of the outstanding shares entitled to vote on the amendment, in each case voting together as a single class.

#### *Blank check preferred stock*

Upon the completion of this offering, our amended and restated certificate of incorporation authorizes 5,000,000 shares of preferred stock. The existence of authorized but unissued shares of preferred stock may enable our board of directors to render more difficult or to discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise. For example, if in the due exercise of its fiduciary obligations, our board of directors were to determine that a takeover proposal is not in the best interests of us or our stockholders, our board of directors could cause shares of preferred stock to be issued without stockholder approval in one or more private offerings or other transactions that might dilute the voting or other rights of the proposed acquirer or insurgent stockholder or stockholder group. In this regard, our amended and restated certificate of incorporation grants our board of directors' broad power to establish the rights and preferences of authorized and unissued shares of preferred stock. The issuance of shares of preferred stock could decrease the amount of earnings and assets available for distribution to holders of shares of common stock. The issuance may also adversely affect the rights and powers, including voting rights, of these holders and may have the effect of delaying, deterring or preventing a change in control of us.

#### *Choice of Forum*

Our amended and restated certificate of incorporation provides that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware will be the exclusive forum for: (a) any derivative action or proceeding brought on our behalf; (b) any action asserting a breach of fiduciary duty; (c) any action asserting a claim against us arising pursuant to the DGCL, our amended and restated certificate of incorporation or our amended or restated bylaws; or (d) any action asserting a claim against us that is governed by the internal affairs doctrine. However, several lawsuits involving other companies are currently pending challenging the validity of choice of forum provisions in certificates of incorporation, and it is possible that a court could rule that such provision is inapplicable or unenforceable.

#### **Anti-takeover effects of the Delaware general corporation law**

Upon completion of this offering, we will be subject to the provisions of Section 203 of the Delaware General Corporation Law, or Section 203. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a 3-year period following the time that this stockholder becomes an interested stockholder, unless the business combination is approved in a prescribed manner. A "business combination" includes, among other things, a merger, asset or stock sale or other transaction resulting in a financial benefit to the interested stockholder. An "interested stockholder" is a person who, together with affiliates and associates, owns, or did own within the three years before the determination of interested stockholder status, 15% or more of the corporation's voting stock. Under Section 203, a business combination between a corporation and an interested stockholder is prohibited unless it satisfies one of the following conditions:

- before the stockholder became interested, the board of directors approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;



- upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding, shares owned by persons who are directors and also officers, and employee stock plans, in some instances; or
- at or after the time the stockholder became interested, the business combination was approved by the board of directors of the corporation and authorized at an annual or special meeting of the stockholders by the affirmative vote of at least two-thirds of the outstanding voting stock which is not owned by the interested stockholder.

#### **NASDAQ Global Market Listing**

We have applied to have our common stock listed on the NASDAQ Global Market under the trading symbol "AAOI."

#### **Transfer Agent and Registrar**

Continental Stock Transfer & Trust will act as the transfer agent and registrar for our common stock. The transfer agent and registrar's address is 17 Battery Place, 8<sup>th</sup> Floor, New York, New York 10004.

## SHARES ELIGIBLE FOR FUTURE SALE

Before this offering, there was no public market for our common stock. Future sales of substantial amounts of common stock in the public market, or the perception that such sales may occur, could adversely affect the market price of our common stock. Although we have applied to have our common stock approved for quotation on the NASDAQ Global Market, we cannot assure you that there will be an active public market for our common stock.

Upon completion of this offering, we will have outstanding an aggregate of        shares of common stock, assuming the issuance of the        shares of common stock offered in this offering and no other exercise of outstanding options or warrants. Of these shares, all shares sold in this offering will be freely tradable without restriction or further registration under the Securities Act, except for any shares purchased by our "affiliates," as that term is defined in Rule 144(a) under the Securities Act, whose sales would be subject to certain limitations and restrictions described below.

The remaining        shares of common stock held by existing stockholders were issued and sold by us in reliance on exemptions from the registration requirements of the Securities Act. Of these shares,        shares will be subject to "lock-up" agreements with the underwriters or us described below on the effective date of this offering. On the effective date of this offering, there will be        shares that are not subject to lock-up agreements and are eligible for sale pursuant to Rule 144. Upon expiration of the lock-up agreements 180 days after the effective date of this offering,        shares will become eligible for sale, subject in most cases to the limitations of Rule 144 and Rule 701. In addition, holders of stock options could exercise such options and sell certain of the shares issued upon exercise as described below.

<u>Days or date after date of this prospectus</u>	<u>Shares eligible for sale</u>	<u>Comment</u>
Upon effectiveness		Shares sold in the offering
Upon effectiveness		Freely tradable shares that may be sold under Rule 144(k) and are not subject to the lock-up
180 days		Lock-ups released, subject to extension; shares that may be sold under Rules 144 and 701

### Lock-Up Agreements

We, and all directors and officers, and holders of substantially all of our outstanding stock and stock options (including the selling stockholders) have agreed that, subject to certain exceptions, without the prior written consent of Raymond James and Piper Jaffray, as representatives on behalf of the underwriters, we and they will not, during the period ending 180 days after the date of the final prospectus relating to this offering, dispose any shares of our stock or options, warrants or other securities with respect to our stock, enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of our common stock, or file or cause to be filed any registration statement with the Securities and Exchange Commission relating to the offering of any shares of common stock or any securities convertible into or exercisable or exchangeable for common stock (other than any registration statement on Form S-8). There are no agreements between Raymond James and Piper Jaffray, as representatives on behalf of the underwriters, our company

and any of our securityholders or affiliates releasing them from these lock-up agreements prior to the expiration of the 180-day period.

The agreements to not contain any pre-established conditions to the waiver by Raymond James and Piper Jaffray on behalf of the underwriters of any terms of the lock-up agreements. Any determination to release shares subject to the lock-up agreements would be based on a number of factors at the time of the determination, including but not necessarily limited to the market price of the common stock, the liquidity of the trading market for the common stock, general market conditions, the number of shares proposed to be sold and the timing, purpose and terms of the proposed sale.

#### **Rule 144**

In general, under Rule 144 as currently in effect, beginning 90 days after the effective date of the registration statement of which this prospectus is a part, a person who is not our affiliate and has not been our affiliate at any time during the preceding 90 days and who is not a party to a lock-up agreement as described above will be entitled to sell any shares of our common stock that such person has beneficially owned for at least six months, including the holding period of any prior owner other than one of our affiliates, without regard to manner of sale, volume limitations or notice provisions of Rule 144. These sales of our common stock by any such person would be subject to the availability of current public information about us if the shares to be sold were beneficially owned by such person for less than one year.

In addition, under Rule 144, a person may sell shares of our common stock acquired from us immediately upon the closing of this offering, without regard to volume limitations or the availability of public information about us, if:

- the person is not our affiliate and has not been our affiliate at any time during the preceding 90 days; and
- the person has beneficially owned the shares to be sold for at least one year, including the holding period of any prior owner other than one of our affiliates.

Beginning 90 days after the date of this prospectus, subject to the lock-up agreements described above, our affiliates who have beneficially owned shares of our common stock for at least six months, including the holding period of any prior owner other than one of our affiliates, will be entitled to sell within any three-month period a number of shares that does not exceed the greater of:

- 1% of the number of shares of our common stock then outstanding, which will equal approximately shares immediately after this offering; and
- the average weekly trading volume in our common stock on the NASDAQ Global Market during the four calendar weeks preceding the date of filing of a Notice of Proposed Sale of Securities Pursuant to Rule 144 with respect to the sale.

Sales under Rule 144 by our affiliates are also subject to manner of sale provisions and notice requirements and to the availability of current public information about us.

## **Rule 701**

Rule 701 of the Securities Act, as in effect on the date of this prospectus, permits resales of shares in reliance upon Rule 144 but without compliance with certain restrictions of Rule 144, including the holding period requirement. Most of our employees, executive officers, directors or consultants who purchased shares under a written compensatory plan or contract may be entitled to rely on the resale provisions of Rule 701, but all holders of Rule 701 shares are required to wait until 90 days after the date of this prospectus before selling their shares. All of the Rule 701 shares are subject to lock-up agreements as described under the heading "Underwriting" and will become eligible for sale at the expiration of those agreements.

## **Stock Options**

We intend to file one or more registration statements on Form S-8 under the Securities Act to register all shares of common stock subject to outstanding stock options and common stock issued or issuable under our stock plans. We expect to file the registration statement covering shares offered pursuant to our stock plans shortly after the date of this prospectus, permitting the resale of such shares by non-affiliates in the public market without restriction under the Securities Act and the sale by affiliates in the public market, subject to applicable volume limitations.

## **Registration Rights**

Upon the closing of this offering, the holders of approximately        shares of our common stock will be eligible to exercise certain rights with respect to the registration of such shares under the Securities Act. See "Description of Capital Stock—Registration Rights." Upon the effectiveness of a registration statement covering these shares, such shares would become freely tradable.

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

This section summarizes the material U.S. federal income and estate tax consequences of the ownership and disposition of our common stock by a non-U.S. holder. For purposes of this summary, a "non-U.S. holder" is any beneficial owner that for U.S. federal income tax purposes is not a U.S. person. The term "U.S. person" means:

- an individual citizen or resident of the U.S.;
- a corporation or entity treated as a corporation for U.S. federal income tax purposes, created or organized under the laws of the U.S. or any state, including the District of Columbia, or otherwise treated as such for U.S. federal income tax purposes;
- an estate whose income is subject to U.S. federal income tax regardless of source; or
- a trust (i) whose administration is subject to the primary supervision of a court within the U.S. and which has one or more U.S. persons who have authority to control all substantive decisions of the trust or (ii) which has a valid election in effect under applicable U.S. Treasury regulations to be treated as a U.S. person.

Generally, an individual may be treated as a resident of the U.S. in any calendar year for U.S. federal income tax purposes by, among other ways, being present in the U.S. for at least 31 days in that calendar year and for an aggregate of at least 183 days during a three-year period ending in the current calendar year. For purposes of this calculation, such individual would count all of the days in which the individual was present in the current year, one-third of the days present in the immediately preceding year, and one-sixth of the days present in the second preceding year. Residents are taxed for U.S. federal income tax purposes as if they were citizens of the U.S.

This summary does not consider the tax consequences for partnerships, entities classified as a partnership for U.S. federal income tax purposes, or persons who hold their interests through a partnership or other entity classified as a partnership for U.S. federal income tax purposes. If a partnership, including any entity treated as a partnership for U.S. federal income tax purposes, is a beneficial owner of common stock, the tax treatment of a partner in the partnership will depend upon the status of the partner and the activities of the partnership. Partnerships that are beneficial owners of our common stock, and partners in such partnerships, should consult their tax advisors regarding the tax consequences to them of the ownership and disposition of our common stock.

This summary applies only to non-U.S. holders who acquire our common stock pursuant to this offering and who hold our common stock as a capital asset (generally property held for investment). This summary generally does not address tax considerations that may be relevant to particular investors because of their specific circumstances, or because they are subject to special rules. Certain former U.S. citizens or long-term residents, controlled foreign corporations, passive foreign investment companies, corporations that accumulate earnings to avoid U.S. federal income tax, life insurance companies, tax-exempt organizations, dealers in securities or currencies, brokers, banks or other financial institutions, certain trusts, hybrid entities, pension funds and investors that hold our common stock as part of a hedge, straddle or conversion transaction are among those categories of potential investors that are subject to special rules not covered in this discussion. This summary does not address any U.S. federal gift tax consequences, or state or local or non-U.S. tax consequences. This summary does not provide a complete analysis of all potential tax considerations. The information provided below is based

on existing authorities. These authorities may change, or the Internal Revenue Service, or IRS, might interpret the existing authorities differently. In either case, the tax considerations of owning or disposing of common stock could differ from those described below.

INVESTORS CONSIDERING THE PURCHASE OF COMMON STOCK SHOULD CONSULT THEIR OWN TAX ADVISORS REGARDING THE APPLICATION OF THE U.S. FEDERAL INCOME AND ESTATE TAX LAWS TO THEIR PARTICULAR SITUATIONS AND THE CONSEQUENCES OF OTHER U.S. FEDERAL, STATE, OR LOCAL OR NON-U.S. LAWS AND ANY APPLICABLE TAX TREATIES.

## **Dividends**

Payments of cash and other property that we make to our shareholders with respect to our common stock will constitute dividends to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. To the extent those dividends exceed our current and accumulated earnings and profits, the dividends will constitute a return of capital and will first reduce a holder's basis, but not below zero, and then will be treated as gain from the sale of stock.

The gross amount of any dividend (out of earnings and profits) paid to a non-U.S. holder of common stock generally will be subject to U.S. withholding tax at a rate of 30% unless the holder is entitled to an exemption from or reduced rate of withholding under an applicable income tax treaty. In order to receive an exemption or a reduced treaty rate, prior to the payment of a dividend, a non-U.S. holder must provide us with an IRS Form W-8BEN (or successor form) certifying qualification for the exemption or reduced rate.

Dividends received by a non-U.S. holder that are effectively connected with a U.S. trade or business conducted by the non-U.S. holder (and dividends attributable to a non-U.S. holder's permanent establishment in the U.S. if an income tax treaty applies) are exempt from this withholding tax. To obtain this exemption, prior to the payment of a dividend, a non-U.S. holder must provide us with an IRS Form W-8ECI (or successor form) properly certifying this exemption. Effectively connected dividends (or dividends attributable to a permanent establishment in the U.S. if an income tax treaty applies), although not subject to withholding tax, are taxed at the same graduated rates applicable to U.S. persons, net of certain deductions and credits. In addition, dividends received by a corporate non-U.S. holder that are effectively connected with a U.S. trade or business of the corporate non-U.S. holder (or dividends attributable to a corporate non-U.S. holder's permanent establishment in the U.S. if an income tax treaty applies) may also be subject to a branch profits tax at a rate of 30% (or such lower rate as may be specified by an applicable income tax treaty).

A non-U.S. holder who provides us with an IRS Form W-8BEN or an IRS Form W-8ECI will be required to periodically update such form.

A non-U.S. holder of common stock that is eligible for a reduced rate of withholding tax pursuant to an income tax treaty may obtain a refund of any excess amounts currently withheld if an appropriate claim for refund is timely filed with the IRS.

## **Gain on Disposition of Common Stock**

A non-U.S. holder will generally not be subject to U.S. federal income tax on any gains realized on the sale, exchange or other disposition of common stock unless:

- the gain is effectively connected with a U.S. trade or business of the non-U.S. holder (or attributable to a permanent establishment in the U.S. if an income tax treaty applies), in which case the non-U.S. holder generally will be required to pay tax on the net gain derived from the sale under regular graduated U.S. federal income tax rates and, if the non-U.S. holder is a corporation, the branch profits tax may apply, at a 30% rate or such lower rate as may be specified by an applicable income tax treaty;
- the non-U.S. holder is an individual who is present in the U.S. for a period or periods aggregating 183 days or more during the calendar year in which the sale or disposition occurs and certain other conditions are met, in which case the non-U.S. holder will be required to pay a flat 30% tax (or such lower rate as may be specified by an applicable income tax treaty between the U.S. and such non-U.S. holder's country of residence) on the net gain derived from the disposition, which tax may be offset by U.S. source capital losses, if any, provided that the non-U.S. holder has timely filed U.S. federal income tax returns with respect to such losses; or
- our common stock constitutes a U.S. real property interest by reason of our status as a "U.S. real property holding corporation" for U.S. federal income tax purposes at any time within the shorter of the five-year period preceding the disposition or the holder's holding period for our common stock. We believe that we are not currently, and we are not likely to become, a "U.S. real property holding corporation" for U.S. federal income tax purposes.

If we become a U.S. real property holding corporation after this offering, so long as our common stock is regularly traded on an established securities market and continues to be so traded, a non-U.S. holder will not be subject to U.S. federal income tax on gain recognized from the sale, exchange or other disposition of shares of our common stock as a result of such status unless (i) such holder actually or constructively owned more than 5% of our common stock at any time during the shorter of (A) the five-year period preceding the disposition, or (B) the holder's holding period for our common stock, and (ii) we were a U.S. real property holding corporation at any time during such period when the more than 5% ownership test was met. If any gain on your disposition is taxable because we are a U.S. real property holding corporation and your ownership of our common stock exceeds 5%, you will be taxed on such disposition generally in the manner applicable to U.S. persons. Any such non-U.S. holder that owns or has owned, actually or constructively, more than 5% of our common stock is urged to consult that holder's own tax advisor with respect to the particular tax consequences to such holder for the gain from the sale, exchange or other disposition of shares of our common stock if we were to be or to become a U.S. real property holding corporation.

## **Backup Withholding and Information Reporting**

Generally, we must report annually to the IRS the amount of dividends paid, the name and address of the recipient, and the amount, if any, of tax withheld. A similar report is sent to the recipient. Pursuant to tax treaties or other agreements, the IRS may make its reports available to tax authorities in the non-U.S. holder's country of residence.

Payments of dividends or of proceeds on the disposition of stock made to a non-U.S. holder may be subject to additional information reporting and backup withholding. Backup withholding will not apply if the non-U.S. holder establishes an exemption, for example, by properly certifying its non-U.S. person status on an IRS Form W-8BEN (or successor form). Notwithstanding the foregoing, backup withholding may apply if either we or our paying agent has actual knowledge, or reason to know, that the holder is a U.S. person.

Backup withholding is not an additional tax. Rather, the U.S. federal income tax liability of persons subject to backup withholding will be reduced by the amount of tax withheld. If withholding results in an overpayment of taxes, a credit or refund may be obtained from the IRS, provided that the required information is furnished to the IRS in a timely manner.

### **Legislation Relating to Foreign Accounts**

Under legislation enacted in 2010, a 30% U.S. federal withholding tax will be imposed on dividends on stock of U.S. corporations, and on the gross proceeds from the disposition of such stock, paid to a "foreign financial institution" (as specially defined for this purpose), unless such institution enters into an agreement with the U.S. Treasury to collect and provide to the U.S. Treasury substantial information regarding its U.S. account holders and certain account holders that are foreign entities with U.S. owners. A 30% U.S. federal withholding tax will also apply to dividends paid on stock of U.S. corporations and on the gross proceeds from the disposition of such stock paid to a non-financial foreign entity unless such entity provides the withholding agent with a certification that it does not have any substantial U.S. owners or a certification identifying the direct and indirect substantial U.S. owners of the entity. The withholding taxes described above generally will apply to dividend payments made after December 31, 2013 and payments of gross proceeds made after December 31, 2016. Under certain circumstances, a non-U.S. holder may be eligible for refunds or credits of such withholding taxes. Investors are urged to consult with their own tax advisors regarding the possible application of these rules to their investment in our common stock.

### **U.S. Federal Estate Tax**

The estates of nonresident alien individuals are generally subject to U.S. federal estate tax on property with a U.S. situs. Because we are a U.S. corporation, our common stock will be U.S. situs property and therefore will be included in the taxable estate of a nonresident alien decedent. The U.S. federal estate tax liability of the estate of a nonresident alien may be affected by a tax treaty between the U.S. and the decedent's country of residence.



## UNDERWRITING

Raymond James & Associates, Inc. and Piper Jaffray & Co. are acting as representatives of each of the underwriters named below. Subject to the conditions set forth in an underwriting agreement among us, the selling stockholders and the underwriters, we and the selling stockholders have severally agreed to sell to the underwriters, and each of the underwriters has agreed, severally and not jointly, to purchase from us and the selling stockholders the number of shares of our common stock set forth opposite its name below:

<u>Name</u>	<u>Number of Shares</u>
Raymond James & Associates, Inc.	
Piper Jaffray & Co.	
Cowen and Company, LLC	
Roth Capital Partners, LLC	
<b>Total:</b>	

The underwriters are offering the shares of common stock subject to their acceptance of the shares from us and the selling stockholders and subject to prior sale. The underwriting agreement provides that the obligations of the several underwriters to pay for and accept delivery of the shares of common stock offered by this prospectus are subject to the approval of certain legal matters by their counsel and to certain other conditions. The underwriters are obligated to take and pay for all of the shares of common stock offered by this prospectus if any such shares are taken. However, the underwriters are not required to take or pay for the shares covered by the underwriters' over-allotment option described below. The underwriting agreement also provides that if an underwriter defaults, the purchase commitments of non-defaulting underwriters may be increased or the offering may be terminated.

The underwriters initially propose to offer part of the shares of common stock directly to the public at the offering price listed on the cover page of this prospectus and part to certain dealers at that price less a concession not in excess of \$ per share. After the initial offering of the shares of common stock, the offering price and other selling terms may be changed by the underwriters. Sales of shares made outside of the U.S. may be made by affiliates of the underwriters.

### **Option to Purchase Additional Shares of Common Stock**

We and the selling stockholders have granted the underwriters an option, exercisable for 30 days from the date of this prospectus, to purchase up to additional shares of common stock at the public offering price listed on the cover page of this prospectus, less underwriting discounts and commissions. To the extent the option is exercised, each underwriter will become obligated, subject to certain conditions, to purchase approximately the same percentage of the additional shares of common stock as the number listed next to the underwriter's name in the preceding table bears to the total number of shares of common stock listed next to the names of all underwriters in the preceding table. The underwriters may exercise this option solely for the purpose of covering over-allotments, if any, made in connection with the offering of the shares of common stock offered by this prospectus.

**Discounts and Expenses**

The following table shows the per share and total public offering price, underwriting discounts and commissions, and proceeds before expenses to us and the selling stockholders. These amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase up to an additional shares of common stock.

	<u>Per Share</u>	<u>Total No Exercise</u>	<u>Total Full Exercise</u>
Initial public offering price	\$	\$	\$
Underwriting discounts and commissions to be paid by:			
Us			
The selling stockholders			
Proceeds, before expenses, to us			
Proceeds, before expenses, to selling stockholders			

The estimated offering expenses payable by us, exclusive of the underwriting discounts and commissions, are approximately \$ .

**Indemnification**

We and the selling stockholders have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act.

**Lock-Up Agreements**

Subject to specified exceptions, we and all directors and officers, and holders of substantially all of our outstanding stock and stock options (including the selling stockholders) have agreed that, subject to certain exceptions, without the prior written consent of Raymond James and Piper Jaffray as representatives on behalf of the underwriters, we and they will not, during the period ending 180 days after the date of the final prospectus relating to this offering:

- offer, sell, contract to sell, pledge, grant any option to purchase, contract to purchase or purchase any option or contract to sell, grant any option, right or warrant, lend, make any short sale or otherwise transfer or dispose of, directly or indirectly, any shares of our stock or options, warrants or other securities with respect to our stock;
- enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of our common stock; or
- file or cause to be filed any registration statement with the Securities and Exchange Commission relating to the offering of any shares of common stock or any securities convertible into or exercisable or exchangeable for common stock (other than any registration statement on Form S-8).

The preceding restrictions apply without regard to whether any such transaction described above is to be settled by delivery of common stock or other securities, in cash or otherwise. In addition, we and each such person agree that, without the prior written consent of the representatives, we and each such person will not, during the period ending 180 days after the

date of this prospectus, make any demand for, or exercise any right with respect to, the registration of any shares of common stock or any security convertible into or exercisable or exchangeable for common stock.

The restrictions described in the immediately preceding paragraph do not apply to:

- the sale of shares to the underwriters pursuant to the underwriting agreement;
- the grant or exercise of options pursuant to our existing stock option plans;
- transfers of shares of common stock or any security convertible into common stock as a bona fide gift;
- transfers of shares of common stock or any security convertible into common stock by will or intestate succession or to any trust for the direct or indirect benefit of the stockholder or immediate family of the stockholder; or
- the establishment of a trading plan designed to comply with Rule 10b5-1(c) under the Exchange Act for the transfer of shares of common stock;

provided that in the case of any transfer or distribution as described in the second, third or fourth bullet points above, (i) each recipient or transferee agrees to be subject to the restrictions described in the immediately preceding paragraph, and (ii) no public announcement or filing under the Exchange Act with respect to such transfer shall be required or voluntarily made during the restricted period under Section 16(a) of the Exchange Act reporting a reduction in beneficial ownership of shares of common stock (other than a filing on a Form 5, Schedule 13D or Schedule 13G (or 13D/A or 13G/A) made after the expiration of the restricted period referred to above).

The 180 day restricted period described in the preceding paragraph will be extended if, during any period that we are not an emerging growth company:

- during the last 17 days of the 180 day restricted period we issue an earnings release or material news event relating to us occurs, or
- prior to the expiration of the 180 day restricted period, we announce that we will release earnings results during the 16-day period beginning on the last day of the 180 day period, in which case the restrictions described in the preceding paragraph will continue to apply until the expiration of the 18-day period beginning on the issuance of the earnings release or the announcement of the material news or material event.

#### **Stabilization**

Until this offering is completed, rules of the SEC may limit the ability of the underwriters and various selling group members to bid for and purchase the shares of our common stock. As an exception to these rules and in accordance with Regulation M under the Exchange Act, the underwriters may engage in activities that stabilize, maintain or otherwise affect the price of our common stock in order to facilitate the offering of the common stock, including: short sales; syndicate covering transactions; imposition of penalty bids; and purchases to cover positions created by short sales.

Stabilizing transactions may include making short sales of shares of our common stock, which involve the sale by the underwriters of a greater number of shares than it is required to purchase in this offering and purchasing shares of common stock from us by exercising the over-allotment option or in the open market to cover positions created by short sales. Short sales may be "covered" shorts, which are short positions in an amount not greater than the underwriters' over-allotment option referred to above, or may be "naked" shorts, which are short positions in excess of that amount.

Each underwriter may close out any covered short position either by exercising its over-allotment option, in whole or in part, or by purchasing shares of common stock in the open market after the distribution has been completed. In making this determination, each underwriter will consider, among other things, the price of shares of our common stock available for purchase in the open market compared to the price at which the underwriter may purchase shares of our common stock pursuant to the over-allotment option.

A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of shares of our common stock in the open market after pricing that could adversely affect investors who purchased in this offering. To the extent that the underwriters create a naked short position, they will purchase shares of our common stock in the open market to cover the position after the pricing of this offering.

The underwriters also may impose a penalty bid on selling group members. This means that if the underwriters purchase shares of our common stock in the open market in stabilizing transactions or to cover short sales, the underwriters can require the selling group members that sold those shares as part of this offering to repay the selling concession received by them.

As a result of these activities, the price of shares of our common stock may be higher than the price that otherwise might exist in the open market. If the underwriters commence these activities, they may discontinue them without notice at any time. The underwriters may carry out these transactions on the NASDAQ Global Market or otherwise.

The underwriters are not required to engage in these activities and may end any of these activities at any time.

### **Relationships**

Certain of the underwriters and their affiliates may provide from time to time in the future certain commercial banking, financial advisory, investment banking and other services for us and such affiliates, and for the selling stockholders and their affiliates, in the ordinary course of their business, for which they will receive customary fees and commissions, as applicable, and reimbursement for out-of-pocket expenses. In addition, from time to time, certain of the underwriters and their affiliates may effect transactions for their own account or the account of customers, and hold on behalf of themselves or their customers, long or short positions in our debt or equity securities or loans, and may do so in the future.

### **Discretionary Accounts**

The underwriters may confirm sales of the common stock offered by this prospectus to accounts over which they exercise discretionary authority but do not expect those sales to exceed 5% of the total number of shares of common stock offered by this prospectus.

## **Directed Shares Program**

At our request, the underwriters have reserved up to 5% of the shares of common stock being offered by this prospectus (excluding the shares of common stock that may be issued upon the underwriters' exercise of their over-allotment option to purchase additional shares of common stock) for sale at the initial public offering price to our directors, officers, employees, business associates and other related persons. The sales will be made by Raymond James & Associates, Inc. through a directed shares program. It is not certain if these persons will choose to purchase all or any portion of these reserved shares, but any purchases they make will reduce the number of shares of common stock available for sale to the general public. Any reserved shares of common stock not so purchased will be offered by the underwriters to the general public on the same basis as the other shares of common stock offered by this prospectus. The individuals eligible to participate in the directed shares program must commit to purchase no later than before the opening of business on the day following the date of this prospectus. We and the selling stockholders have agreed to indemnify Raymond James & Associates, Inc. and the underwriters against certain liabilities and expenses in connection with the directed shares program, including liabilities under the Securities Act in connection with the sale of the reserved shares and for the failure of any participant to pay for its shares of common stock.

## **Listing**

We expect to apply to list our common stock on the NASDAQ Global Market under the symbol "AAOI."

## **Determination of Initial Offering Price**

Prior to this offering, there has been no public market for our common stock. Consequently, the initial public offering price will be determined by negotiations between us and the representatives. Among the factors considered in determining the initial public offering price will be our future prospects and those of our industry in general, our sales, earnings and certain other financial and operating information in recent periods, market prices of securities, and certain financial and operating information of companies engaged in activities similar to ours.

## **Electronic Prospectus**

A prospectus in electronic format may be available on the Internet sites or through other online services maintained by one or more of the underwriters and selling group members participating in this offering, or by their affiliates. In those cases, prospective investors may view offering terms online and, depending upon the underwriter or the selling group member, prospective investors may be allowed to place orders online. The underwriters may agree with us to allocate a specific number of shares of common stock for sale to online brokerage account holders. Any such allocation for online distributions will be made by the underwriters on the same basis as other allocations.

Other than the prospectus in electronic format, the information on any underwriter's or any selling group member's website and any information contained in any other website maintained by the underwriters or any selling group member is not part of this prospectus or the registration statement of which this prospectus forms a part, has not been approved or endorsed by us or any underwriters or any selling group member in its capacity as underwriter or selling group member and should not be relied upon by investors.

## Selling Restrictions

Other than in the U.S. and as described below, no action has been taken by us or the underwriters that would permit a public offering of the shares of common stock offered by this prospectus in any jurisdiction where action for that purpose is required. The shares of common stock offered by this prospectus may not be offered or sold, directly or indirectly, nor may this prospectus or any other offering material or advertisements in connection with the offer and sale of any such shares of common stock be distributed or published in any jurisdiction, except under circumstances that will result in compliance with the applicable rules and regulations of that jurisdiction. Persons into whose possession this prospectus comes are advised to inform themselves about and to observe any restrictions relating to the offering and the distribution of this prospectus. This prospectus does not constitute an offer to sell or a solicitation of an offer to buy any shares of common stock offered by this prospectus in any jurisdiction in which such an offer or a solicitation is unlawful.

### *European Economic Area*

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive, each a Member State, each underwriter has represented and agreed that with effect from and including the date on which the Prospectus Directive is implemented in that Member State it has not made and will not make an offer of securities to the public in that Member State, except that it may, with effect from and including such date, make an offer of securities to the public in that Member State:

- at any time to legal entities which are authorized or regulated to operate in the financial markets or, if not so authorized or regulated, whose corporate purpose is solely to invest in securities;
- at any time to any legal entity which has two or more of (1) an average of at least 250 employees during the last financial year; (2) a total balance sheet of more than €43,000,000 and (3) an annual net turnover of more than €50,000,000, as shown in its last annual or consolidated accounts;
- to fewer than 100 natural or legal persons (other than qualified investors as defined in the Prospectus Directive) subject to obtaining the prior consent of the book-running managers for any such offer; or
- at any time in any other circumstances which do not require the publication by us of a prospectus pursuant to Article 3 of the Prospectus Directive.

For the purposes of the above, the expression "offer of securities to the public" in relation to any securities in any Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the securities to be offered so as to enable an investor to decide to purchase or subscribe for the securities, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State, and the expression Prospectus Directive means Directive 2003/71/EC and includes any relevant implementing measure in that Member State.

### *United Kingdom*

This prospectus and any other material in relation to the shares described herein is only being distributed to, and is only directed at, (i) persons who are outside the United Kingdom,

(ii) investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended, or the Order, or (iii) high net worth entities, and other persons to whom it may be lawfully communicated, falling within Article 49(2)(a) to (d) of the Order (all such persons together being referred to as relevant persons). The shares are only available to, and any invitation, offer or agreement to purchase or otherwise acquire such shares will be engaged in only with, relevant persons. This prospectus and its contents are confidential and should not be distributed, published or reproduced (in whole or in part) or disclosed by recipients to any other person in the United Kingdom. Any person in the United Kingdom that is not a relevant person should not act or rely on this prospectus or any of its contents.

## **LEGAL MATTERS**

The validity of the common stock offered by this prospectus will be passed upon for us by DLA Piper LLP (US), Houston, Texas. Certain legal matters will be passed upon for the underwriters by Wilson Sonsini Goodrich & Rosati, Professional Corporation, Austin, Texas.

## **EXPERTS**

The consolidated financial statements of Applied Optoelectronics, Inc. and its subsidiaries as of December 31, 2012 and 2011, and for each of the years in the three-year period ended December 31, 2012, included in this prospectus and elsewhere in the registration statement have been so included in reliance upon the report of Grant Thornton LLP, independent registered public accountants, upon the authority of said firm as experts in accounting and auditing in giving said report.

Adams Capital, Inc., an independent valuation services firm, has given its opinion, set forth in its valuation reports described in this prospectus as to the fair value of our common stock as of the dates set forth in the valuation reports. Additionally, Adams Capital, Inc. has consented to the references in this registration statement and to its valuation reports.

## **WHERE YOU CAN FIND MORE INFORMATION**

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the shares of common stock we are offering by this prospectus. This prospectus does not contain all of the information included in the registration statement. For further information pertaining to us and our common stock, you should refer to the registration statement and to its exhibits. Whenever we make reference in this prospectus to any of our contracts, agreements or other documents, the references are not necessarily complete, and you should refer to the exhibits attached to the registration statement for copies of the actual contract, agreement or other document.

Upon the closing of the offering, we will be subject to the informational requirements of the Exchange Act and will file annual, quarterly and current reports, proxy statements and other information with the SEC. You can read our SEC filings, including the registration statement, over the Internet at the SEC's website at [www.sec.gov](http://www.sec.gov). You may also read and copy any document we file with the SEC, including the registration statement of which this prospectus is a part, at its public reference facility at 100 F Street, N.E., Room 1580, Washington, D.C. 20549.

You may also obtain copies of the documents at prescribed rates by writing to the Public Reference Section of the SEC at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the public reference facilities.



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**Report of Independent Registered Public Accounting Firm**

The Board of Directors and Stockholders  
Applied Optoelectronics, Inc.:

We have audited the accompanying consolidated balance sheets of Applied Optoelectronics, Inc. (the Company) and subsidiaries as of December 31, 2012 and 2011, and the related consolidated statements of operations, comprehensive loss, stockholders' equity and cash flows for each of the years in the three-year period ended December 31, 2012. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Applied Optoelectronics, Inc. and subsidiary as of December 31, 2012 and 2011 and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2012, in conformity with U.S. generally accepted accounting principles.

/s/ Grant Thornton LLP

Houston, Texas  
May 21, 2013

**Applied Optoelectronics, Inc. and Subsidiaries**
**CONSOLIDATED BALANCE SHEETS**

(in thousands, except per share data)

	December 31,		March 31,	
	2012	2011	2013	Pro Forma 2013
			(unaudited)	
<b>ASSETS</b>				
Current assets				
Cash and cash equivalents	\$ 10,723	\$ 1,768	\$ 8,577	\$ 8,577
Restricted cash	503	306	766	766
Accounts receivable—trade, net of allowance of \$59 and \$61, respectively	13,525	12,335	11,233	11,233
Notes receivable	1,034	—	8	8
Inventories	12,493	12,671	12,339	12,339
Prepaid expenses and other current assets	968	695	1,534	1,534
Total current assets	39,246	27,775	34,457	34,457
Property, plant and equipment, net of accumulated depreciation of \$24,967 and \$22,556, respectively	24,838	24,532	24,824	24,824
Land use rights, net	674	688	672	672
Intangible assets, net	795	651	796	796
Other assets, net	195	77	308	308
<b>TOTAL ASSETS</b>	<b>\$ 65,748</b>	<b>\$ 53,723</b>	<b>\$ 61,057</b>	<b>\$ 61,057</b>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>				
Current liabilities				
Current portion of notes payable and long-term debt	\$ 15,421	\$ 18,326	\$ 12,515	\$ 12,515
Short-term loan from shareholders	—	910	—	—
Accounts payable	6,913	7,792	6,591	6,591
Accrued liabilities	3,243	2,658	2,081	2,081
Total current liabilities	25,577	29,686	21,187	21,187
Notes payable and long-term debt, less current portion	9,163	3,361	9,549	9,549
<b>TOTAL LIABILITIES</b>	<b>34,740</b>	<b>33,047</b>	<b>30,736</b>	<b>30,736</b>
Stockholders' equity (deficit):				
Redeemable Convertible Preferred Stock and Convertible Preferred Stock; 172,200 shares authorized; 166,404 shares and 130,224 shares issued and outstanding at December 31, 2012 and 2011, respectively, no par value; 166,860 shares issued and outstanding, actual, at March 31, 2013 \$0.001 par value; and no shares issued and outstanding pro forma at March 31, 2013.	105,367	94,373	105,481	—
Common Stock; 300,000 shares authorized; 7,978, and 7,954 shares issued and outstanding at December 31, 2012 and 2011, respectively, no par value; 8,120 shares issued and outstanding, actual, at March 31, 2013 \$0.001 par value; and 268,920 shares issued and outstanding, pro forma, at March 31, 2013 \$0.001 par value.	1,074	1,069	1,103	106,584
Additional paid-in capital	4,468	4,234	4,569	4,569
Accumulated other comprehensive gain	2,016	1,972	2,079	2,079
Accumulated deficit	(81,917)	(80,972)	(82,911)	(82,911)
<b>TOTAL STOCKHOLDERS' EQUITY</b>	<b>31,008</b>	<b>20,676</b>	<b>30,321</b>	<b>30,321</b>
<b>TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY</b>	<b>\$ 65,748</b>	<b>\$ 53,723</b>	<b>\$ 61,057</b>	<b>\$ 61,057</b>

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

**Applied Optoelectronics, Inc. and Subsidiaries**  
**CONSOLIDATED STATEMENTS OF OPERATIONS**  
(in thousands, except share and per share data)

	Year ended December 31,			Three Months ended March 31,	
	2012	2011	2010	2013 (unaudited)	2012
Revenue, net	\$ 63,421	\$ 47,840	\$ 40,489	\$ 14,317	\$ 12,506
Cost of goods sold	44,492	34,468	27,539	9,732	8,393
Gross profit	18,929	13,372	12,950	4,585	4,113
Operating expenses					
Research and development	7,603	6,451	5,176	2,004	1,575
Sales and marketing	3,135	2,412	1,993	907	809
General and administrative	8,012	8,243	8,382	2,374	1,965
Asset impairment charges	—	—	492	—	—
Total operating expenses	18,750	17,106	16,043	5,285	4,349
Income (loss) from operations	179	(3,734)	(3,093)	(700)	(236)
Other income (expense)					
Interest expense	(1,381)	(1,338)	(906)	(306)	(376)
Other income (expense), net	257	(256)	619	12	89
Total other expense	(1,124)	(1,594)	(287)	(294)	(287)
Loss before income taxes	(945)	(5,328)	(3,380)	(994)	(523)
Income taxes	—	—	—	—	—
Net loss	\$ (945)	\$ (5,328)	\$ (3,380)	\$ (994)	\$ (523)
Net loss per share—basic and diluted, as revised	\$ (0.12)	\$ (0.67)	\$ (0.44)	\$ (0.12)	\$ (0.07)
Weighted average shares used to compute net loss per share, as revised:					
Basic and diluted	7,967,272	7,909,736	7,767,035	7,988,523	7,955,050
Pro forma net loss per share—basic and diluted (unaudited)	\$ (0.00)			\$ (0.00)	
Weighted average shares used to compute pro forma net loss per share (unaudited):					
Basic and diluted	251,406,466			268,267,555	

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

**Applied Optoelectronics, Inc. and Subsidiaries****CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS****(in thousands)**

	Year ended December 31,			Three Months ended March 31,	
	2012	2011	2010	2013 (unaudited)	2012
Net loss	\$ (945)	\$ (5,328)	\$ (3,380)	\$ (994)	\$ (523)
Foreign currency translation adjustment, net of tax of \$0, \$0 and \$0	44	434	4	63	42
Comprehensive loss	<u>\$ (901)</u>	<u>\$ (4,894)</u>	<u>\$ (3,376)</u>	<u>\$ (931)</u>	<u>\$ (481)</u>

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

**Applied Optoelectronics, Inc. and Subsidiaries**
**CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)**
**Years ended December 2010, 2011 and 2012 and the three months ended March 31, 2013**
**(in thousands)**

	<u>Preferred Stock</u>		<u>Common Stock</u>		<u>Additional paid-in capital</u>	<u>Accumulated deficit</u>	<u>Accumulated other comprehensive gain</u>	<u>Stockholders' equity</u>
	<u>Number of shares</u>	<u>Amount</u>	<u>Number of shares</u>	<u>Amount</u>				
December 31, 2009	123,547	\$ 90,424	7,763	\$ 1,048	\$ 2,891	\$ (72,264)	\$ 1,534	23,633
Preferred stock issued, net	—	—	—	—	—	—	—	—
Issuance of stock for consultancy service	—	—	64	3	—	—	—	3
Stock options exercised	—	—	6	1	—	—	—	1
Stock based compensation	—	—	—	—	780	—	—	780
Net loss	—	—	—	—	—	(3,380)	—	(3,380)
Foreign currency translation adjustment	—	—	—	—	—	—	4	4
December 31, 2010	123,547	90,424	7,833	1,052	3,671	(75,644)	1,538	21,041
Preferred stock issued, net	6,677	3,949	—	—	—	—	—	3,949
Issuance of stock for consultancy service	—	—	40	1	—	—	—	1
Stock options exercised	—	—	81	16	—	—	—	16
Stock based compensation	—	—	—	—	563	—	—	563
Net loss	—	—	—	—	—	(5,328)	—	(5,328)
Foreign currency translation adjustment	—	—	—	—	—	—	434	434
December 31, 2011	130,224	94,373	7,954	1,069	4,234	(80,972)	1,972	20,676
Preferred stock issued, net	36,180	10,994	—	—	—	—	—	10,994
Stock options exercised	—	—	24	5	—	—	—	5
Stock based compensation	—	—	—	—	161	—	—	161
Issuance of warrants	—	—	—	—	73	—	—	73
Net loss	—	—	—	—	—	(945)	—	(945)
Foreign currency translation adjustment	—	—	—	—	—	—	44	44
December 31, 2012	166,404	\$ 105,367	7,978	\$ 1,074	\$ 4,468	\$ (81,917)	\$ 2,016	\$ 31,008
Stock options exercised (unaudited)	—	—	142	29	—	—	—	29
Warrants exercised (unaudited)	456	114	—	—	—	—	—	114
Stock based compensation (unaudited)	—	—	—	—	101	—	—	101
Net loss (unaudited)	—	—	—	—	—	(994)	—	(994)
Foreign currency translation adjustment (unaudited)	—	—	—	—	—	—	63	63
March 31, 2013 (unaudited)	166,860	\$ 105,481	8,120	\$ 1,103	\$ 4,569	\$ (82,911)	\$ 2,079	\$ 30,321

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

**Applied Optoelectronics, Inc. and Subsidiaries**
**CONSOLIDATED STATEMENTS OF CASH FLOWS**

	<u>Year ended December 31,</u>			<u>Three Months ended</u>	
	<u>2012</u>	<u>2011</u>	<u>2010</u>	<u>March 31,</u>	
				<u>2013</u>	<u>2012</u>
				<u>(unaudited)</u>	
<b>Operating activities:</b>					
Net loss	\$ (945)	\$ (5,328)	\$ (3,380)	\$ (994)	\$ (523)
Adjustments to reconcile net loss to net cash used in operating activities:					
Provision for obsolete inventory	858	1,579	648	137	71
Impairment of long-lived assets	—	—	492	—	—
Depreciation and amortization	2,942	3,112	3,340	770	739
(Gain) loss on disposal of assets	36	80	(11)	1	36
Stock-based compensation and warrants expense	161	563	780	111	18
Changes in operating assets and liabilities:					
Accounts receivable	(1,158)	(4,498)	(2,103)	2,293	2,597
Notes receivable	(1,034)	—	—	1,027	—
Inventory	(538)	(1,578)	(3,674)	(52)	(313)
Other current assets	(261)	473	(151)	(866)	(436)
Accounts payable	(961)	1,534	(251)	(253)	(1,070)
Accrued liabilities	542	(62)	1,101	(853)	(100)
Net cash used in operating activities	<u>(358)</u>	<u>(4,125)</u>	<u>(3,209)</u>	<u>1,321</u>	<u>1,019</u>
<b>Investing activities:</b>					
Purchase of property, plant and equipment	(3,178)	(1,790)	(3,017)	(803)	(1,062)
Proceeds from disposal of equipment	138	387	37	—	138
Deposit and deferred charges	(41)	(1)	113	(122)	(41)
Purchase of intangible assets	(209)	(167)	(47)	(18)	(76)
Net cash used in investing activities	<u>(3,290)</u>	<u>(1,571)</u>	<u>(2,914)</u>	<u>(943)</u>	<u>(1,041)</u>
<b>Financing activities:</b>					
Proceeds from issuance of notes payable and long-term debt	845	—	391	—	—
Principal payments of long-term debt and notes payable	(707)	(245)	(434)	(64)	(62)
Proceeds from line of credit borrowings	19,305	16,760	12,385	9,554	925
Repayments from line of credit borrowings	(16,585)	(15,200)	(6,233)	(12,036)	(11)
Proceeds from shareholder loans	—	—	3,200	—	—
Repayments of shareholder loans	(150)	(1,200)	(793)	—	—
(Increase) decrease in restricted cash	(193)	(155)	455	(263)	(320)
Exercise of stock options	5	16	1	28	2
Exercise of warrants	—	—	—	114	—
Common stock issued for consultant services	—	1	3	—	—
Issuance of preferred stock, net	10,234	2,859	—	—	—
Net cash provided by financing activities	<u>12,754</u>	<u>2,836</u>	<u>8,975</u>	<u>(2,666)</u>	<u>534</u>
Effect of exchange rate changes on cash	(150)	136	(621)	142	39
Net increase (decrease) in cash	8,956	(2,724)	2,232	(2,146)	550
Cash and cash equivalents at beginning of year	1,767	4,492	2,260	10,723	1,966
Cash and cash equivalents at end of year	<u>\$ 10,723</u>	<u>\$ 1,768</u>	<u>\$ 4,492</u>	<u>\$ 8,577</u>	<u>\$ 2,516</u>
<b>Supplemental disclosure of cash flow information:</b>					
Cash paid for:					
Interest	\$ 1,469	\$ 1,392	\$ 737	\$ 136	\$ 233
Income taxes	—	1	2	1	—
Conversion of shareholders' loan to preferred stock	\$ 760	\$ 1,100	\$ —	\$ —	\$ —

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

**Applied Optoelectronics, Inc. and Subsidiaries**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

**(Information as of March 31, 2013 and 2012 is unaudited)**

**NOTE A—ORGANIZATION AND OPERATIONS**

Applied Optoelectronics, Inc. ("AOI") (the "Company") was incorporated in the State of Texas on February 28, 1997. The Company is a leading, vertically integrated provider of fiber-optic networking solutions, primarily for three networking end-markets: cable television, fiber-to-the-home and internet data centers. The Company designs and manufactures a range of optical communications solutions at varying levels of integration, from components, subassemblies and modules to complete turn-key equipment.

Prime World International Holdings, Ltd. ("Prime World") is a wholly-owned subsidiary of the Company incorporated in the British Virgin Islands on January 13, 2006. Prime World is the parent company of Global Technology, Inc. ("Global"). Global was established in June 2002 in the People's Republic of China ("PRC") and was acquired by Prime World on March 30, 2006. The Company also operates a division, AOI—Taiwan, which is qualified to do business in Taiwan and primarily manufactures transceivers and performs research and development activities.

**NOTE B—SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

1. *Basis of Presentation*

The consolidated financial statements include the accounts of the Company and all of its wholly-owned subsidiaries and are prepared in accordance with accounting principles generally accepted in the United States of America (GAAP). All intercompany balances and transactions have been eliminated in consolidation.

*Unaudited Interim Consolidated Financial Information*

The accompanying interim consolidated balance sheet as of March 31, 2013, and the consolidated statements of operations, comprehensive loss, and cash flows for the three months ended March 31, 2013 and 2012 and the consolidated statement of stockholders' equity for the three months ended March 31, 2013 and the related footnote disclosures are unaudited. These unaudited interim consolidated financial statements have been prepared in accordance with GAAP. In management's opinion, the unaudited interim consolidated financial statements have been prepared on the same basis as the audited financial statements and include all adjustments, which include only normal recurring adjustments, necessary for the fair presentation of the Company's statement of financial position as of March 31, 2013 and the Company's consolidated results of operations and cash flows for the three months ended March 31, 2013 and 2012. The results for the three months ended March 31, 2013 are not necessarily indicative of the results expected for the full fiscal year.

*Unaudited Pro Forma Balance Sheet Information*

Upon the completion of the Company's initial public offering (the "Offering"), all outstanding convertible preferred stock will automatically convert into shares of the Company's



**Applied Optoelectronics, Inc. and Subsidiaries**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Information as of March 31, 2013 and 2012 is unaudited)**

**NOTE B—SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)**

common stock. The unaudited pro forma balance sheet information gives effect to the conversion of the convertible preferred stock as if such conversion had occurred as of March 31, 2013.

2. *Use of Estimates*

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported. Actual results could differ from those estimates in the consolidated financial statements and accompanying notes. Significant estimates and assumptions that impact these financial statements relate to, among other things, allowance for doubtful accounts, inventory reserve, stock-based compensation expense, estimated useful lives of property and equipment, and taxes.

3. *Foreign Currency Translation*

All assets and liabilities of foreign subsidiaries are translated into U.S. dollars at the exchange rate as of the balance sheet date. Revenue and expense accounts are translated at weighted-average rates for the reporting period. Translation adjustments do not impact the results of operations and are reported as a separate component of stockholders' equity. Foreign currency transaction gains and losses are included in the consolidated statements of operations.

4. *Fair Value*

The carrying value of cash and cash equivalents, accounts receivable, accounts payable, and note receivable approximate their historical fair values due to their short-term maturities. The carrying value of the debt approximates its fair value due to the short-term nature of the debt since it renews frequently at current interest rates. Management believes that the interest rates in effect at each year end represent the current market rates for similar borrowings.

5. *Cash and Cash Equivalents*

The Company considers all highly liquid securities with an original maturity of ninety days or less from the date of purchase to be cash equivalents. Cash in foreign accounts was approximately \$1.1 million and \$1.4 million at December 31, 2012 and 2011, respectively.

The Company maintains cash and cash equivalents at U.S. financial institutions for which the combined account balances in individual institutions may exceed Federal Deposit Insurance Corporation ("FDIC") insurance coverage and, as a result, there is a concentration of credit risk related to amounts on deposit in excess of FDIC insurance coverage. As of December 31, 2012, approximately \$9.4 million of U.S. deposits were not covered by FDIC insurance. The Company has not experienced any losses and believes it is not exposed to any significant risk with such accounts.

**Applied Optoelectronics, Inc. and Subsidiaries**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Information as of March 31, 2013 and 2012 is unaudited)**

**NOTE B—SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)**

6. *Restricted Cash/Compensating Balances*

The Company is required to maintain a minimum balance equal to 30% in 2012 and 10% in 2011 and 2010 of one of its lines of credit with a bank, as well as other restricted cash balances. As of December 31, 2012 and 2011, the amount of restricted cash was \$0.5 million and \$0.3 million, respectively.

7. *Accounts Receivable/Allowance for Doubtful Accounts*

The Company carries its accounts receivable at the net amount that it estimates to be collectible. An allowance for uncollectable accounts is maintained through a charge against operations. The allowance is determined by management review of outstanding amounts per customer, historical payments and the aging of accounts.

8. *Notes Receivable*

The Company carries its notes receivable at face value or discounted value if the note is interest bearing. The maturity date of the notes receivable are all within one year of the original issuance date and are carried at face value.

9. *Concentration of Credit Risk and Significant Customers*

Financial instruments which potentially subject the Company to concentrations of credit risk include cash, cash equivalents and accounts receivable. The Company places all cash and cash equivalents with high-credit quality financial institutions.

The Company performs ongoing credit valuations of its customers' financial condition whenever deemed necessary and generally does not require deposits or collateral to support customer receivables. The historical amount of losses on uncollectible accounts has been within the Company's estimates. The Company's five largest customers represented an aggregate of 47%, 56% and 60% of total revenue for the years ended December 31, 2012, 2011 and 2010, respectively. The five largest receivable balances for customers represented an aggregate of 58%, and 71% of total accounts receivable at December 31, 2012 and 2011, respectively. For the years ended December 31, 2012 and 2011, Cisco Systems, Inc. and Biogenomics Corp. were the only customers that accounted for more than 10% of the Company's total revenue. In 2012, we earned revenue of \$21.2 million and \$7.1 million, from Cisco Systems, Inc. and Biogenomics Corp., respectively. In 2011, the Company earned \$12.8 million and \$5.6 million from Cisco Systems, Inc. and Biogenomics Corp., respectively.

10. *Fair Value Accounting*

The fair value measurement standard defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The standard characterizes inputs used in determining fair

**Applied Optoelectronics, Inc. and Subsidiaries****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)****(Information as of March 31, 2013 and 2012 is unaudited)****NOTE B—SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)**

value according to a hierarchy that prioritized inputs based on the degree to which they are observable. The three levels of the fair value hierarchy are as follows:

Level 1—Inputs represent quoted prices in active markets for identical assets or liabilities.

Level 2—Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. These include quoted prices for similar assets or liabilities in active markets and quoted prices for identical or similar assets or liabilities in markets that are not active.

Level 3—Inputs that are not observable from objective sources, such as management's internally developed assumptions used in pricing an asset or liability.

Assets and liabilities that are required to be fair valued on a recurring basis include money market funds, marketable securities, equity instruments and contingent consideration.

Money market funds are valued with Level 1 inputs, using quoted market prices, and are included in cash and cash equivalents on the Company's consolidated balance sheets.

**11. Inventories**

Inventories are stated at the lower of cost (average-cost method) or market. Work in process and finished goods includes materials, labor and allocated overhead. The Company assesses the valuation of its inventory on a periodic basis and provides write-offs for the value of estimated excess and obsolete inventory based on estimates of future demand.

**12. Property, Plant and Equipment**

Property, plant and equipment are stated at cost, net of accumulated depreciation and amortization. The Company calculates depreciation using the straight-line method over the following estimated useful lives:

	Useful lives
Buildings	20 - 40 years
Land improvements	10 years
Machinery and equipment	3 - 20 years
Furniture and fixtures	1 - 8 years
Computer equipment and software	3 - 7 years
Leasehold improvements	The shorter of the life of the applicable lease or the useful life of the improvement
Transportation equipment	5 years

**Applied Optoelectronics, Inc. and Subsidiaries**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Information as of March 31, 2013 and 2012 is unaudited)**

**NOTE B—SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)**

Major improvements are capitalized and expenditures for maintenance and repairs are expensed as incurred. Construction in progress represents property, plant and equipment under construction or being installed. Costs include original cost, installation, construction and other direct costs which include interest on borrowings used to finance the asset. Construction in progress is transferred to the appropriate fixed asset account and depreciation commences when the asset has been substantially completed and placed in service.

Land use rights allow the Company rights for 50 years to certain land in Ningbo, China on which the Company built a facility that included office space, manufacturing operations and employee dormitories. The land use rights are recorded at cost and are amortized on the straight-line basis over the useful life of the related contract. The land use rights expire on March 8, 2054.

**13. Intangible Assets**

Intangible assets consist of intellectual property that is stated at cost less accumulated amortization. As of December 31, 2012, the Company had 103 total patents issued. The costs incurred to obtain such patents have been capitalized and are being amortized over an estimated life of 20 years. The Company periodically evaluates its intangible assets to determine whether events or changes in circumstances indicate that a patent or trademark may not be applicable to the Company's current products or is no longer in use. If such a determination is made, the intangible asset is impaired and the remaining value of the patent or trademark will be expensed at that time.

**14. Impairment of Long-Lived Assets**

The Company accounts for impairment of long-lived assets in accordance with Accounting Standards Codification ("ASC") 360, *Property, Plant and Equipment*, ("ASC 360"). Long-lived assets consist primarily of property, plant and equipment. In accordance with ASC 360, the Company periodically evaluates long-lived assets whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. The Company obtained appraisals on an asset by asset basis, and will recognize an impairment loss when the sum of the appraised values is less than the carrying amounts of such assets. The appraised values, based on reasonable and supportable assumptions and projections, require subjective judgments. Depending on the assumptions and estimates used, the appraised values projected in the evaluation of long-lived assets can vary within a range of outcomes. The appraisals consider the likelihood of possible outcomes in determining the best estimate for the value of the assets.

The measurement for such an impairment loss is then based on the fair value of the asset as determined by the appraisals. During 2010, the Company recorded a \$0.5 million noncash asset impairment charge on equipment with carrying values lower than estimated fair values.

**Applied Optoelectronics, Inc. and Subsidiaries**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Information as of March 31, 2013 and 2012 is unaudited)**

**NOTE B—SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)**

15. *Comprehensive Income*

ASC 220, *Comprehensive Income*, ("ASC 220") establishes rules for reporting and display of comprehensive income and its components. ASC 220 requires that unrealized gains and losses on the Company's foreign currency translation adjustments be included in comprehensive income.

16. *Stock-Based Compensation*

The Company accounts for share-based compensation in accordance with the provisions of ASC 718, *Compensation—Stock Compensation*. Share-based compensation expense is recognized based on the estimated grant date fair value, net of an estimated forfeiture rate, in order to recognize compensation cost for those shares expected to vest. Compensation cost is recognized on a straight-line basis over the vesting period of the options.

17. *Revenue Recognition*

The Company derives revenue from the manufacture and sale of fiber optic networking solutions. Revenue recognition follows the criteria of ASC 605, *Revenue Recognition*. Specifically, the Company recognizes revenue when persuasive evidence exists of an arrangement with a customer, usually in the form of a customer purchase order; delivery to a third party carrier has occurred; title and risk of loss have transferred to the customer; the price is fixed or determinable; collectability is reasonably assured and there are no uncertainties with respect to customer acceptance. The Company may offer units (samples) to current and potential customers at no charge for evaluation or qualification purposes. Such sample units are expensed as selling or research and development costs when shipped.

18. *Advertising Costs*

Advertising costs are charged to operations as incurred and amounted to approximately \$80,000, \$104,000 and \$78,000 for the years ended December 31, 2012, 2011 and 2010, respectively.

19. *Research and Development*

Research and development costs are charged to operations as incurred.

20. *Income Taxes*

The Company accounts for income taxes in accordance with the provisions of ASC 740, *Income Taxes*. The liability method is used to account for deferred income taxes. Under the liability method, deferred tax assets and liabilities are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse. The realizability of

**Applied Optoelectronics, Inc. and Subsidiaries**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Information as of March 31, 2013 and 2012 is unaudited)**

**NOTE B—SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)**

deferred tax assets are evaluated annually and a valuation allowance is provided if it is unlikely that the deferred tax assets will not give rise to future benefits in the Company's tax returns.

Uncertain tax provisions are recorded at their net recognizable amount, based on the amount of tax, interest and penalties that management deems is more likely than not to be sustained upon settlement with the tax authorities in the domestic and international jurisdictions in which the Company operates. The Company records tax-related interest and penalties as a component of income tax expense.

*21. Supplemental Cash Flow Information*

During the years ended December 31, 2012 and 2011, \$0.8 million and \$1.1 million in aggregate principal amount of the convertible shareholder notes was converted by the holders, respectively. Upon conversion, 2,171,428 shares and 1,816,666 shares of Series G Preferred Stock were issued to the holders, respectively.

*22. New Accounting Standards Adopted in this Report*

*ASU 2011-04.* In May 2011, the FASB issued ASU 2011-04, *Fair Value Measurement (Topic 820): Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and IFRS*. This ASU represents the converged guidance of the FASB and the IASB on measuring fair value and for disclosing information about fair value measurements. The amendments in this ASU clarify the board of directors' intent about the application of existing fair value measurement and disclosure requirements and changes particular principles or requirements for measuring fair value and for disclosing information about fair value measurements. ASU 2011-04 is effective prospectively for interim and annual reporting periods beginning after December 15, 2011. The Company adopted the provisions of ASU 2011-04 on January 1, 2012, and the adoption of this standard did not have a material impact on the Company's financial position, results of operations or cash flows.

*ASU 2011-05.* In June 2011, the FASB issued ASU 2011-05, *Comprehensive Income (Topic 220): Presentation of Comprehensive Income*. The amendments in this ASU allow an entity the option to present the total of comprehensive income, the components of net income, and the components of other comprehensive income either in a single continuous statement of comprehensive income or in two separate but consecutive statements. In both choices, an entity is required to present each component of net income along with total net income, each component of other comprehensive income along with a total for other comprehensive income, and a total amount for comprehensive income. This ASU eliminates the option to present the components of other comprehensive income as part of the statement of changes in stockholders' equity. ASU 2011-05 should be applied retrospectively for interim and annual reporting periods beginning after December 15, 2011 with early adoption permitted. The Company early adopted the provisions of ASU 2011-05 during the fourth quarter of 2011, and the adoption of this standard did not have a material impact on the Company's financial position, results of operations, or cash flows.

**Applied Optoelectronics, Inc. and Subsidiaries**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**(Information as of March 31, 2013 and 2012 is unaudited)**

**NOTE B—SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)**

*ASU 2011-12.* In December 2011, the FASB issued ASU 2011-12, *Deferral of the Effective Date for Amendment to the Presentation of Reclassifications of Items Out of Accumulated Other Comprehensive Income (Topic 220): Presentation of Comprehensive Income*. This ASU defers the guidance on whether to require entities to present reclassification adjustments out of accumulated other comprehensive income by component in both the statement where net income is presented and the statement where other comprehensive income is presented for both interim and annual financial statements. ASU 2011-12 reinstated the requirements for the presentation of reclassifications that were in place prior to the issuance of ASU 2011-05 and did not change the effective date of ASU 2011-05. ASU 2011-12 should be applied consistently with ASU 2011-05; accordingly, this ASU is to be applied retrospectively for interim and annual reporting periods beginning after December 15, 2011, with early adoption permitted. The Company early adopted the provisions of ASU 2011-12 during the fourth quarter of 2011, and the adoption of this standard did not have a material impact on the Company's financial position, results of operations, or cash flows.

*23. Subsequent Events*

For the annual consolidated financial statements as of December 31, 2012 and for each of the three years then ended, the Company evaluated these consolidated financial statements and disclosures for subsequent events through April 4, 2013, the date they were initially available to be issued. For the interim consolidated financial statements as of March 31, 2013 and 2012, and for the three months then ended, and the revised annual financial statements, subsequent events were evaluated through May 21, 2013, the date the interim and revised annual financial statements were available to be issued.

**NOTE C—EARNINGS PER SHARE**

Basic net loss per share has been computed using the weighted-average number of shares of common stock outstanding during the period. Pro forma basic and diluted earnings per share includes all common stock and all shares of preferred stock as if converted to common equivalent shares using their conversion rate at the end of each period. Diluted net loss per share has been computed using the weighted-average number of shares of common stock and dilutive potential common shares from options and warrants outstanding during the period. In periods with net losses, normally dilutive shares become anti-dilutive. Therefore, basic and dilutive earnings per share are the same.

## Applied Optoelectronics, Inc. and Subsidiaries

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

December 31, 2012, 2011 and 2010

## NOTE C—EARNINGS PER SHARE (Continued)

The financial statements have been revised for the calculation and presentation of basic and diluted loss per share for 2012, 2011 and 2010. The Company's disclosure originally presented basic and diluted loss per share including preferred shares on an "as converted basis" in determining the weighted average shares used for both basic and diluted loss per share. The preferred shares have the right to participate in the Company's earnings and dividends; however, since there is not a contractual obligation for the preferred shareholders to share in the Company's losses, the preferred shares should not be included in loss periods, as their effect is anti-dilutive. The Company has concluded this revised disclosure did not have a material effect on the original financial statements as historical loss per share is not meaningful given the magnitude of outstanding participating preferred shares relative to total equity on an as-if-converted basis. The preferred shares automatically convert to common shares upon consummation of a qualified public offering. For 2012 and the subsequent interim period, the Company has presented both basic and diluted loss per share excluding the preferred shares and also unaudited pro forma loss per share giving effect to the conversion of the preferred shares to common shares.

The following table presents the revised calculation of basic and diluted EPS:

	Years ended December 31,			Three months ended March 31,	
	2012	2011	2010	2013	2012
	(in thousands, except per share data)			(unaudited)	
<b>Numerator:</b>					
Net loss	\$ (945)	\$ (5,328)	\$ (3,380)	\$ (994)	\$ (523)
<b>Denominator:</b>					
Weighted-average shares used to compute net loss per share:					
Basic and diluted	7,967	7,910	7,767	7,989	7,955
Net loss per share—basic and diluted	\$ (0.12)	\$ (0.67)	\$ (0.44)	\$ (0.12)	\$ (0.07)

*Pro Forma earnings per share (unaudited)*

The following unaudited calculation of the numerator and denominator of basic and diluted EPS gives effect to the automatic conversion of all outstanding shares of the Company's convertible preferred stock (using the as if-converted method) into common stock as though the



Applied Optoelectronics, Inc. and Subsidiaries

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

December 31, 2012, 2011 and 2010

NOTE C—EARNINGS PER SHARE (Continued)

conversion had occurred as of the beginning of the period or the original date of issuance, if later.

	Year ended December 31, 2012	Three months ended March 31, 2013 (unaudited)
	(in thousands, except for per share data)	
<b>Numerator:</b>		
Net loss	\$ (945)	\$ (994)
<b>Denominator:</b>		
Number of shares used to compute net loss per share—basic and diluted:	7,968	7,989
Assumed conversion of preferred stock to common stock	243,438	260,279
Number of shares used to compute pro forma net loss per share—basic and diluted:	251,406	268,268
Pro forma net loss per share—basic and diluted	\$ (0.00)	\$ (0.00)

The following potentially dilutive securities were excluded from the computation of diluted net loss per share as their effect would have been antidilutive:

	2012	2011	2010
	(in thousands)		
Employee stock options	12,580	11,324	8,669
Warrants	2,868	3,670	2,186
Total	15,448	14,994	10,855

NOTE D—INVENTORIES

At December 31, 2012 and 2011, and at March 31, 2013, inventories consisted of the following:

	Years ended December 31,		Three Months Ended March 31, 2013 (unaudited)
	2012	2011	
	(in thousands)		
Raw materials	\$ 4,755	\$ 6,410	\$ 4,786
Work in process	4,434	3,628	4,821
Finished goods	3,304	2,633	2,732
	\$ 12,493	\$ 12,671	\$ 12,339

## Applied Optoelectronics, Inc. and Subsidiaries

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

December 31, 2012, 2011 and 2010

## NOTE D—INVENTORIES (Continued)

For the years ended December 31, 2012, 2011 and 2010, the lower of cost or market adjustment expensed for inventory was \$0.9 million, \$1.6 million and \$0.6 million, respectively. For the three months ended March 31, 2013, the lower of cost or market adjustment expense for inventory was \$0.1 million.

## NOTE E—PROPERTY, PLANT AND EQUIPMENT

At December 31, 2012 and 2011, property, plant and equipment consisted of the following:

	<u>2012</u>	<u>2011</u>
	(in thousands)	
Land improvements	\$ 93	\$ —
Building and improvements	15,239	15,002
Machinery and equipment	29,977	27,698
Furniture and fixtures	739	738
Computer equipment and software	2,851	2,745
Transportation equipment	173	172
	<u>49,072</u>	<u>46,355</u>
Less accumulated depreciation and amortization	(24,967)	(22,556)
	<u>24,105</u>	<u>23,799</u>
Construction in progress	—	—
Land	733	733
Property, plant and equipment, net	<u>\$ 24,838</u>	<u>\$ 24,532</u>

For the years ended December 31, 2012, 2011 and 2010, depreciation expense of property, plant and equipment was \$2.9 million \$3.1 million and \$3.3 million, respectively.

## NOTE F—INTANGIBLE ASSETS

At December 31, 2012 and 2011, intangible assets consisted of the following:

	<u>2012</u>		
	<u>Gross amount</u>	<u>Accumulated amortization</u>	<u>Intangible assets, net</u>
	(in thousands)		
Patents	\$ 1,509	\$ (718)	\$ 791
Trademarks	10	(6)	4
Total intangible assets	<u>\$ 1,519</u>	<u>\$ (724)</u>	<u>\$ 795</u>

## Applied Optoelectronics, Inc. and Subsidiaries

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

December 31, 2012, 2011 and 2010

## NOTE F—INTANGIBLE ASSETS (Continued)

	2011		
	Gross amount	Accumulated amortization (in thousands)	Intangible assets, net
Patents	\$ 1,304	\$ (659)	\$ 645
Trademarks	10	(4)	6
Total intangible assets	<u>\$ 1,314</u>	<u>\$ (663)</u>	<u>\$ 651</u>

For the years ended December 31, 2012, 2011 and 2010, amortization expense for intangible assets, included in general and administrative expenses on the income statement, was \$60,000 \$46,000 and \$41,000, respectively. The remaining weighted average amortization period for intangible assets is approximately 12 years.

At December 31, 2012, approximate amortization expense for intangible assets was as follows (in thousands):

2013	\$ 65
2014	65
2015	65
2016	65
2017	65
Thereafter	470
	<u>\$ 795</u>

**Applied Optoelectronics, Inc. and Subsidiaries**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**December 31, 2012, 2011 and 2010**

**NOTE G—FAIR VALUE OF FINANCIAL INSTRUMENTS**

The following table presents a summary of the Company's financial instruments measured at fair value on a recurring basis as of March 31, 2013 (unaudited):

	Quoted prices in active markets for identical assets (Level 1)	Significant other observable remaining inputs (Level 2)	Significant unobservable inputs (Level 3)	Total
	(in thousands)			
<b>Assets:</b>				
Cash and cash equivalents	\$ 8,577	\$ —	\$ —	\$ 8,577
Restricted cash	766			766
Notes receivable	—	8	—	8
<b>Total assets</b>	<b>\$ 9,343</b>	<b>\$ 8</b>	<b>\$ —</b>	<b>\$ 9,351</b>
<b>Liabilities:</b>				
Interest rate swap	\$ —	\$ 5	\$ —	\$ 5
<b>Total liabilities</b>	<b>\$ —</b>	<b>\$ 5</b>	<b>\$ —</b>	<b>\$ 5</b>

The following table presents a summary of the Company's financial instruments measured at fair value on a recurring basis as of December 31, 2012:

	Quoted prices in active markets for identical assets (Level 1)	Significant other observable remaining inputs (Level 2)	Significant unobservable inputs (Level 3)	Total
	(in thousands)			
<b>Assets:</b>				
Cash and cash equivalents	\$ 10,723	\$ —	\$ —	\$ 10,723
Restricted cash	503			503
Notes receivable	—	1,034	—	1,034
<b>Total assets</b>	<b>\$ 11,226</b>	<b>\$ 1,034</b>	<b>\$ —</b>	<b>\$ 12,260</b>
<b>Liabilities:</b>				
Interest rate swap	\$ —	\$ 11	\$ —	\$ 11
<b>Total liabilities</b>	<b>\$ —</b>	<b>\$ 11</b>	<b>\$ —</b>	<b>\$ 11</b>

## Applied Optoelectronics, Inc. and Subsidiaries

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

December 31, 2012, 2011 and 2010

## NOTE G—FAIR VALUE OF FINANCIAL INSTRUMENTS (Continued)

The following table presents a summary of the Company's financial instruments measured at fair value on a recurring basis as of December 31, 2011:

	Quoted prices in active markets for identical assets (Level 1)	Significant other observable remaining inputs (Level 2)	Significant unobservable inputs (Level 3)	Total
	(in thousands)			
<b>Assets:</b>				
Cash and cash equivalents	\$ 1,768	\$ —	\$ —	\$ 1,768
Restricted cash	306			306
Notes receivable	—	—	—	—
<b>Total assets</b>	<b>\$ 2,074</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$ 2,074</b>
<b>Liabilities:</b>				
Interest rate swap	\$ —	\$ 38	\$ —	\$ 38
<b>Total liabilities</b>	<b>\$ —</b>	<b>\$ 38</b>	<b>\$ —</b>	<b>\$ 38</b>

Applied Optoelectronics, Inc. and Subsidiaries

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

December 31, 2012, 2011 and 2010

NOTE H—NOTES PAYABLE AND LONG-TERM DEBT

Notes payable and long-term debt consisted of the following:

	December 31,	
	2012	2011
	(in thousands)	
Term loan with a U.S. bank with monthly payments of principal and interest at prime plus 1.25% (floor rate: 4.5%), maturing May 3, 2014	\$ 141	\$ 241
Term loan with a U.S. bank with monthly payments of principal and interest at prime plus 1.25% (floor rate: 4.15%) or swap contract (fixed 5%), maturing May 3, 2014	3,181	3,287
Revolving line of credit with a U.S. bank up to \$10,500,000 with interest at prime plus 1.25% (floor rate: 4.5%), maturing November 15, 2013	8,637	7,176
Revolving line of credit with a China bank up to \$12,847,421 with interest at 110% of China Prime rate which ranged from 3.87% to 7.54% in 2012 with various maturity dates from February 2013 to March 2014	10,668	9,681
Bank acceptance notes issued to vendors with a zero percent interest rate, a 30% guarantee deposit of \$409, and maturity dates ranging from January 2013 to June 2013	1,521	662
Revolving line of credit with a China bank up to \$1,150,000 with interest at 7.54%, 125% of the China Prime rate in 2011	—	555
Note payable to a finance company due in monthly installments with 9% interest, maturing October 31, 2013	38	85
Note payable to a finance company due in monthly installments with 3.3% interest, maturing June 20, 2013	398	—
<b>Total</b>	<b>24,584</b>	<b>21,687</b>
Less current portion	15,421	18,326
<b>Long term portion</b>	<b>\$ 9,163</b>	<b>\$ 3,361</b>

The current portion of long-term debt is the amount payable within one year of the balance sheet date of December 31, 2012. The prime rate of interest was 3.25% on December 31, 2012 and 2011.

Maturities of notes payable and long-term debt are as follows for the future years ending December 31(in thousands):

2013	\$ 15,421
2014	9,163
<b>Total outstanding</b>	<b>\$ 24,584</b>

The U.S. bank loans and line of credit agreement require the Company to meet certain financial covenants including a minimum liquidity ratio, minimum quarterly earnings and debt service coverage requirements as well as maximum debt to tangible net worth ratio and reporting requirements. Collateral for the U.S. bank loans and line of credit includes substantially all of

**Applied Optoelectronics, Inc. and Subsidiaries**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**December 31, 2012, 2011 and 2010**

**NOTE H—NOTES PAYABLE AND LONG-TERM DEBT (Continued)**

the assets of the Company. As of December 31, 2012, the Company was in compliance with all of its financial and operational covenants associated with these loans.

As of December 31, 2012, the Company had \$4.7 million of unused borrowing capacity.

In November 2012, the Company renewed its U.S. revolving line of credit of \$10.5 million with the same U.S. bank with a maturity date of November 15, 2013. The interest rate on this line of credit is the prime rate plus 1.25% or the floor rate 4.5%, whichever is higher.

In May 2011, the Company entered into an interest rate swap transaction contract for its real estate loan of \$3.4 million for a fixed rate of 5% expiring on May 5, 2013. A security deposit of \$60,000 was required for this swap contract. On December 31, 2012, the Company would pay \$11,000 in additional interest if it terminated such swap contract. The Company determines a mark-to-market valuation of its swap contract each period, and any changes in fair value is recognized in the statement of operations.

The Company issued the following warrants to the same U.S. bank in connection with the renewals of the loan in 2009, 2010 and 2012:

<u>Renewal year</u>	<u>Warrants issued</u> (shares in thousands)	<u>Security upon exercise</u>	<u>Initial exercise price</u>	<u>Expiration date</u>
2009	400	Preferred F	0.25	6/30/2014
2010	250	Preferred F	0.60	5/3/2013
2012	200	Preferred G	0.35	11/2/2017
Total	<u>850</u>			

The Company estimated the fair value of these warrants at the date of the grant using the Black-Scholes option-pricing model and records the expense over the vesting period of the warrants using the following assumptions:

<u>Issue date</u>	<u>Expected volatility</u>	<u>Risk free interest rate</u>	<u>Expected term (years)</u>
2009	70%	2.54%	5
2010	70%	3.66%	3
2012	70%	0.73%	5

As of December 31, 2012, the market value of the warrants amounted to \$33,431, of which \$8,707 was recorded as interest expense in 2012, representing the expense for the periods 2009 through 2012. No warrants were exercised during 2012, 2011 and 2010.

The Company estimated the fair value of these warrants at the date of the grant using the Black-Scholes option-pricing model and records the expense over the life of the warrants. As of December 31, 2012, the market value of the warrants amounted to \$33,431, of which \$8,707 was recorded as warrant expenses.

**Applied Optoelectronics, Inc. and Subsidiaries****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)****December 31, 2012, 2011 and 2010****NOTE H—NOTES PAYABLE AND LONG-TERM DEBT (Continued)**

The Company, through its China subsidiary, established a bank line of credit for \$11.8 million and \$1.1 million with a China Bank as of December 31, 2012. The interest rate for this line of credit varies between 110% and 125% of the China prime rate. This credit line is a revolving line that is renewable by its anniversary. Collateral for the loans includes the land use rights, building and equipment located in China.

The Company entered into a 12-month equipment financing agreement of \$0.9 million with a Taiwan bank during 2012. The financing agreement required equipment collateral and a compensation deposit of \$50,000 that is included in restricted cash. The agreement requires monthly installment payments over 12 months and ends in June 2013. The financing agreement bears interest at the rate of 3.375%.

**NOTE I—SHORT-TERM LOAN WITH SHAREHOLDERS**

In 2010, the Company borrowed \$3.2 million from 12 shareholders under the terms of unsecured promissory note agreements. These notes bore an interest rate of 6% with maturity dates of 18 months from the effective dates of the notes originally maturing on October 21, 2011, but extended to December 31, 2012. The note holders were also issued warrants that expire by April 23, 2020, to purchase 1,536,000 shares of the Company's Series F Preferred Stock, with an exercise price of \$0.25 per share. As part of the loan maturity date extension, additional warrants to purchase 182,442 shares of the Company's Series G Preferred Stock were issued in 2011 with an exercise price of \$0.60 per share that expire on April 23, 2020.

In 2011, two of the note holders converted their respective notes into shares of Series G Preferred Stock and four of the notes were repaid in full. In 2012, five of the remaining note holders converted their respective notes into shares of Series G Preferred Stock and one of the notes was repaid. As of December 31, 2012, all principal and interest related to these notes had been fully satisfied.

The Company estimated the fair value of these warrants at the date of the grant using the Black-Scholes option-pricing model and records the expense over the life of the warrants using the following assumptions:

<u>Issue date</u>	<u>Expected volatility</u>	<u>Risk free interest rate</u>	<u>Expected term (years)</u>
2010	70%	3.66%	10
2011	70%	0.83%	10



## Applied Optoelectronics, Inc. and Subsidiaries

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

December 31, 2012, 2011 and 2010

## NOTE I—SHORT-TERM LOAN WITH SHAREHOLDERS (Continued)

As of December 31, 2012, the market value of the warrants amounted to \$59,085, of which \$11,422 was recorded as interest expense in 2012, representing the expense for the periods 2010 through 2012. No warrants were exercised during 2010, 2011 and 2012.

## NOTE J—ACCRUED LIABILITIES

Accrued liabilities consisted of the following as of December 31:

	<u>2012</u>	<u>2011</u>
	(in thousands)	
Accrued payroll	\$ 1,631	\$ 1,367
Accrued employee benefits	429	452
Accrued property taxes	167	173
Accrued interest	74	188
Accrued construction expenses	—	—
Advanced payments	189	25
Accrued commission	69	201
Accrued professional fees	22	—
Accrued other	662	252
	<u>\$ 3,243</u>	<u>\$ 2,658</u>

## NOTE K—OTHER INCOME AND EXPENSE

Other income and expense consisted of the following as of December 31:

	<u>2012</u>	<u>2011</u>	<u>2010</u>
	(in thousands)		
Interest income	\$ 26	\$ 15	\$ 34
Unrealized foreign exchange gain (loss)	217	(352)	406
Realized foreign exchange gain (loss)	(79)	83	88
Government subsidy income	92	77	71
Other non-operating gain	38	1	9
Gain (loss) on disposal of assets	(37)	(80)	11
	<u>\$ 257</u>	<u>\$ (256)</u>	<u>\$ 619</u>

**Applied Optoelectronics, Inc. and Subsidiaries**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**December 31, 2012, 2011 and 2010**

**NOTE L—INCOME TAXES**

The sources of our income or loss from operations before income taxes were as follows:

	Year Ended December 31,		
	2012	2011	2010
Domestic	(3,077)	(3,513)	(2,144)
Foreign (loss) income	2,132	(1,815)	(1,236)
<b>Total Income (loss)</b>	<b>(945)</b>	<b>(5,328)</b>	<b>(3,380)</b>

Deferred income tax assets and liabilities result principally from net operating losses, different methods of recognizing depreciation, reserve for doubtful accounts, inventory reserves for obsolescence and accrued vacation, together with timing differences between book and tax reporting. At December 31, the net deferred tax assets and liabilities are comprised of the following approximate amounts:

	2012	2011
	(in thousands)	
NOL carryforward	\$ 22,673	\$ 21,797
Inventory reserves	389	305
Stock compensation	511	—
Fixed assets and intangibles	(1,582)	(1,664)
Impairment loss	(614)	(614)
Other	267	276
	21,644	20,099
Less valuation allowance	(21,644)	(20,099)
<b>Deferred tax assets, net</b>	<b>\$ —</b>	<b>\$ —</b>

The valuation allowance was established to reduce the deferred tax asset for the amounts that will more likely than not be realized. This reduction is primarily necessary due to the uncertainty of the Company's ability to utilize all of the net operating loss carry forwards. The valuation allowance increased approximately \$1.5 million, \$0.8 million and \$0.5 million in 2012, 2011 and 2010, respectively.

As of December 31, 2012 and 2011, and for the periods then ended, the Company had no uncertain tax positions.

The Company has a U.S. net operating loss carry forward of approximately \$66.7 million, which expires between 2020 and 2032. The Company also has U.S. research and development tax credits of \$1.5 million which expire between 2024 and 2032. The Company has a net operating loss carry-forward from its China operations of approximately \$5.4 million, which expires between 2013 and 2016. Utilization of net operating losses and tax credit carry-forwards

**Applied Optoelectronics, Inc. and Subsidiaries**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**December 31, 2012, 2011 and 2010**

**NOTE L—INCOME TAXES (Continued)**

are subject to a substantial annual limitation due to the ownership change limitations set forth in Internal Revenue Code Section 382. Based upon analysis performed with respect to Section 382 of the Internal Revenue Code, approximately \$21.6 million of the total available U.S. net operating loss carry forwards will not be available for utilization as an offset to taxable income in future periods. Because of changes in control that are deemed to have occurred under Section 382, the Company's net operating loss carry forward available in calendar year 2013 to shelter taxable income was limited to \$38.8 million at December 31, 2012, with an additional \$3.7 million becoming available between 2013 and 2025. The additional \$3.7 million is subject to an annual limitation of the \$0.3 million. Additional ownership changes could result in the expiration of the net operating loss and tax credit carry-forwards before utilization.

The Company files income tax returns in the U.S federal jurisdiction and various states and foreign jurisdictions. As of December 31, 2012, the Company's federal returns for the year ended December 31, 2009 through the current period are still open to examination. In addition, all of the net operating losses and research and development credit carry-forwards that may be utilized in future years are still subject to examination. The Company is not currently subject to U.S. federal, state and local, or non-U.S. income tax examinations by any tax authorities.

A reconciliation of the U.S. federal income tax rate of 34% for the years ended December 31, 2012, 2011 and 2010 to the Company's effective income tax rate follows:

	<u>2012</u>	<u>2011</u>	<u>2010</u>
		(in thousands)	
Expected (benefit) taxes	\$ (293)	\$ (1,808)	\$ (1,158)
Non-deductible expenses	(760)	1,003	534
Increase in valuation allowance	1,545	845	523
Non-qualified stock options and other, net	(492)	(40)	101
<b>Tax expense</b>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>

The Company's wholly owned subsidiary, Prime World is a tax-exempt entity under the Income Tax Code of the British Virgin Islands.

The Company's wholly owned subsidiary, Global has enjoyed preferential tax concessions in China as a "high-tech enterprise." Pursuant to China's State Council's Regulations on Encouraging Investment in and Development, Global is entitled to full exemption from China's Foreign Enterprise Income Tax, or FEIT, for the first two years and a 50% reduction for the next three years, commencing from the first profit making year after offsetting all tax losses carried forward from the previous five years. In March 2007, China enacted the PRC Enterprise Income Tax Law, or EIT Law, under which, effective January 1, 2008, China adopted a uniform income tax rate of 25% for all enterprises (including foreign-invested enterprises) and cancelled several tax incentives enjoyed previously by foreign-invested enterprises. For foreign-invested enterprises like Global that were established before the promulgation of the EIT Law, a five-year transition period is provided during which reduced income tax rates will apply but will

**Applied Optoelectronics, Inc. and Subsidiaries**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**December 31, 2012, 2011 and 2010**

**NOTE L—INCOME TAXES (Continued)**

gradually be phased out. The Chinese government has not yet announced implementation measures for the transitional policy concerning such preferential tax rates, so the Company is unable at this time to estimate the financial impact of the new tax law on Global.

**NOTE M—STOCK-BASED COMPENSATION**

The Company issues stock options to employees, consultants and non-employee directors. There are four incentive share plans that have been approved by the board of directors: the 1998 Incentive Share Plan, the 2000 Incentive Share Plan, the 2004 Incentive Share Plan and the 2006 Incentive Share Plan. Stock option awards for each of the four plans generally vest over a four year period and have a maximum term of ten years.

Stock options under these plans have been granted at the fair market value on the date of the grant. Nonqualified and Incentive Stock Options may be granted from each of these plans. The fair market value of the Company's stock has been historically determined by the board of directors and beginning in 2007, with the assistance of a third party valuation specialist.

The 1998 Incentive Share Plan provides for awards of Stock Options, Stock Appreciation Rights, Restricted Stock, Performance Awards or Other Awards. Initially 2,000,000 shares of common stock were reserved for issuance under such plan and such amount was amended to 2,080,000 in June 2001. As of December 31, 2012, 115,850 shares were outstanding under this plan and there were no shares available to issue under this plan.

The 2000 Incentive Share Plan provides for awards of Stock Options, Stock Appreciation Rights, Restricted Stock, Performance Awards or Other Awards. Upon approval 3,604,100 shares of common stock were reserved for issuance under the plan. As of December 31, 2012, 632,586 shares were outstanding under this plan and there were no shares available to issue under this plan.

The 2004 Incentive Share Plan provides for awards of Stock Options, Stock Appreciation Rights, Restricted Stock, Performance Awards or Other Awards. Upon approval, 1,500,000 shares of common stock were reserved for issuance under the plan. As of December 31, 2012, 771,170 shares were outstanding under this plan and there were no shares available to issue under this plan.

The 2006 Incentive Share Plan provides for awards of Stock Options, Stock Appreciation Rights, Restricted Stock, Performance Awards or Other Awards. Initially 1,500,000 shares of common stock were reserved for issuance under the plan. In June 2008, the number of shares of common stock reserved for issuance under this plan was increased to 14,000,000. The plan was again amended to increase the reserved shares to 30,000,000 in November 2012. As of December 31, 2012, 11,060,044 shares were outstanding under this plan and there were 18,714,408 shares available to issue under this plan.

## Applied Optoelectronics, Inc. and Subsidiaries

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

December 31, 2012, 2011 and 2010

## NOTE M—STOCK-BASED COMPENSATION (Continued)

The Company estimates the fair value of employee stock options at the date of the grant using the Black-Scholes option-pricing model with the following assumptions:

	2012	2011	2010
Expected volatility	70%	70%	74%
Risk free interest rate	1.01%	2.32%	1.72%
Expected term (years)	6.25	6.25	6.25
Expected dividend yield	—	—	—
Estimated forfeitures	10%	13%	13%

As there has been no market for the Company's common stock, the expected volatility for options granted to date was derived from an analysis of reported data for a peer group of companies that issued options with similar terms. The expected volatility has been determined using an average of the expected volatility reported by this peer group of companies. The Company uses a risk free interest rate based on the 10-year Treasury as reported during the period. The expected term of options has been determined utilizing the simplified method which calculates a simple average based on vesting period and option life. The Company does not anticipate paying dividends in the near future. Estimated forfeitures are based on historical experience and future work force projections.

Employee stock-based compensation expenses recognized for the years ended December 31, were as follows:

	2012	2011	2010
	(in thousands)		
Cost of sales	\$ 7	\$ 35	\$ 61
Research and development	8	50	60
Sales and marketing	9	58	80
General and administrative	137	420	579
Total employee stock-based compensation expenses	<u>\$ 161</u>	<u>\$ 563</u>	<u>\$ 780</u>

Options have been granted to the Company's employees under the four incentive plans and generally become exercisable as to 25% of the shares on the first anniversary date following the date of grant and semi-annually thereafter. All options expire ten years after the date of grant. The Company has outstanding options to purchase 2,533,240 shares under the 1998 plan; 3,778,267 shares under the 2000 plan; 2,229,545 shares under the 2004 plan; and 16,985,327 shares under the 2006 plan.

## Applied Optoelectronics, Inc. and Subsidiaries

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

December 31, 2012, 2011 and 2010

## NOTE M—STOCK-BASED COMPENSATION (Continued)

The following is a summary of option activity:

	Number of shares	Exercise price	Weighted average exercise price
	(in thousands, except price data)		
Outstanding, January 1, 2010	4,845	\$ 0.10 - \$1.88	\$ 0.1927
Granted	4,030	0.20	0.2000
Exercised	(7)	0.20	0.2000
Forfeited	(100)	0.20	0.2000
Expired	(99)	0.15 - 1.88	0.1946
Outstanding, December 31, 2010	8,669	0.10 - 0.25	0.1946
Exercisable, December 31, 2010	4,050	0.10 - 0.25	0.1885
Granted	3,715	0.20	0.2000
Exercised	(81)	0.10 - 0.20	0.2000
Forfeited	(756)	0.20	0.2000
Expired	(223)	0.15 - 0.20	0.1991
Outstanding, December 31, 2011	11,324	0.10 - 0.25	0.1959
Exercisable, December 31, 2011	5,417	0.10 - 0.25	0.1915
Granted	2,647	0.20	0.2000
Exercised	(23)	0.20 - 0.25	0.2097
Forfeited	(575)	0.20	0.2000
Expired	(793)	0.10 - 0.25	0.1767
Outstanding, December 31, 2012	12,580	0.10 - 0.25	0.1978
Exercisable, December 31, 2012	7,006	0.10 - 0.25	0.1960
Vested and expected to vest, December 31, 2012	11,891	0.10 - 0.25	0.1977
Granted (unaudited)	10,037	0.25	0.2500
Exercised (unaudited)	(142)	0.20	0.20
Forfeited (unaudited)	(190)	0.20 - 0.25	0.2071
Expired (unaudited)	(64)	0.20	0.20
Outstanding, March 31, 2013 (unaudited)	22,219	0.10 - 0.25	0.2213
Exercisable, March 31, 2013 (unaudited)	7,430	0.10 - 0.25	0.1963
Vested and expected to vest (unaudited)	19,759	0.10 - 0.25	0.2191

## Applied Optoelectronics, Inc. and Subsidiaries

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

December 31, 2012, 2011 and 2010

## NOTE M—STOCK-BASED COMPENSATION (Continued)

The following table summarizes information about the options outstanding at December 31, 2012:

<u>Range of exercise prices</u>	<u>Number of shares outstanding</u>	<u>Weighted average remaining contractual life (years)</u>	<u>Weighted average exercise price</u>	<u>Aggregate intrinsic value</u>	<u>Number of shares exercisable</u>	<u>Weighted average remaining contractual life (years)</u>	<u>Weighted average exercise price</u>	<u>Aggregate intrinsic value</u>
				(in thousands, except price data)				
\$0.10 - \$0.165	556	1.67	\$ 0.135	\$ 64	556	1.67	\$ 0.135	\$ 64
0.20 - 0.25	12,023	7.68	0.201	593	6,450	6.92	0.201	314
<b>Total</b>	<b>12,579</b>	<b>7.41</b>	<b>\$ 0.198</b>	<b>\$ 657</b>	<b>7,006</b>	<b>6.49</b>	<b>\$ 0.196</b>	<b>\$ 378</b>

As of December 31, 2012, total compensation cost related to unvested stock options not yet recognized was \$0.4 million, which is expected to be expensed over a weighted-average period of 3.25 years.

As of March 31, 2013, total compensation cost related to unvested stock options not yet recognized was \$1.8 million, which is expected to be expensed over a weighted-average period of 3.62 years.

The aggregate intrinsic value of options outstanding and options exercisable as of December 31, 2012 and December 31, 2011 was \$0.7 million and \$0.4 million, respectively.

The number and weighted average fair value of options granted in 2012, 2011 and 2010 is as follows:

<u>2012</u>		<u>2011</u>		<u>2010</u>	
<u>Shares</u>	<u>Weighted average fair value</u>	<u>Shares</u>	<u>Weighted average fair value</u>	<u>Shares</u>	<u>Weighted average fair value</u>
		(shares in thousands)			
2,647	\$ 0.1642	3,715	\$ 0.0131	4,030	\$ 0.0144

## NOTE N—STOCKHOLDERS' EQUITY

1. *Common Stock*

The Company has authorized the issuance of up to 300,000,000 shares of common stock, all of which have been designated voting common stock, under its Tenth Amended and Restated Articles of Incorporation (the "Restated Articles").

## Applied Optoelectronics, Inc. and Subsidiaries

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

December 31, 2012, 2011 and 2010

## NOTE N—STOCKHOLDERS' EQUITY (Continued)

## 2. Convertible Preferred Stock

The Company has authorized the issuance of up to 200,000,000 shares of preferred stock under the Company's Restated Articles. The number of authorized, and issued shares and the conversion rate from a preferred share into a common share by series is as follows:

	Authorized shares	Issued shares	Carrying value	Conversion rate
	(in thousands, except for conversion rate)			
Series A (Redeemable)	4,900	4,806	\$ 7,105	1:3.1731
Series C	17,500	17,470	21,802	1:2.3106
Series D	11,800	11,414	14,184	1:2.5359
Series E	11,000	10,339	28,055	1:3.6186
Series F	82,000	79,518	19,278	1:1.2000
Series G	45,000	42,857	14,943	1:1.0000
	<u>172,200</u>	<u>166,404</u>	<u>\$ 105,367</u>	

The Company's Series A Preferred Stock may be redeemed at any time at the option of the Company's board by paying Series A shareholders a redemption price per share equal to the Series A purchase price of \$1.50 plus the quotient of (i) the retained earnings of the Company as of the last day of the month immediately preceding notice of redemption divided by (ii) the number of Series A Preferred Stock outstanding on the date such notice is mailed.

Except for Series A preferred shareholders, holders of preferred stock vote equally with shares of common stock on an as-converted basis on actions required by stockholders, other than as required by the Texas Business Organizations Code ("TBOC"). Holders of Series A Preferred do not have the right to vote on any action to be taken by the shareholders of the Company, except (a) to the extent a vote is required by the TBOC; or (b) with respect to certain other matters specified in the Restated Articles. In addition, each of the Series C, Series D, Series E, Series F and Series G have per-class voting rights similar to the class-voting rights for Series A Preferred Stock.

The Company's preferred shareholders are not entitled to receive dividends unless declared by the board of directors of the Company. Each share of preferred stock is convertible into common stock as shown in the conversion rate table above upon an initial public offering of the Company's common stock.

Each class of preferred stock provides to shareholders certain liquidation preferences upon any liquidation, dissolution or winding up of the Corporation. The Series G Preferred is senior to all other series of preferred stock, and the Series G liquidation preference is equal to the Series G purchase price plus a Series G preferential return equal to interest at prime rate plus one percent on the Series G purchase price, not to exceed the Series G purchase price, for a total



## Applied Optoelectronics, Inc. and Subsidiaries

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

December 31, 2012, 2011 and 2010

## NOTE N—STOCKHOLDERS' EQUITY (Continued)

liquidation payment of up to two times the Series G purchase price. The Series F Preferred is senior to all other series of preferred stock other than Series G, and the Series F liquidation preference is equal to the Series F purchase price plus a Series F preferential return equal to interest at prime rate plus one percent on the Series F purchase price, not to exceed the Series F purchase price, for a total liquidation payment of up to two times the Series F purchase price. The Series E Preferred is senior to all other series of preferred stock other than Series F and G, and the Series E liquidation preference is equal to the Series E purchase price plus a Series E preferential return equal to interest at prime rate plus one percent on the Series E purchase price, not to exceed the Series E purchase price, for a total liquidation payment of up to two times the Series E purchase price. The Series D Preferred are senior to all other series of preferred stock other than Series E, F and G, and the Series D liquidation preference is equal to the Series D purchase price plus a Series D preferential return equal to interest at prime rate plus one percent on the Series D purchase price, not to exceed the Series D purchase price, for a total liquidation payment of up to two times the Series D purchase price. The Series A and C Preferred are junior to Series D, E, F and G. Series C holders are entitled to a first payment equal to the Series C purchase price. Then, the Series A liquidation preference is equal to the Series A purchase price plus a Series A preferential return equal to interest at prime rate plus one percent on the Series A purchase price, not to exceed the Series A purchase price, for a total liquidation payment of up to two times the Series A purchase price. The Series C Preferred are then entitled to a second payment junior to the Series A liquidation payment, which Series C Junior liquidation payment is equal to that amount paid or distributed to holders of Common Stock as if such share of Series C Preferred Stock were converted; provided that the amount distributed per share of Series C Preferred Stock will not exceed one half of the Series C purchase price.

The total liquidation value on an aggregated basis as of December 31, 2012 was \$127.8 million.

## 3. Warrants

As of December 31, 2012, the Company had the following warrants outstanding related to certain financing and consulting transactions:

<u>Issue date</u>	<u>Security upon exercise</u>	<u>Shares</u>	<u>Expiration date</u> (shares in thousands)	<u>Weighted average exercise price</u>
5/17/2011	Common	300	6/30/2014	\$ 0.20000
6/30/2009 to 5/3/2010	Preferred F	2,186	6/30/2014 to 4/23/2020	\$ 0.29003
12/31/2011 to 11/2/2012	Preferred G	382	5/3/2013 to 4/23/2020	\$ 0.46926
		<u>2,868</u>		

In March 2013, 456,000 of the Preferred F Warrants were exercised.

**Applied Optoelectronics, Inc. and Subsidiaries****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)****December 31, 2012, 2011 and 2010****NOTE N—STOCKHOLDERS' EQUITY (Continued)**

The Company estimated the fair value of these warrants at the date of the grant using the Black-Scholes option-pricing model and records the expense over the vesting period of the warrants. The Company recorded expense of \$21,000 in 2012 related to the issuance of these warrants based upon the following assumptions:

<u>Issue date</u>	<u>Expected volatility</u>	<u>Risk free interest rate</u>	<u>Expected term (years)</u>
2009	70%	2.54%	5
2010	70%	3.66%	3
2011	70%	0.83% to 3.12%	3 to 10
2012	70%	0.73%	5

As of December 31, 2012, the market value of the warrants amounted to \$94,000, of which \$21,000 was recorded as interest expense in 2012, representing the expense for the periods 2009 through 2012. No warrants were exercised during 2010, 2011 and 2012.

As of March 31, 2013, the Company had outstanding warrants to purchase:

- 300,000 shares of its common stock with an exercise price of \$0.20 per share. This warrant will automatically convert upon the closing of the offering, unless earlier exercised by the holder, into a number of common shares determined by dividing (i) the aggregate fair market value of the underlying shares less the aggregate cost of those shares (using the exercise price of \$0.20) by (ii) the then fair market value of one share. The fair market value of the shares are determined by either the closing price of the shares if traded on an exchange or the Board of Directors of the Company, if not traded on an exchange.
- 1,080,000 shares of its Series F preferred stock with an exercise price of \$0.25 per share. These warrants will automatically convert upon the closing of the offering, unless earlier exercised by the holder, into a number of common shares determined by dividing (i) the aggregate fair market value of the underlying shares less the aggregate cost of those shares (using the exercise price of \$0.25) by (ii) the then fair market value of one share. The fair market value of the shares are determined by either the closing price of the shares if traded on an exchange or the Board of Directors of the Company, if not traded on an exchange.
- 650,000 shares of its Series F preferred stock with a weighted average exercise price of \$0.38462 per share. If these warrants have not been exercised prior to the closing of the offering, then, pursuant to their terms, the warrants shall automatically adjust to be exercisable for an aggregate of 780,011 shares of common stock at a weighted average exercise price of \$0.32051 per share.
- 182,442 shares of its Series G preferred stock with an exercise price of \$0.60 per share. These warrants will automatically convert upon the closing of the offering, unless earlier

**Applied Optoelectronics, Inc. and Subsidiaries**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**December 31, 2012, 2011 and 2010**

**NOTE N—STOCKHOLDERS' EQUITY (Continued)**

exercised by the holder, into a number of common shares determined by dividing (i) the aggregate fair market value of the underlying shares less the aggregate cost of those shares (using the exercise price of \$0.60) by (ii) the then fair market value of one share. The fair market value of the shares are determined by either the closing price of the shares if traded on an exchange or the Board of Directors of the Company, if not traded on an exchange.

- 200,000 shares of its Series G preferred stock with an exercise price of \$0.35 per share. If this warrant has not been exercised prior to closing of the offering, then pursuant to its terms, the warrant shall automatically adjust to be exercisable for 200,000 shares of common stock at \$0.35 per share.

**NOTE O—SEGMENT AND GEOGRAPHIC INFORMATION**

The Company operates in one reportable segment. The Company's Chief Executive Officer, who is considered to be the chief operating decision maker, manages the Company's operations as a whole and reviews financial information presented on a consolidated basis, accompanied by information about product revenue, for purposes of evaluating financial performance and allocating resources.

The following tables set forth the Company's revenue and asset information by geographic region. Revenue is classified based on the location of product manufacturing plants. Long-lived

Applied Optoelectronics, Inc. and Subsidiaries

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

December 31, 2012, 2011 and 2010

NOTE O—SEGMENT AND GEOGRAPHIC INFORMATION (Continued)

assets in the tables below comprise only property, plant, equipment and intangible assets (in thousands):

	For the year ended December 31,			For the three months ended March 31,	
	2012	2011	2010	2013	2012
	(unaudited)				
	(in thousands)				
<b>Revenues:</b>					
United States	\$ 12,192	\$ 18,767	\$ 13,273	\$ 2,696	\$ 2,663
Taiwan	15,200	6,547	10,018	5,942	3,293
China	36,029	22,526	17,198	5,680	6,550
<b>Total</b>	<b>\$ 63,421</b>	<b>\$ 47,840</b>	<b>\$ 40,489</b>	<b>\$ 14,317</b>	<b>\$ 12,506</b>

	For the year ended December 31,			For the three months ended March 31,	
	2012	2011	2010	2013	2012
	(unaudited)				
	(in thousands)				
<b>Long-lived assets:</b>					
United States	\$ 8,966	\$ 9,457	\$ 10,430	\$ 8,808	\$ 9,295
Taiwan	3,719	2,325	2,633	3,690	3,062
China	13,595	14,052	13,784	13,793	13,739
<b>Total</b>	<b>\$ 26,280</b>	<b>\$ 25,834</b>	<b>\$ 26,847</b>	<b>\$ 26,291</b>	<b>\$ 26,096</b>

The Company serves three primary markets, the CATV, internet data center and FTTH markets. Of the Company's total revenues in 2012, the Company earned \$49.8 million, or 78.6%, from the CATV market, \$5.3 million, or 8.3%, from the internet data center market, \$3.7 million, or 5.8%, from the FTTH market, and \$4.6 million, or 7.3%, from other markets. Of the Company's total revenues in 2011, the Company earned \$38.9 million, or 81.4%, from the CATV market, \$14,000, or 0.0%, from the internet data center market, \$3.3 million, or 6.9%, from the FTTH market, and \$5.6 million, or 11.6%, from other markets. Of the Company's total revenues in 2010, the Company earned \$33.0 million, or 81.4%, from the CATV market, no revenue from the internet data center market, \$2.0 million, or 4.9%, from the FTTH market, and \$5.6 million, or 13.7%, from other markets.

NOTE P—MAJOR CUSTOMERS

The Company currently derives its revenues from customers in the United States and throughout the rest of the world. Generally, the Company does not require deposits or other collateral to support customer receivables. The Company performs an initial and periodic credit evaluation of its customers and maintains an allowance for uncollectible accounts for potential uncollectible accounts. The historical amount of losses on uncollectible accounts has been

**Applied Optoelectronics, Inc. and Subsidiaries****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)****December 31, 2012, 2011 and 2010****NOTE P—MAJOR CUSTOMERS (Continued)**

within the Company's estimates. The Company's five largest customers represented an aggregate of 47%, 56% and 60% of revenue for the years ended December 31, 2012, 2011 and 2010, respectively. The five largest receivable balances for customers represented an aggregate of 58%, 71% and 55% of total accounts receivable at December 31, 2012 and 2011 and March 31, 2013, respectively.

**NOTE Q—EMPLOYEE BENEFIT PLANS**

On August 1, 2000, the Company established a 401(k) profit sharing plan covering employees meeting certain age and service requirements. The plan provides for discretionary Company contributions to be allocated based on the employee's eligible contributions. The Company made no contributions to the 401(k) plan for the years ended December 31, 2012, 2011 and 2010.

Employees of Global participate in a state-mandated social security program in China. Under this program, pension costs are recorded on the basis of required monthly contributions to employees' individual accounts during their service periods. Under the regulations of the People's Republic of China, Global is required to make fixed contributions to a fund, which is under the administration of the local labor departments. Employees of AOI—Taiwan participate in a pension program under the Taiwan Labor Pension Act. Pension expense for Global was \$244,000, \$206,000 and \$188,000 in 2012, 2011 and 2010, respectively. Pension expense for AOI—Taiwan was \$168,000, \$123,000 and \$92,000 in 2012, 2011 and 2010, respectively.

**NOTE R—COMMITMENTS AND CONTINGENCIES****1. Commitments**

The Company conducts part of its operations from leased facilities and also leases equipment. Rent expense was \$0.5 million, \$0.4 million and \$0.6 million for the years ended December 31, 2012, 2011 and 2010, respectively.

At December 31, 2012, the approximate minimum rental commitments under noncancellable leases in excess of one year that expire at varying dates through 2015 were as follows:

<u>Year ending December 31,</u>	<u>Amount</u> <u>(in thousands)</u>
2013	\$ 521
2014	167
2015	9
	<u>\$ 697</u>

**Applied Optoelectronics, Inc. and Subsidiaries****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)****December 31, 2012, 2011 and 2010****NOTE R—COMMITMENTS AND CONTINGENCIES (Continued)****2. Employment Agreements and Consultancy Agreements**

The Company has entered into employment and indemnification agreements with its CEO and CSO. These agreements provide that if their employment is terminated as a result of a change of control of the Company, or if their employment is terminated for certain other reasons set forth in the agreements, the Company will be required to pay a severance payment in an amount equal to their annual base salary, and other additional compensation due under the terms of the agreements.

The Company had entered into a consulting agreement with one of its shareholders for a period of two years from July 2009 to June 2011. The agreement provided that a consulting service fee would be paid to the consultant upon delivery of stipulated services. The Company paid \$150,000 and \$350,000 of consulting services fees to the consultant in 2011 and 2010, respectively.

In 2012, the Company entered into consulting agreements with two of its shareholders and board members for a period of one year from June 2012 to June 2013. Each agreement provides that a consulting fee will be paid to the consultant within 30 days after submission of the invoice by the consultant. The Company paid \$25,000 of consulting service fees to one consultant in 2012.

**3. Contingencies**

The Company may be party to litigation, claims or assessments in the ordinary course of business. Management is not aware of any of these matters that would have a material effect on the financial condition, results of operations or cash flows of the Company.

**NOTE S—RELATED PARTY TRANSACTIONS**

The Company had the following related parties' activities with its shareholders:

	<u>2012</u>	<u>2011</u>	<u>2010</u>
		(in thousands)	
Interest expense	\$ 36	\$ 176	\$ 169
Consulting service fees	25	150	350
Note payable	—	910	3,200
Interest payable	—	122	150

**NOTE T—SUBSEQUENT EVENTS**

As of March 15, 2013, the Company renewed and extended \$6.0 million of its line of credit for an additional one year term with a China based bank. In addition, the Company also repaid \$2.1 million of loans and bank acceptance notes subsequent to year-end.

**Applied Optoelectronics, Inc. and Subsidiaries**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**December 31, 2012, 2011 and 2010**

**NOTE T—SUBSEQUENT EVENTS (Continued)**

On April 12, 2013, the board of directors of the Company approved and adopted the 2013 Long-Term Incentive Plan, subject to approval by the Company's stockholders, which will become effective immediately prior to the closing of this offering.

On March 25, 2013, the Company was converted from a Texas corporation to a Delaware corporation.

On January 18, 2013, the Company's board of directors granted stock options for 10,037,000 shares of the Company's common stock to various employees of the Company. The stock options have an exercise price of \$0.25 per share and vest over a four year period from date of grant.

On April 11, 2013, the loans with East West Bank with an outstanding principal balance of \$9.6 million were extended and now mature on November 15, 2014.

In connection with the loan renewal with East West Bank, on April 11, 2013, the Company extended the expiration date of the warrant to purchase 250,000 shares of Series F preferred stock, held by East West Bank, to May 3, 2014.

shares



**Common Stock**

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PROSPECTUS

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**RAYMOND JAMES**

**PIPER JAFFRAY**

**COWEN AND COMPANY**

**ROTH CAPITAL PARTNERS**

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, 2013

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**PART II****INFORMATION NOT REQUIRED IN THE PROSPECTUS****Item 13. Other Expenses of Issuance And Distribution**

The following table sets forth the costs and expenses, other than underwriting discounts and commissions, payable by registrant in connection with the sale of common stock being registered. All amounts are estimates except the SEC registration fee and the FINRA filing fee.

SEC registration fee	\$ 6,820
FINRA filing fee	\$ 8,000
NASDAQ Global Market listing fee	\$ 150,000
Printing and mailing costs	\$ *
Legal fees and expenses	\$ *
Accounting fees and expenses	\$ *
Blue Sky fees and expenses	\$ *
Directors and officers insurance	\$ *
Transfer agent and registrar fees	\$ *
Miscellaneous expenses	\$ *
Total Expenses	\$ *

\* To be completed by amendment.

**Item 14. Indemnification of Directors and Officers**

Section 145 of the Delaware General Corporation Law (the "DGCL") authorizes a corporation to indemnify its directors and officers against liabilities arising out of actions, suits and proceedings to which they are made or threatened to be made a party by reason of the fact that they have served or are currently serving as a director or officer to a corporation. The indemnity may cover expenses (including attorneys' fees) judgments, fines and amounts paid in settlement actually and reasonably incurred by the director or officer in connection with any such action, suit or proceeding. Section 145 permits corporations to pay expenses (including attorneys' fees) incurred by directors and officers in advance of the final disposition of such action, suit or proceeding. In addition, Section 145 provides that a corporation has the power to purchase and maintain insurance on behalf of its directors and officers against any liability asserted against them and incurred by them in their capacity as a director or officer, or arising out of their status as such, whether or not the corporation would have the power to indemnify the director or officer against such liability under Section 145.

We have adopted provisions in our amended and restated certificate of incorporation and amended and restated bylaws to be in effect immediately prior to the closing of this offering that limit or eliminate the personal liability of our directors to the fullest extent permitted by the DGCL, as it now exists or may in the future be amended. Consequently, a director will not be personally liable to us or our stockholders for monetary damages or breach of fiduciary duty as a director, except for liability for:

- any breach of the director's duty of loyalty to us or our stockholders;

- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- any unlawful payments related to dividends or unlawful stock purchases, redemptions or other distributions; or
- any transaction from which the director derived an improper personal benefit.

These limitations of liability do not alter director liability under the federal securities laws and do not affect the availability of equitable remedies such as an injunction or rescission.

In addition, our amended and restated bylaws provide that:

- we will indemnify our directors, officers and, in the discretion of our board of directors, certain employees to the fullest extent permitted by the DGCL, as it now exists or may in the future be amended; and
- we will advance reasonable expenses, including attorneys' fees, to our directors and, in the discretion of our board of directors, to our officers and certain employees, in connection with legal proceedings relating to their service for or on behalf of us, subject to limited exceptions.

We have entered into indemnification agreements with each of our directors and certain of our executive officers. These agreements provide that we will indemnify each of our directors and certain of our executive officers to the fullest extent permitted by Delaware law.

We also maintain general liability insurance which covers certain liabilities of our directors and officers arising out of claims based on acts or omissions in their capacities as directors or officers, including liabilities under the Securities Act.

#### **Item 15. Recent Sales of Unregistered Securities**

In the three completed fiscal years preceding the filing of this registration statement, we have issued the following securities that were not registered under the Securities Act:

##### ***(a) Issuances of Capital Stock.***

On December 31, 2011, we issued and sold an aggregate of 6,676,916 shares of Series G preferred stock to twenty-five investors, at a price of \$0.60 per share, in the initial closing of our Series G private placement. On September 7, 2012, we issued and sold an additional 31,410,977 shares of Series G preferred stock to fifty-four investors, at a price of \$0.35 per share, in the second closing of our Series G private placement. As a result of the second closing of our Series G private placement, we agreed to amend the per share price of the initial closing of our Series G private placement from \$0.60 per share to \$0.35 per share and, as a result an additional 4,769,215 shares of Series G preferred stock was issued to the investors of the initial closing of our Series G private placement. As a result, a total of 42,857,108 shares of Series G preferred stock was issued by our company.

No underwriters were used in the foregoing transactions. All sales of securities described above were made in reliance upon the exemption from registration provided by Section 4(2) of the Securities Act (and/or Regulation D promulgated thereunder) of the Securities Act for transactions by a registrant not involving a public offering. All of the foregoing securities are deemed restricted securities for the purposes of the Securities Act.

Upon the completion of this offering, each share of redeemable Series A preferred stock will convert into \_\_\_\_\_ shares of common stock, each share of Series C preferred stock will convert into \_\_\_\_\_ shares of common stock, each share of Series D preferred stock will convert into \_\_\_\_\_ shares of common stock, each share of Series E preferred stock will convert into \_\_\_\_\_ shares of common stock, each share of Series F preferred stock will convert into \_\_\_\_\_ shares of common stock, and each share of Series G preferred stock will convert into \_\_\_\_\_ shares of common stock.

***(b) Grants and Exercises of Stock Options.***

From January 1, 2010 through April 30, 2013, we have granted stock options to purchase an aggregate of 20,535,700 shares of common stock with exercise prices ranging from \$0.20 to \$0.30 per share, to employees, officers, directors, consultants pursuant to our stock option plans. 253,506 shares of options have been exercised for consideration aggregating \$50,426.20 from January 1, 2010 through April 30, 2013. The issuance of common stock upon exercise of the options was exempt either pursuant to Rule 701, as a transaction pursuant to a compensatory benefit plan, or pursuant to Section 4(2) of the Securities Act or Regulation S of the Securities Act, as a transaction by a registrant not involving a public offering. The shares of common stock issued upon exercise of options are deemed restricted securities for the purposes of the Securities Act.

***(c) Issuances and Exercises of Warrants***

On May 3, 2010, we issued a warrant to our U.S. lender to purchase 250,000 shares of Series F preferred stock, with an exercise price of \$0.60 per share and an expiration date of May 3, 2013. On April 11, 2013, the expiration date of this warrant was extended until May 3, 2014. On November 2, 2012, we issued warrants to our U.S. lender to purchase 200,000 shares of Series G preferred stock, with an exercise price of \$0.35 per share and an expiration date equal to thirty days after the expiration of the initial lock-up period agreed to between our company and its underwriters in connection with this offering. As of April 30, 2013, none of the warrants described above have been exercised.

From February 3, 2010 through April 23, 2010, we issued warrants to 11 individuals and entities to purchase 1,536,000 shares of Series F preferred stock issued in connection with promissory notes we entered into with such individuals and entities. The exercise price of the warrants is \$0.25 and expires upon the closing of this offering. As of April 30, 2013, warrants have been exercised for 552,000 shares of Series F preferred stock.

On May 17, 2011, we issued warrants to Alliance Management Consulting Co. Ltd. to purchase 300,000 shares of our common stock in partial consideration of certain services provided to us. The exercise price of the warrants is \$0.20 per share and expire upon the closing of this offering. As of April 30, 2013, none of the warrants described above have been exercised.

On December 31, 2011, we issued warrants to purchase 1,001,536 shares of Series G preferred stock, with an exercise price of \$0.60 per share in connection with the initial closing of our Series G private placement, to the investors of the initial closing of our Series G private placement. However, the warrants were terminated as a result of the second closing of our Series G private placement in which we agreed to amend the per share price of the initial closing of our Series G Private Placement from \$0.60 per share to \$0.35 per share. As of April 30, 2013, none of the warrants described above have been exercised.

On December 31, 2011, we issued warrants to eight individuals and entities to purchase 182,442 shares of Series G preferred stock in connection with eight promissory notes we entered

into with such individuals and entities. The exercise price of the warrants is \$0.60 and expire upon closing of this offering. As of April 30, 2013, warrants have been exercised for 33,333 shares of Series G preferred stock.

No underwriters were used in the foregoing transactions. All sales of securities described above were made in reliance upon the exemption from registration provided by Section 4(2) of the Securities Act (and/or Regulation D promulgated thereunder) of the Securities Act for transactions by a registrant not involving a public offering. All of the foregoing securities are deemed restricted securities for the purposes of the Securities Act.

## **Item 16. Exhibits and Financial Statement Schedules**

### ***(a) Exhibits***

See the Exhibit Index on the page immediately following the signature page for a list of exhibits filed as part of this registration statement on Form S-1, which Exhibit Index is incorporated herein by reference.

### ***(b) Financial Statement Schedules***

Schedules not listed above have been omitted because the information required to be set forth therein is not applicable or is shown in the financial statements or notes thereto.

## **Item 17. Undertakings**

The undersigned registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreements certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the provisions described in Item 14 of this registration statement, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission, such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes that:

- (1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this Registration Statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this Registration Statement as of the time it was declared effective.
- (2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

**SIGNATURES**

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this amendment to the registration statement to be signed on its behalf by the undersigned, thereunto duly authorized in the City of Houston, State of Texas, on June 28, 2013.

**APPLIED OPTOELECTRONICS, INC.**

By:

\_\_\_\_\_  
Chih-Hsiang (Thompson) Lin,  
*President and Chief Executive Officer*

**POWER OF ATTORNEY**

We, the undersigned directors of Applied Optoelectronics, Inc. (the "Company"), hereby severally constitute and appoint Chih-Hsiang (Thompson) Lin and James L. Dunn, Jr., and each of them singly, our true and lawful attorneys, with full power, and to each of them singly, to sign for us and in our names in the capacities indicated below, any and all pre-effective and post-effective amendments to this registration statement, and any registration statement filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended, in connection with the registration under the Securities Act of 1933, as amended, of our equity securities, and to file or cause to be filed the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys, and each of them singly, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as each of them might or could do in person, and hereby ratifying and confirming all that said attorneys, and each of them, or their substitute or substitutes, shall do or cause to be done by virtue of this Power of Attorney.

Pursuant to the requirements of the Securities Act of 1933, this amendment to the registration statement has been signed by the following persons in the capacities and on the dates indicated.

Signature

Date

\_\_\_\_\_  
Chih-Hsiang (Thompson) Lin,  
*President, Chief Executive Officer and Director*  
*(principal executive officer)*

\_\_\_\_\_  
James L. Dunn, Jr.,  
*Chief Financial Officer*  
*(principal financial officer and*  
*principal accounting officer)*

Signature

Date

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Juen-Sheng (Andrew) Kang,  
*Chairman of the Board of Directors*

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William H. Yeh,  
*Director*

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Richard B. Black,  
*Director*

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Alex Ignatiev,  
*Director*

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Alan Moore,  
*Director*

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Min-Chu (Mike) Chen,  
*Director*

**EXHIBIT INDEX**

<u>Number</u>	<u>Description</u>
1.1*	Form of Underwriting Agreement
3.1**	Certificate of Incorporation of the registrant, as currently in effect
3.2***	Form of Amended and Restated Certificate of Incorporation of the registrant, to be filed immediately prior to the closing of this offering with the Delaware Secretary of State
3.3**	Bylaws of the registrant, as currently in effect
3.4***	Form of Amended and Restated Bylaws of the registrant, to be in effect immediately prior to the closing of this offering
4.1**	Form of Registration Rights Agreement
4.2**	Form of Stockholders' Agreement
5.1*	Opinion of DLA Piper LLP (US)
10.1**	Form of Indemnification Agreement between the registrant each of its Directors and certain of its Executive Officers
10.2**	1998 Incentive Share Plan
10.3.1***	Form of Stock Option Agreement under 1998 Incentive Share Plan
10.3.2***	Form of Stock Option Agreement under 1998 Incentive Share Plan
10.4**	2000 Incentive Share Plan
10.5.1***	Form of Stock Option Agreement under 2000 Incentive Share Plan
10.5.2***	Form of Stock Option Agreement under 2000 Incentive Share Plan
10.6**	2004 Incentive Share Plan
10.7***	Form of Stock Option Agreement under 2004 Incentive Share Plan
10.8**	2006 Incentive Share Plan
10.8.1*	First Amendment to 2006 Incentive Share Plan
10.9***	Form of Stock Option Agreement under 2006 Incentive Share Plan
10.10***	2013 Equity Incentive Plan
10.11***	Form of Restricted Stock Award Agreement under 2013 Equity Incentive Plan
10.12***	Form of Restricted Stock Unit Award Agreement under 2013 Equity Incentive Plan
10.13***	Form of Stock Appreciation Right Award Agreement under 2013 Equity Incentive Plan
10.14***	Form of Notice of Stock Option Award and Stock Option Award Agreement under 2013 Equity Incentive Plan
10.15***	Lease Agreement effective May 1, 2012 between the registrant and 12808 W. Airport, LLC
10.16***	First Amendment to Lease Agreement effective June 15, 2012 between the registrant and 12808 W. Airport, LLC
10.17***	Translation of Chinese lease agreement dated January 10, 2012 between the registrant and Admiral Overseas Corporation for space on 4F, NO.700, Jhongjheng Rd., Jhonghe District, New Taipei City 23552, Taiwan (R.O.C.)
10.18***	Translation of Chinese lease agreement dated April 1, 2012 between the registrant and Admiral Overseas Corporation for space on 6-7F, NO.700, Jhongjheng Rd., Jhonghe District, New Taipei City 23552, Taiwan (R.O.C.)

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<u>Number</u>	<u>Description</u>
10.19***	Amended and Restated Loan and Security Agreement effective May 20, 2009 between registrant and United Commercial Bank
10.20**	First Amendment to Amended and Restated Loan and Security Agreement effective May 3, 2010 between the registrant and East West Bank (as successor in interest to United Commercial Bank)
10.21**	Second Amendment to Amended and Restated Loan and Security Agreement effective October 28, 2010 between the registrant and East West Bank
10.22**	Third Amendment to Amended and Restated Loan and Security Agreement effective December 6, 2010 between the registrant and East West Bank
10.23**	Fourth Amendment to Amended and Restated Loan and Security Agreement effective May 5, 2011 between the registrant and East West Bank
10.24**	Fifth Amendment to Amended and Restated Loan and Security Agreement effective November 30, 2011 between the registrant and East West Bank
10.25**	Sixth Amendment to Amended and Restated Loan and Security Agreement effective March 29, 2012 between the registrant and East West Bank
10.26**	Seventh Amendment to Amended and Restated Loan and Security Agreement effective June 29, 2012 between the registrant and East West Bank
10.27**	Eighth Amendment to Amended and Restated Loan and Security Agreement effective November 2, 2012 between the registrant and East West Bank
10.27.1***	Ninth Amendment to Amended and Restated Loan and Security Agreement effective April 11, 2013 between the registrant and East West Bank
10.28***	Translation of Chinese form of RMB Working Capital Loan Agreement between the Global Technology Inc. and China Construction Bank
10.29**	Employment Agreement regarding Change of Control or Separation of Service between the registrant and Chih-Hsiang (Thompson) Lin, dated January 28, 2007
10.29.1***	Amended and Restated Employment Agreement regarding Change of Control or Separation of Service between the registrant and Chih-Hsiang (Thompson) Lin, dated April 16, 2013
10.30**	Employment Agreement regarding Change of Control or Separation of Service between the registrant and Stefan J. Murry, dated January 28, 2007
10.31**	Employment Agreement regarding Change of Control or Separation of Service between the registrant and Shu-Hua (Joshua) Yeh, dated June 1, 2012
10.32***	Employment Agreement between the registrant and James L. Dunn, Jr., dated April 16, 2013
10.33***	Employment Agreement between the registrant and Hung-Lun (Fred) Chang, dated April 16, 2013
21.1**	Subsidiaries of the registrant
23.1*	Consent of Grant Thornton LLP
23.2*	Consent of DLA Piper LLP (US) (included in Exhibit 5.1)
23.3	Consent of Ovum Limited
23.4	Consent of Adams Capital Inc.
24.1	Power of Attorney (see page II-5 to this registration statement on Form S-1)

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\* To be filed by amendment.

\*\* Included with initial confidential submission.

\*\*\* Included with confidential submission of Amendment No. 1.

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CONSENT OF OVUM LIMITED

June 14, 2013

Applied Optoelectronics, Inc.  
13115 Jess Pirtle Blvd.  
Sugar Land, TX 77478

Ladies and Gentlemen:

In relation to a Registration Statement on Form S-1 being filed on or around June 17, 2013, we hereby consent to the inclusion of and reference to the name Ovum Limited., and our reports, or information contained therein, prepared for Applied Optoelectronics, Inc., including the report dated March 14, 2013 entitled "CATV Access Infrastructure and Optics Supplier Landscape."

Sincerely,

Ovum Limited

/s/ BRIAN ROSA

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By: Brian Rosa  
Title: Sales Director—North America

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QuickLinks

[Exhibit 23.3](#)

[CONSENT OF OVUM LIMITED](#)

**CONSENT OF INDEPENDENT BUSINESS VALUATION EXPERT**

June 18, 2013

Applied Optoelectronics, Inc.  
13115 Jess Pirtle Boulevard  
Sugar Land, TX 77478

Ladies and Gentlemen:

In relation to a Registration Statement on Form S-1 being filed on or around June 30, 2013, we hereby consent to the inclusion of and reference to (including the heading "Experts") the name "Adams Capital, Inc.", and our reports, or information contained therein, prepared for Applied Optoelectronics, Inc., including those dated May 22, 2009, January 29, 2013, and May 2, 2013.

Sincerely,

Adams Capital, Inc.

By:         /s/ DAVID ADAMS  

Name: David P. Adams III  
Title: *President*

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QuickLinks

[Exhibit 23.4](#)

[CONSENT OF INDEPENDENT BUSINESS VALUATION EXPERT](#)