VEECO INSTRUMENTS INC

FORM 10-K
(Annual Report)

Filed 02/28/14 for the Period Ending 12/31/13

Address	TERMINAL DRIVE PLAINVIEW, NY 11803
Telephone	516 677-0200
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Symbol	VECO
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Industry	Semiconductors
Sector	Technology
Fiscal Year	12/31

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2013

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from to .

Commission file number 0-16244

VEECO INSTRUMENTS INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware	**11-2989601**
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)
Terminal Drive **Plainview, New York**	**11803**
(Address of Principal Executive Offices)	(Zip Code)

Registrant’s telephone number, including area code **(516) 677-0200**

Website: **www.veeco.com**

Securities registered pursuant to Section 12(b) of the Act:
Common Stock, par value $.01 per share

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

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files.) Yes ☒ No ☐

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

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

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

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of “large accelerated filer,” “accelerated filer,” and “smaller reporting company” in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☒ Accelerated filer ☐ Non-accelerated filer ☐ Smaller reporting company ☐
(Do not check if a smaller reporting company)

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

The aggregate market value of the voting stock held by non-affiliates of the Registrant, based on the closing price of the common stock on June 28, 2013 as reported on The Nasdaq National Market, was $1,376,219,104. Shares of common stock held by each officer and director and by each person who owns 10% or more of the outstanding common stock have been excluded from this computation in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

39,846,244 shares of common stock were outstanding as of the close of business on February 18, 2014.

DOCUMENTS INCORPORATED BY REFERENCE

Safe Harbor Statement

This annual report on Form 10-K (the "Report") contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Discussions containing such forward-looking statements may be found in Part I. Items 1, 3, 7 and 7A hereof, as well as within this Report generally. In addition, when used in this Report, the words "believes," "anticipates," "expects," "estimates," "plans," "intends", "will" and similar expressions are intended to identify forward-looking statements. All forward-looking statements are subject to a number of risks and uncertainties that could cause actual results to differ materially from projected results. These risks and uncertainties include, without limitation, the following:

- Our operating results have been, and may continue to be, adversely affected by unfavorable market conditions;
- Timing of market adoption of light emitting diode ("LED") technology for general lighting is uncertain;
- Our failure to successfully manage our outsourcing activities or failure of our outsourcing partners to perform as anticipated could adversely affect our results of operations and our ability to adapt to fluctuating order volumes;
- The further reduction or elimination of foreign government subsidies and economic incentives may adversely affect the future order rate for our metal organic chemical vapor deposition ("MOCVD") equipment;
- Our operating results have been, and may continue to be, adversely affected by tightening credit markets;
- Our backlog is subject to customer cancellation or modification and such cancellation could result in decreased sales and increased provisions for excess and obsolete inventory and/or liabilities to our suppliers for products no longer needed;
- Our failure to estimate customer demand accurately could result in excess or obsolete inventory and/or liabilities to our suppliers for products no longer needed, while manufacturing interruptions or delays could affect our ability to meet customer demand;
- The cyclicality of the industries we serve directly affects our business;
- We rely on a limited number of suppliers, some of whom are our sole source for particular components;
- Our sales to LED and data storage manufacturers are highly dependent on these manufacturers' sales for consumer electronics applications, which can experience significant volatility due to seasonal and other factors, which could materially adversely impact our future results of operations;
- We are exposed to the risks of operating a global business, including the need to obtain export licenses for certain of our shipments and political risks in the countries we operate;
- We may be exposed to liabilities under the Foreign Corrupt Practices Act and any determination that we violated these or similar laws could have a material adverse effect on our business;
- The timing of our orders, shipments, and revenue recognition may cause our quarterly operating results to fluctuate significantly;
- We operate in industries characterized by rapid technological change;
- We face significant competition;
- We depend on a limited number of customers, located primarily in a limited number of regions, which operate in highly concentrated industries;

- Our sales cycle is long and unpredictable;
- We are subject to internal control evaluations and attestation requirements of Section 404 of the Sarbanes-Oxley Act and any delays or difficulty in satisfying these requirements or negative reports concerning our internal controls could adversely affect our future results of operations and our stock price;
- The price of our common shares may be volatile and could decline significantly;
- Our inability to attract, retain, and motivate key employees could have a material adverse effect on our business;
- We are subject to foreign currency exchange risks;
- The enforcement and protection of our intellectual property rights may be expensive and could divert our limited resources;
- We may be subject to claims of intellectual property infringement by others;
- If we are subject to cyber-attacks we could incur substantial costs and, if such attacks are successful, could result in significant liabilities, reputational harm and disruption of our operations;
- Our acquisition strategy subjects us to risks associated with evaluating and pursuing these opportunities and integrating these businesses;
- We may be required to take additional impairment charges for goodwill and indefinite-lived intangible assets or definite-lived intangible and long-lived assets;
- Changes in accounting pronouncements or taxation rules or practices may adversely affect our financial results;
- We are subject to risks of non-compliance with environmental, health and safety regulations;
- We have significant operations in locations which could be materially and adversely impacted in the event of a natural disaster or other significant disruption;
- We have adopted certain measures that may have anti-takeover effects which may make an acquisition of our Company by another company more difficult;
- New regulations related to conflict minerals will force us to incur additional expenses, may make our supply chain more complex, and may result in damage to our relationships with customers; and
- The matters set forth in this Report generally, including the risk factors set forth in “Part I. Item 1A. Risk Factors.”

Consequently, such forward-looking statements should be regarded solely as the current plans, estimates and beliefs of Veeco Instruments Inc. (together with its consolidated subsidiaries, “Veeco”, the “Company”, “we”, “us”, and “our”, unless the context indicates otherwise). The Company does not undertake any obligation to update any forward-looking statements to reflect future events or circumstances after the date of such statements.

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PART I.

Item 1. Business

The Company

Veeco Instruments Inc. (together with its consolidated subsidiaries, "Veeco", the "Company", "we", "us", and "our", unless the context indicates otherwise) creates process equipment that enables technologies for a cleaner and more productive world. We design, manufacture and market thin film equipment aligned with global "megatrends" such as energy efficiency and mobility. Our equipment is primarily sold to make electronic devices including light emitting diodes ("LED"s), flexible organic LED (OLED) displays, hard-disk drives, solar cells, power semiconductors and wireless components.

We develop highly differentiated, "best-in-class" process equipment for critical performance steps. Our products feature leading technology, low cost-of-ownership and high throughput. Core competencies in advanced thin film technologies, over 300 patents, and decades of specialized process know-how helps us to stay at the forefront of these demanding industries.

Our *LED & Solar segment* includes two related compound semiconductor technologies, metal organic chemical vapor deposition ("MOCVD") and molecular beam epitaxy ("MBE") as well as newly acquired atomic layer deposition ("ALD") technology. Our MOCVD and MBE systems and components enable the manufacture of LEDs used in consumer electronics, displays and lighting, power semiconductors, wireless components and solar cells. Our ALD technology is used by the manufacturers of OLED displays and has further applications in the semiconductor and solar markets.

Our *Data Storage segment* designs and manufactures systems used to create thin film magnetic heads ("TFMH"s) that read and write data on hard disk drives. These include ion beam etch, ion beam deposition, diamond-like carbon, physical vapor deposition, chemical vapor deposition, and slicing, dicing and lapping systems. While our systems are primarily sold to hard drive customers, they also have applications in optical coatings, micro-electro-mechanical systems ("MEMS") and magnetic sensors, and extreme ultraviolet ("EUV") lithography.

As of December 31, 2013, we had approximately 800 employees to support our customers through product and process development, training, manufacturing, and sales and service sites in the U.S., South Korea, Taiwan, China, Singapore, Japan, Europe and other locations.

Veeco Instruments Inc. was organized as a Delaware corporation in 1989.

Our Growth Strategy

Our growth strategy consists of:

- Providing differentiated process equipment to address customers' next generation product development roadmaps;
- Investing to win through focused research and development spending in markets that we believe provide significant growth opportunities or are at an inflection point in process equipment requirements. Examples include LED, OLED, and power semiconductor devices;
- Leveraging our world-class sales channel and local process applications support to build strong strategic relationships with technology leaders;
- Expanding our portfolio of service products that improve the performance of our systems, including spare parts, upgrades and consumables to drive growth and improve customer satisfaction;
- Combining outsourced and internal manufacturing strategies to flex manufacturing capacity through industry investment cycles; and
- Pursuing partnerships and acquisitions to expand our product portfolio and accelerate our growth.

Business Overview and Industry Trends

Business Overview: Our deposition, etch and other systems are applicable to the creation of a broad range of microelectronic components, including LEDs, OLEDs, TFMHs and compound semiconductor devices. Our customers who manufacture these devices invest in equipment in order to advance their next generation products and deliver more efficient and cost effective technology solutions. Our businesses tend to be cyclical, and are highly influenced by customer buying patterns that are dependent upon industry trends. While our products are sold to multiple end markets, we are focused herein on the trends that most influence our business.

LED Industry Trends: Following the global recession in 2008-2009, we experienced a rapid improvement in business conditions in late 2009 through mid-2011, particularly in our MOCVD business. Demand for our MOCVD equipment increased dramatically, primarily from customers in South Korea, China, and Taiwan, as LEDs became the standard illumination for TV backlighting. We experienced a strong increase in demand for MOCVD from customers in China due to government funding of LED fabrication facility expansions throughout the region. Following this large investment, the LED industry entered an overcapacity situation, evidenced by low tool utilization rates being reported by many key global customers. As a result, our MOCVD business declined significantly from the middle of 2011 through the end of 2013. While utilization rates of our equipment in many customer facilities improved in 2013 from prior trough levels in 2012, weak business conditions in MOCVD persist and continue to be difficult at the start of 2014. In the short term, it is difficult for us to predict when the supply/demand of MOCVD equipment will return to equilibrium and when order rates for our MOCVD products will meaningfully recover.

While consumer electronics (e.g. cell phones, laptops, LED-TVs) have been the dominant end markets for LED technology over the past decade, and for which most of the new MOCVD capacity was installed, these applications are expected to reach saturation in the next few years. Conversely, the general lighting market is in its infancy, and we believe that thousands of additional MOCVD tools will be required as LEDs become widely adopted for this much larger market application.

As part of the shift toward more efficient energy use across the globe, we believe LED technology will play a key role in energy and cost savings in lighting. We see this opportunity as both vast and long-term given that LED lighting is just now beginning to penetrate the global lighting market. LED adoption is happening initially in outdoor, commercial and industrial lighting where high usage and lower efficiency make incumbent lighting costly. Further adoption across all forms of lighting is expected to occur in the coming years with rapidly declining LED costs, shortening payback periods versus conventional lighting technologies, and “ban-the-bulb” legislation now underway in more than 20 countries around the globe. In addition to the incandescent bulb phase-outs, many countries are implementing policies to accelerate adoption of LEDs. These include China’s “10 cities 10,000 lights” program, South Korea’s “20-60” plan targeting 60% penetration of lighting on a national level by 2020, and Japan’s “Basic Energy Plan” with specific goals for energy efficient lighting. In March 2013, LED industry forecasters at Digitimes Research projected that LED lighting will represent about 38.6% of the total lighting market, and will be worth approximately $44.2 billion by 2015.

In order to capitalize on this opportunity, we introduced several new generations of MOCVD tools, including our TurboDisc® K-Series™ and MaxBright® MOCVD systems which provide customers with significant cost of ownership advantages when compared with alternative equipment. These activities enabled us to overtake our primary competitor in market share in 2012. To maintain our leadership position, we continue to invest heavily in MOCVD research and development to help drive down cost of LED manufacturing for our customers in order to accelerate lighting adoption.

Trends in other Markets Impacting our MOCVD Business : Power semiconductors are an emerging market opportunity for MOCVD equipment. While silicon-based transistors are the mainstream of power electronic devices today, gallium nitride (“GaN”)-on-Silicon based power electronics developed on MOCVD tools can potentially deliver higher performance (i.e. higher efficiency and switching speed). Global industry leaders in power electronics are currently working on research and development programs to explore this new technology. GaN-on-Silicon based power devices have potential for information technology and consumer devices (e.g. power supplies, inverters).

Another application for MOCVD is in the solar market. MOCVD equipment can also be used to manufacture high-efficiency triple junction photovoltaic cells. We currently sell a small number of MOCVD systems each year to make solar cells for Concentrator Photovoltaic (CPV) and Space Based applications.

Trends Impacting our MBE Business : Our MBE systems, sources and components are used to manufacture critical epitaxial layers in applications such as solar cells, fiber-optics, mobile phones, radar systems and displays. Our business is primarily influenced by long-term market trends in cell phone manufacturing. Each one of these complex cell phone devices contains an increasing number of power amplifiers or other compound semiconductor radio frequency components. Due to industry consolidation and resulting overcapacity, our sales of MBE production tools have been declining for about a year. In 2013, we refocused our business and product portfolio to increase our market share in sales of MBE systems to scientific research organizations and universities.

Trends Impacting our ALD Business: On October 1, 2013, we completed the acquisition of Synos Technology, Inc.("Synos"), which brought atomic layer deposition technology to us. We are working with the world leader in mobile OLED displays to develop ALD systems that effectively encapsulate the OLED materials and potentially enable flexible displays for mobile phones. According to industry forecasting firm IHS iSuppli, the flexible OLED display market is expected to grow from $21 million in 2013 to almost $12 billion by 2020. In addition, we also see numerous extended opportunities for ALD technology in OLED TV, lighting, semiconductor, solar and other adjacent markets.

Data Storage Business Overview and Trends: Worldwide storage demand continues to increase. While hard disk drives ("HDDs") face significant competition from flash memory, we believe that HDDs will continue to provide the best value for mass storage and will remain at the forefront of large capacity storage applications. According to data storage research firm TrendFocus' August 2013 report, shipments of TFMHs, the HDD component that our equipment makes, are forecasted to grow at a compound annual growth rate of 4.2% from 2013 to 2017.

While technological change continues in data storage, the industry has gone through a period of maturation, including vertical integration and consolidation. A recovery in capital spending by our key data storage customers in 2010, combined with the successful introduction of several new deposition tools to advance areal density, enabled us to report revenue growth in both 2010 and 2011. Natural disasters in Japan (tsunami) and Thailand (floods) caused major disruptions to the HDD supply chain in 2011. The floods in Thailand resulted in an unexpected increase in equipment orders for us in the fourth quarter of 2011 as customers rebuilt lost capacity. This led to record levels of Data Storage revenue in the first half of 2012. However, this significant equipment investment, combined with industry consolidation and a slowdown in hard drive unit demand in mid-2012 due to weak global economic conditions, caused our hard drive customers to freeze capacity additions. So, for the full year of 2012, our Data Storage revenue was flat and orders were well below recent historical averages. Industry overcapacity and weak order rates continued into 2013 and it is unclear when hard drive manufacturers will need to make significant investments in new equipment capacity.

Throughout industry cycles, we continue to invest in developing systems to support advanced technologies such as heat assisted magnetic recording ("HAMR"). HAMR is a technology that magnetically records data on high-stability media using laser thermal assistance to first heat the material. HAMR takes advantage of high-stability magnetic compounds that can store single bits in a much smaller area than in current hard drive technology.

Our Data Storage systems are also sold for applications in MEMS magnetic sensors, optical coatings and EUV photomasks. We have put in place new product development, marketing and sales strategies to grow the non-data storage applications for our technologies.

We have two segments, LED & Solar and Data Storage. Net sales for these segments are illustrated in the following table (dollars in thousands):

	For the year ended December 31,					
	2013	**Percent of total**	**2012**	**Percent of total**	**2011**	**Percent of total**
Segment Analysis						
LED & Solar	$ 249,742	75.3%	$ 363,181	70.4%	$ 827,797	84.5%
Data Storage	82,007	24.7%	152,839	29.6%	151,338	15.5%
Total	$ 331,749	100.0%	$ 516,020	100.0%	$ 979,135	100.0%

Please see our footnote *Foreign Operations, Geographic Area and Product Segment Information* in our Consolidated Financial Statements for additional information regarding our segments and sales by geographic location.

LED & Solar

Metal Organic Chemical Vapor Deposition Systems ("MOCVD"): We are the world's leading supplier of MOCVD technology. MOCVD production systems are used to make GaN-based devices (blue and green LEDs) and AsP-based devices (red, orange and yellow LEDs), which are used today in television and laptop backlighting, general illumination, large area signage, specialty illumination and many other applications. Our AsP MOCVD systems also are used to make high-efficiency triple junction photo cells. In 2011, we introduced the industry's first production-proven multi-chamber MOCVD system, the MaxBright, for high-volume production of LEDs. We sell MOCVD systems in either single or multi-chamber configurations. In 2012, we introduced the TurboDisc MaxBright M & MHP and K465i HP GaN MOCVD systems, the industry's highest productivity, highest footprint efficiency platforms for LED manufacturing.

Molecular Beam Epitaxy Systems ("MBE"): MBE is the process of precisely depositing epitaxially aligned atomically thin crystal layers, or epilayers, of elemental materials onto a substrate in an ultra-high vacuum environment. For many compound semiconductors, MBE is the critical first step of the fabrication process, ultimately determining device functionality and performance. We provide MBE systems and components for the production of wireless devices (e.g. power amplifiers, high electron mobility transistors or hetero-junction bipolar transistors) and a broad array of compound semiconductor materials research applications. In 2013, we introduced the GENxplor™, the industry's first fully-integrated MBE system for the compound semiconductor R&D market. The GENxplor creates high quality epitaxial layers on substrates up to 3" in diameter and is ideal for cutting edge research on a wide variety of materials including gallium arsenide, nitrides, and oxides.

Fast Array Scanning Atomic Layer Deposition Systems ("FAST-ALD"): FAST-ALD™ represents a paradigm shift in a technology long known for excellent deposition uniformity and pin-hole free films. While traditional ALD is slow, costly and limited to "chamber-sized" reactors, FAST-ALD can deposit materials below 100º Celsius and 10 times faster, making it capable of deposition on substrates with virtually no size limitation. Our patented linear reactor allows the chemical reaction to occur at the substrate's surface. We are primarily focused on applying this technology for the encapsulation of organic light emitting diode (OLED) materials used to enable flexible mobile devices and we are also exploring additional applications in solar, semiconductor and other end markets.

Data Storage

Ion Beam Deposition ("IBD") Systems: Our IBD systems and NEXUS® IBD systems utilize ion beam technology to deposit precise layers of thin films. The NEXUS systems may be included on our cluster system platform to allow either parallel or sequential etch/deposition processes. IBD systems deposit high purity thin film layers and provide maximum uniformity and repeatability. In addition to IBD systems, we provide a broad array of ion beam sources. These technologies are applicable in the hard drive industry as well as for optical coatings and other end markets.

Ion Beam Etch ("IBE") Systems: Our NEXUS IBE systems etch precise, complex features for use primarily by data storage and telecommunications device manufacturers in the fabrication of discrete and integrated microelectronic devices.

Physical Vapor Deposition ("PVD") Systems: Our NEXUS PVD systems offer manufacturers a highly flexible deposition platform for developing next-generation data storage applications.

Diamond-Like Carbon ("DLC") Deposition Systems: Our DLC deposition systems deposit protective coatings on advanced TFMHs.

Chemical Vapor Deposition ("CVD") Systems: Our NEXUS CVD systems deposit conformal films for advanced TFMH applications.

Precision Lapping, Slicing, and Dicing Systems: Our Optium® products generally are used in "back-end" applications in a data storage fabrication facility where TFMHs or "sliders" are fabricated. This equipment includes lapping tools, which enable precise material removal within three nanometers, which is necessary for next generation TFMHs. We also manufacture tools that slice and dice wafers into rowbars and TFMHs.

Optical Coatings: Our SPECTOR offers manufacturers improvements in target material utilization, optical endpoint control and process time for cutting-edge optical interference coating applications.

Service and Sales

We sell our products and services worldwide primarily through various strategically located sales and service facilities in the U.S., Europe and Asia Pacific, and we believe that our customer service organization is a significant factor in our success. In 2010 and 2011, we significantly expanded our footprint in Asia to bring training, technology support and R&D closer to our customers through new sites in China, Taiwan and South Korea. We provide service and support on a warranty, service contract or an individual service-call basis. We believe that offering timely support creates stronger relationships with customers and provides us with a significant competitive advantage. Revenues from the sale of parts, service and support represented approximately 29%, 21% and 9% of our net sales for the years ended December 31, 2013, 2012 and 2011, respectively. Parts and consumables sales represented approximately 23%, 17% and 7% of our net sales for those years, respectively, and service and support sales were 6%, 4% and 2%, respectively.

Customers

We sell our products to many of the world's major LED, solar and hard drive manufacturers as well as to customers in other industries, research centers, and universities. We rely on certain principal customers for a significant portion of our sales. Sales to HC SemiTek in our LED & Solar segment accounted for more than 10% of our total net sales in 2013, Western Digital in our Data Storage segment accounted for more than 10% of our total net sales in 2012, and Elec-Tech International Co. Ltd. and Sanan Optoelectronics in our LED & Solar segment each accounted for more than 10% of our total net sales in 2011. If any principal customer discontinues its relationship with us or suffers economic difficulties, our business, prospects, financial condition and operating results could be materially and adversely affected.

Research and Development and Marketing

Our marketing, research and development functions are organized by business unit. We believe that this organizational structure allows each business unit manager to more closely monitor the products for which they are responsible, resulting in more efficient marketing and research and development. Our research and development activities take place at our facilities in Plainview, New York; Poughkeepsie, New York; Camarillo, California; Ft. Collins, Colorado; Somerset, New Jersey; St. Paul, Minnesota; Fremont, California; and South Korea.

We believe that continued and timely development of new products and enhancements to existing products are necessary to maintain our competitive position. We work collaboratively with our customers to help ensure our technology and product roadmaps are aligned with customer requirements.

Our research and development expenses were approximately $81.4 million, $95.2 million and $96.6 million, or approximately 25%, 18% and 10% of net sales for the years ended December 31, 2013, 2012 and 2011, respectively. These expenses consisted primarily of salaries, project materials and other product development and enhancement costs.

Suppliers

We currently outsource certain functions to third parties, including the manufacture of all or substantially all of our new MOCVD systems, Data Storage systems and ion sources. We primarily rely on several suppliers for the manufacturing of these systems. In addition, certain of the components and sub-assemblies included in our products are obtained from a single source or a limited group of suppliers.

Backlog

Our backlog consists of orders for which we received a firm purchase order, a customer-confirmed shipment date within twelve months and a deposit, where required.

Our backlog decreased to $143.3 million as of December 31, 2013 from $150.2 million as of December 31, 2012. During the year ended December 31, 2013, we recorded backlog adjustments of approximately $6.8 million, consisting of a $5.6 million adjustment related to orders that no longer met our bookings criteria as well as an adjustment related to foreign currency translation of $1.2 million.

Competition

In each of the markets that we serve, we face substantial competition from established competitors, some of which have greater financial, engineering and marketing resources than us, as well as from smaller competitors. In addition, many of our products face competition from alternative technologies, some of which are more established than those used in our products. Significant factors for customer selection of our tools include system performance, accuracy, repeatability, ease of use, reliability, cost of ownership and technical service and support. We believe that we are competitive based on the customer selection factors in each market we serve. None of our competitors compete with us across all of our product lines.

Some of our competitors include, but are not limited to: Aixtron; Canon Anelva DCA Instruments; Leybold Optics; Oerlikon Balzers; Oxford Instruments; Toyo Nippon Sanso; and Riber.

Intellectual Property

Our success depends in part on our proprietary technology. Although we attempt to protect our intellectual property rights through patents, copyrights, trade secrets and other measures, there can be no assurance that we will be able to protect our technology adequately or that competitors will not be able to develop similar technology independently.

We have patents and exclusive and non-exclusive licenses to patents owned by others covering certain of our products, which we believe provide us with a competitive advantage. We have a policy of seeking patents on inventions concerning new products and improvements as part of our ongoing research, development and manufacturing activities. We believe that there is no single patent or exclusive or non-exclusive license to patents owned by others that is critical to our operations, as the success of our business depends primarily on the technical expertise, innovation, customer satisfaction and experience of our employees.

We also rely upon trade secret protection for our confidential and propriety information. There can be no assurance that others will not independently develop substantially equivalent proprietary information and techniques or otherwise gain access to our trade secrets or that we can meaningfully protect our trade secrets. In addition, we cannot be certain that we will not be sued by third parties alleging that we have infringed their patents or other intellectual property rights. If any third party sues us, our business, results of operations or financial condition could be materially adversely affected.

Employees

As of December 31, 2013, we had approximately 800 employees, of which there were approximately 160 in manufacturing and testing, 90 in sales and marketing, 160 in service and product support, 260 in engineering, research and development and 130 in information technology, general administration and finance. In addition, we had approximately 10 temporary employees/outside contractors in support of our variable cost strategy. The success of our future operations depends in large part on our ability to recruit and retain engineers, technicians and other highly-skilled professionals who are in considerable demand. We feel that we have adequate programs in place to attract, motivate and retain our employees. We plan to monitor industry practices to make sure that our compensation and employee benefits remain competitive. However, there can be no assurance that we will be successful in recruiting or retaining key personnel. We believe that our relations with our employees are good.

Available Information

We file annual, quarterly and current reports, information statements and other information with the Securities and Exchange Commission (the "SEC"). The public may obtain information by calling the SEC at 1-800-SEC-0330. The SEC also maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. The address of that site is www.sec.gov.

Internet Address

We maintain a website where additional information concerning our business and various upcoming events can be found. The address of our website is www.veeco.com. We provide a link on our website, under Investors—Financial—SEC Filings, through which investors can access our filings with the SEC, including our filed annual report on Form 10-K, filed quarterly reports on Form 10-Q, current reports on Form 8-K and all amendments to those reports. These filings are posted to our website as soon as reasonably practicable after we electronically file such material with the SEC.

Item 1A. Risk Factors

Risk Factors That May Impact Future Results

In addition to the other information set forth herein, the following risk factors should be carefully considered by shareholders of and potential investors in the Company.

Our operating results have been, and may continue to be, adversely affected by unfavorable market conditions.

Market conditions relative to the segments in which we operate have deteriorated significantly in many of the countries and regions in which we do business, and may remain depressed for the foreseeable future. Our MOCVD order volumes decreased significantly in the latter part of 2011, remained depressed through 2012 and 2013, and may continue to remain at low levels. Foreign government incentives designed to encourage the development of the LED industry have been curtailed, and the demand for our MOCVD products has softened. We have experienced and may continue to experience customer rescheduling and, to a lesser extent, cancellations of orders for our products. Continuing adverse market conditions relative to our products would negatively impact our business, and could result in:

- further reduced demand for our products;
- further rescheduling and cancellations of orders for our products, resulting in negative backlog adjustments;
- increased price competition and lower margin for our products;
- increased competition from sellers of used equipment or lower-priced alternatives to our products;
- increased risk of excess and obsolete inventories;
- increased risk in the collectability of amounts due from our customers;
- increased risk in potential reserves for doubtful accounts and write-offs of accounts receivable;
- disruptions in our supply chain as we reduce our purchasing volumes and limit our contract manufacturing operations; and
- higher operating costs as a percentage of revenues.

If the markets in which we participate continue to experience a slow recovery or an additional down turn, this could have a further negative impact on our sales and revenue generation, margins and operating expenses, and the time it takes us to return to profitability.

Timing of market adoption of LED technology for general lighting is uncertain.

Our future business prospects depend largely on the market adoption of products that incorporate our technologies. Potential barriers to such adoption include higher initial costs and customer familiarity with, and substantial investment and know-how in, existing technologies. These barriers apply to the adoption of LED technology for general illumination applications, including residential, commercial and street lighting markets. While the use of LED technology for general lighting has grown in recent years, challenges remain and widespread adoption may not occur at currently projected rates. Furthermore, the adoption of, or changes in, government policies that discourage the use of traditional lighting technologies may impact LED adoption. These barriers also apply to the adoption of OLED products. While the use of OLED is expected to grow in the near future, it is difficult to predict the rate at which OLED will be adopted by the market. The market adoption of OLED products may not occur at our currently projected rates.

Our failure to successfully manage our outsourcing activities or failure of our outsourcing partners to perform as anticipated could adversely affect our results of operations and our ability to adapt to fluctuating order volumes.

To better align our costs with market conditions, increase the percentage of variable costs relative to total costs and to increase productivity and operational efficiency, we have outsourced certain functions to third parties, including the manufacture of all or substantially all of our new MOCVD systems, Data Storage systems and ion sources. We are relying heavily on our outsourcing partners to perform their contracted functions and to allow us the flexibility to adapt to changing market conditions, including periods of significantly diminished order volumes. If our outsourcing partners do not perform as required, or if our outsourcing model does not allow us to realize the intended cost savings and flexibility, our results of operations (and those of our third party providers) may be adversely affected. Disputes and possibly litigation involving third party providers could result and we could suffer damage to our reputation. Dependence on contract manufacturing and outsourcing may also adversely affect our ability to bring new products to market. Although we attempt to select reputable providers, it is possible that one or more of these providers could fail to perform as we expect. In addition, the role of third party providers has required and will continue to require us to implement changes to our existing operations and adopt new procedures and processes for retaining and managing these providers in order to realize operational efficiencies, assure quality, and protect our intellectual property. If we do not effectively manage our outsourcing strategy or if third party providers do not perform as anticipated, we may not realize the benefits of productivity improvements and we may experience operational difficulties, increased costs, manufacturing and/or installation interruptions or delays, inefficiencies in the structure and/or operation of our supply chain, loss of intellectual property rights, quality issues, increased product time-to-market and/or inefficient allocation of human resources, any or all of which could materially and adversely affect our business, financial condition and results of operations.

The further reduction or elimination of foreign government subsidies and economic incentives may adversely affect the future order rate for our MOCVD equipment.

We generate a significant portion of our revenue in China. In recent years, the Chinese government has provided various incentives to encourage development of the LED industry, including subsidizing a significant portion of the purchase cost of MOCVD equipment. These subsidies have enabled and encouraged certain customers in this region to purchase more of our MOCVD equipment than these customers might have purchased without these subsidies. These subsidies have now been curtailed and are expected to further decline over time and may end at some point in the future. The further reduction or elimination of these incentives may result in a further reduction in future orders for our MOCVD equipment in this region which could materially and adversely affect our business, financial condition and results of operations.

A related risk is that many customers use or had planned to use Chinese government subsidies, in addition to other incentives from the Chinese government, to build new manufacturing facilities or to expand existing manufacturing facilities. Delays in the start-up of these facilities or the cancellation of construction plans altogether, together with other related issues pertaining to customer readiness, could adversely impact the timing of our revenue recognition, could result in further order cancellations, and could have other negative effects on our financial condition and operating results.

Our operating results have been, and may continue to be, adversely affected by tightening credit markets.

As a global company with worldwide operations, we are subject to volatility and adverse consequences associated with worldwide economic downturns. As seen in recent years, in the event of a worldwide downturn, many of our customers may delay or further reduce their purchases of our products and services. If negative conditions in the global credit markets prevent our customers' access to credit, product orders in these channels may decrease which could result in lower revenue. Likewise, if our suppliers face challenges in obtaining credit, in selling their products or otherwise in operating their businesses, they may become unable to continue to offer the materials we use to manufacture our products. With the recent downturn in our MOCVD segment, we have experienced, and may continue to experience, lower than anticipated order levels, cancellations of orders in backlog, rescheduling of customer deliveries, and attendant pricing pressures, all of which could adversely affect our results of operations.

Furthermore, tightening macroeconomic measures and monetary policies adopted by China's government aimed at preventing overheating of China's economy and controlling China's high level of inflation have limited, and may continue to limit, the availability of financing to our customers in this region. Limited financing, or delays in the timing of such financing, may result in delays and cancellations of shipments of our products (and associated revenues) conditioned on such financing.

In addition, we finance a portion of our sales through trade credit. In addition to ongoing credit evaluations of our customers' financial condition, we seek to mitigate our credit risk by obtaining deposits and/or letters of credit on certain of our sales arrangements. We could suffer significant losses if a customer whose accounts receivable we have not secured fails or is otherwise unable to pay us. A significant loss in collections on our accounts receivable would have a negative impact on our financial results.

Our backlog is subject to customer cancellation or modification and such cancellation could result in decreased sales and increased provisions for excess and obsolete inventory and/or liabilities to our suppliers for products no longer needed.

Customer purchase orders are subject to cancellation or rescheduling by the customer, sometimes with limited or no penalties. Often, we have incurred expenses prior to such cancellation without adequate monetary compensation. We adjust our backlog for such cancellations, contract modifications, and delivery delays that result in a delivery period in excess of one year, among other items. The current and forecasted downturn in our MOCVD reporting unit could result in further increases in order cancellations and/or postponements.

We record a provision for excess and obsolete inventory based on historical and future usage trends and other factors including the consideration of the amount of backlog we have on hand at any particular point in time. If our backlog is canceled or modified, our estimates of future product demand may prove to be inaccurate, in which case we may have understated the provision required for excess and obsolete inventory. In the future, if we determine that our inventory is overvalued, we will be required to recognize such costs in our financial statements at the time of such determination. In addition, we place orders with our suppliers based on our customers' orders to us. If our customers cancel their orders with us, we may not be able to cancel our orders with our suppliers and may be required to take a charge for these cancelled commitments to our suppliers. Any such charges could be material to our results of operations and financial condition.

Our failure to estimate customer demand accurately could result in excess or obsolete inventory and/or liabilities to our suppliers for products no longer needed, while manufacturing interruptions or delays could affect our ability to meet customer demand.

Our business depends on our ability to accurately forecast and supply equipment, services and related products that meet the rapidly changing technical and volume requirements of our customers, which depends in part on the timely delivery of parts, components and subassemblies (collectively, parts) from suppliers. The current uncertain worldwide economic conditions and market instabilities make it increasingly difficult for us (and our customers and our suppliers) to accurately forecast future product demand. If actual demand for our products is different than expected, we may purchase more/fewer parts than necessary or incur costs for canceling, postponing or expediting delivery of parts. If we overestimate the demand for our products, excess inventory could result which could be subject to heavy price discounting, which could become obsolete, and which could subject us to liabilities to our suppliers for products no longer needed. In addition, the volatility of demand for capital equipment increases capital, technical and other risks for companies in the supply chain.

Furthermore, some key parts may be subject to long lead-times and/or obtainable only from a single supplier or limited group of suppliers, and some sourcing or subassembly is provided by suppliers located in countries other than the United States. We may experience significant interruptions of our manufacturing operations, delays in our ability to deliver products or services, increased costs or customer order cancellations as a result of:

- the failure or inability of suppliers to timely deliver quality parts;
- volatility in the availability and cost of materials;
- difficulties or delays in obtaining required import or export approvals;
- information technology or infrastructure failures;
- natural disasters (such as earthquakes, tsunamis, floods or storms); or
- other causes (such as regional economic downturns, pandemics, political instability, terrorism, or acts of war) could result in delayed deliveries, manufacturing inefficiencies, increased costs or order cancellations.

In addition, in the event of an unanticipated increase in demand for our products, our need to rapidly increase our business and manufacturing capacity may be limited by working capital constraints of our suppliers and may exacerbate any interruptions in our manufacturing operations and supply chain and the associated effect on our working capital. Any or all of these factors could materially and adversely affect our business, financial condition and results of operations.

The cyclicality of the industries we serve directly affects our business.

Our business depends in large part upon the capital expenditures of manufacturers in the LED markets, data storage markets, and other device markets. We are subject to the business cycles of these industries, the timing, length, and volatility of which are difficult to predict. These industries have historically been highly cyclical and have experienced significant economic downturns in the last decade. As a capital equipment provider, our revenues depend in large part on the spending patterns of these customers, who often delay expenditures or cancel or reschedule orders in reaction to variations in their businesses or general economic conditions. In downturns, we must be able to quickly and effectively align our costs with prevailing market conditions, as well as motivate and retain key employees. However, because a portion of our costs are fixed, our ability to reduce expenses quickly in response to revenue shortfalls may be limited. Downturns in one or more of these industries, including the current MOCVD and Data Storage downturn, have had and will likely have a material adverse effect on our business, financial condition and operating results. Alternatively, during periods of rapid growth, we must be able to acquire and/or develop sufficient manufacturing capacity to meet customer demand, and attract, hire, assimilate and retain a sufficient number of qualified people. We cannot give assurances that our net sales and operating results will not be adversely affected if our customers experience economic downturns or slowdowns in their businesses.

We rely on a limited number of suppliers, some of whom are our sole source for particular components.

We currently outsource certain functions to third parties, including the manufacture of all or substantially all of our new MOCVD systems, Data Storage systems and ion sources. We primarily rely on several suppliers for the manufacturing of these systems. We plan to maintain some level of internal manufacturing capability for these systems. The failure of our present suppliers to meet their contractual obligations under our supply arrangements and our inability to make alternative arrangements or resume the manufacture of these systems ourselves could have a material adverse effect on our revenues, profitability, cash flows, and relationships with our customers.

In addition, certain of the components and sub-assemblies included in our products are obtained from a single source or a limited group of suppliers. Our inability to develop alternative sources, if necessary, could result in a prolonged interruption in supply or a significant increase in the price of one or more components, which could adversely affect our operating results.

Our sales to LED and data storage manufacturers are highly dependent on these manufacturers' sales for consumer electronics applications, which can experience significant volatility due to seasonal and other factors, which could materially adversely impact our future results of operations.

The demand for LEDs and hard disk drives is highly dependent on sales of consumer electronics, such as flat-panel televisions and computer monitors, computers, tablets, digital video recorders, camcorders, MP3/4 players, smartphones, cell phones and other mobile devices. Manufacturers of LEDs and hard disk drives are among our largest customers and have accounted for a substantial portion of our revenues for the past several years. Factors that could influence the levels of spending on consumer electronic products include consumer confidence, access to credit, volatility in fuel and other energy costs, conditions in the residential real estate and mortgage markets, labor and healthcare costs and other macroeconomic factors affecting consumer spending behavior. These and other economic factors have had and could continue to have a material adverse effect on the demand for our customers' products and, in turn, on our customers' demand for our products and services and on our financial condition and results of operations. Furthermore, manufacturers of LEDs have in the past overestimated their potential market share growth. If this growth is currently overestimated or is overestimated in the future, we may experience further cancellations of orders in backlog, rescheduling of customer deliveries, obsolete inventory and/or liabilities to our suppliers for products no longer needed.

In addition, the demand for some of our customers' products can be even more volatile and unpredictable due to the possibility of competing technologies, such as flash memory as an alternative to hard disk drives. Unpredictable fluctuations in demand for our customers' products or rapid shifts in demand from our customers' products to alternative technologies could materially adversely impact our future results of operations.

We are exposed to the risks of operating a global business, including the need to obtain export licenses for certain of our shipments and political risks in the countries we operate.

Approximately 83%, 84%, and 90% of our net sales for the years ended 2013, 2012 and 2011, respectively were generated from sales outside of the United States. We expect sales from non-U.S. markets to continue to represent a significant, and possibly increasing, portion of our sales in the future. Our non-U.S. sales and operations are subject to risks inherent in conducting business abroad, many of which are outside our control, including:

- difficulties in managing a global enterprise, including staffing, managing distributors and representatives, and repatriation of earnings;
- regional economic downturns, varying foreign government support, and unstable political environments;
- political and social attitudes, laws, rules, regulations and policies within countries that favor domestic companies over non-domestic companies, including government-supported efforts to promote the development and growth of local competitors;
- longer sales cycles and difficulty in collecting accounts receivable;
- multiple, conflicting, and changing governmental laws and regulations, including import/export controls and other trade barriers;
- reliance on various information systems and information technology to conduct our business, which may be vulnerable to cyber-attacks by third parties or breached due to employee error, misuse or other causes that could result in business disruptions, loss of or damage to intellectual property, transaction errors, processing inefficiencies, or other adverse consequences should our security practices and procedures prove ineffective, and
- different customs and ways of doing business.

These challenges, many of which are associated with sales into China, may continue and recur again in the future, which could have a material adverse effect on our business. In addition, political instability, terrorism, acts of war or epidemics in regions where we operate may adversely affect or disrupt our business and results of operations.

Furthermore, products which are either manufactured in the United States or based on U.S. technology are subject to the United States Export Administration Regulations ("EAR") when exported to and re-exported from international jurisdictions, in addition to the local jurisdiction's export regulations applicable to individual shipments. Currently, our MOCVD deposition systems and certain of our other products are controlled for export under the EAR. Licenses or proper license exceptions may be required for the shipment of our products to certain countries. Obtaining an export license requires cooperation from the customer and customer-facility readiness, and can add time to the order fulfillment process. While we have generally been successful in obtaining export licenses in a timely manner, there can be no assurance that this will continue or that an export license can be obtained in each instance where it is required. If an export license is required but cannot be obtained, then we will not be permitted to export the product to the customer. The administrative processing, potential delay and risk of ultimately not obtaining an export license pose a particular disadvantage to us relative to our non-U.S. competitors who are not required to comply with U.S. export controls. Non-compliance with the EAR or other applicable export regulations could result in a wide range of penalties including the denial of export privileges, fines, criminal penalties, and the seizure of commodities. In the event that any export regulatory body determines that any of our shipments violate applicable export regulations, we could be fined significant sums and/or our export capabilities could be restricted, which could have a material adverse impact on our business.

We may be exposed to liabilities under the Foreign Corrupt Practices Act and any determination that we violated these or similar laws could have a material adverse effect on our business.

We are subject to the Foreign Corrupt Practices Act ("FCPA") and other laws that prohibit improper payments or offers of payments to foreign government officials, as defined by the statute, for the purpose of obtaining or retaining business. In addition, many of our customers have policies limiting or prohibiting us from providing certain types or amounts of entertainment, meals or gifts to their employees. It is our policy to implement safeguards to discourage these practices by our employees and representatives. However, our safeguards may prove to be ineffective and our employees, consultants, sales agents or distributors may engage in conduct for which we may be held responsible. Violations of the FCPA or similar laws or similar customer policies may result in severe criminal or civil sanctions or the loss of supplier privileges to a customer and we may be subject to other liabilities, which could negatively affect our business, operating results and financial condition.

The timing of our orders, shipments, and revenue recognition may cause our quarterly operating results to fluctuate significantly.

We derive a substantial portion of our net sales in any fiscal period from the sale of a relatively small number of high-priced systems. As a result, the timing of recognition of revenue for a single transaction could have a material effect on our sales and operating results for a particular fiscal period. As is typical in our industry, orders, shipments, and customer acceptances often occur during the last few weeks of a quarter. As a result, delay of only a week or two will determine which period revenue is reported in and can cause volatility in our revenue for a given reporting period. Our quarterly results have fluctuated significantly in the past, and we expect this trend to continue. If our orders, shipments, net sales or operating results in a particular quarter do not meet expectations, our stock price may be adversely affected.

We operate in industries characterized by rapid technological change.

All of our businesses are subject to rapid technological change. Our ability to remain competitive depends on our ability to enhance existing products and develop and manufacture new products in a timely and cost effective manner and to accurately predict technology transitions. Because new product development commitments must be made well in advance of sales, we must anticipate the future demand for products in selecting which development programs to fund and pursue. Our financial results for the current year and in the future will depend to a great extent on the successful introduction of several new products, many of which require achieving increasingly stringent technical specifications. We cannot be certain that we will be successful in selecting, developing, manufacturing and marketing new products or new technologies or in enhancing existing products.

We face significant competition.

We face significant competition throughout the world in each of our reportable segments, which may increase as certain markets in which we operate continue to expand. Some of our competitors have greater financial, engineering, manufacturing, and marketing resources than us. In addition, we face competition from smaller emerging equipment companies whose strategy is to provide a portion of the products and services we offer, with a focused approach on innovative technology for specialized markets. New product introductions or enhancements by our competitors could cause a decline in sales or loss of market acceptance of our existing products. Increased competitive pressure could also lead to intensified price competition resulting in lower margins. Our failure to compete successfully with these other companies would seriously harm our business.

We depend on a limited number of customers, located primarily in a limited number of regions, which operate in highly concentrated industries.

Our customer base is and has been highly concentrated. Orders from a relatively limited number of customers have accounted for, and likely will continue to account for, a substantial portion of our net sales, which may lead customers to demand pricing and other terms less favorable to us. Based on net sales, our five largest customers accounted for 42%, 34%, and 41% of our total net sales for the years ended 2013, 2012 and 2011, respectively. Customer consolidation activity involving some of our largest customers could result in an even greater concentration of our sales in the future.

If a principal customer discontinues its relationship with us or suffers economic setbacks, our business, financial condition, and operating results could be materially and adversely affected. Our ability to increase sales in the future will depend in part upon our ability to obtain orders from new customers. We cannot be certain that we will be able to do so. In addition, because a relatively small number of large manufacturers, many of whom are our customers, dominate the industries in which they operate, it may be especially difficult for us to replace these customers if we lose their business. A substantial portion of orders in our backlog are orders from our principal customers.

In addition, a substantial investment is required by customers to install and integrate capital equipment into a production line. As a result, once a manufacturer has selected a particular vendor's capital equipment, we believe that the manufacturer generally relies upon that equipment for the specific production line application and frequently will attempt to consolidate its other capital equipment requirements with the same vendor. Accordingly, if a customer selects a competitor's product over ours for technical superiority or other reasons, we could experience difficulty selling to that customer for a significant period of time.

Furthermore, we do not have long-term contracts with our customers. As a result, our agreements with our customers do not provide any assurance of future sales and we are exposed to competitive price pressure on each new order we attempt to obtain. Our failure to obtain new sales orders from new or existing customers would have a negative impact on our results of operations.

Our customer base is also highly concentrated in terms of geography, and the majority of our sales are to customers located in a limited number of countries. In 2013, 62% of our total net sales were to customers located in China, Taiwan and South Korea. Dependence upon sales emanating from a limited number of regions increases our risk of exposure to local difficulties and challenges, such as those associated with regional economic downturns, political instability, fluctuating currency exchange rates, natural disasters, social unrest, pandemics, terrorism or acts of war. In addition, we may encounter challenges associated with political and social attitudes, laws, rules, regulations and policies within these countries that favor domestic companies over non-domestic companies, including customer- or government-supported efforts to promote the development and growth of local competitors. Our reliance upon customer demand arising primarily from a limited number of countries could materially adversely impact our future results of operations.

Our sales cycle is long and unpredictable.

Historically, we have experienced long and unpredictable sales cycles (the period between our initial contact with a potential customer and the time when we recognize revenue from that customer). Our sales cycle can range up to twelve months or longer. The timing of an order often depends on the capital expenditure budget cycle of our customers, which is completely out of our control. In addition, the time it takes us to build a product to customer specifications typically ranges from one to six months. When coupled with the fluctuating amount of time required for shipment, installation and final acceptance, our sales cycles often vary widely, and variations in length of this period can cause further fluctuations in our operating results. As a result of our lengthy sales cycle, we may incur significant research and development expenses and selling and general and administrative expenses before we generate revenues for these products. We may never generate the anticipated revenues if a customer cancels or changes plans. Variations in the length of our sales cycle could also cause our sales and, therefore, our cash flow and net income to fluctuate widely from period to period.

We are subject to internal control evaluations and attestation requirements of Section 404 of the Sarbanes-Oxley Act and any delays or difficulty in satisfying these requirements or negative reports concerning our internal controls could adversely affect our future results of operations and our stock price.

Pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, we must include in our Annual Report on Form 10-K a report by management on the effectiveness of our internal control over financial reporting. Ongoing compliance with this requirement is complex, costly, time-consuming and is subject to significant judgment. If our internal controls are ineffective or if our management does not timely assess the adequacy of such internal controls, our ability to file timely and accurate periodic reports may be impeded. Any delays in filing may cause us to face the following risks and concerns, among others:

- concern on the part of our customers, partners, investors, and employees about our financial condition and filing delay status, including the potential loss of business opportunities;
- significant time and expense required to complete delayed filings, and the distraction of our senior management team and board of directors as we work to complete delayed filings;
- investigations by the SEC and other regulatory authorities of the Company and of members of our management;
- limitations on our ability to raise capital and make acquisitions;
- suspension or termination of our stock listing on the NASDAQ stock exchange, and the removal of our stock as a component of certain stock market indices; and
- general reputational harm.

Any or all of the foregoing could result in the commencement of stockholder lawsuits against the Company. Any such litigation, as well as any proceedings that could arise as a result of a filing delay and the circumstances which gave rise to it, may be time consuming and expensive, may divert management attention from the conduct of our business, could have a material adverse effect on our business, financial condition, and results of operations, and may expose us to costly indemnification obligations to current or former officers, directors, or other personnel, regardless of the outcome of such matters, which may not be adequately covered by insurance.

The price of our common shares may be volatile and could decline significantly.

The stock market in general and the market for technology stocks in particular, has experienced volatility that has often been unrelated to the operating performance of companies. If these market or industry-based fluctuations continue, the trading price of our common shares could decline significantly independent of our actual operating performance, and shareholders could lose all or a substantial part of their investment. The market price of our common shares could fluctuate significantly in response to several factors, including among others:

- general stock market conditions and uncertainty, such as those occasioned by a global liquidity crisis, negative financial news, and a failure of large financial institutions;
- receipt of substantial orders or cancellations for our products;
- issues associated with the performance and reliability of our products;
- actual or anticipated variations in our results of operations;
- announcements of financial developments or technological innovations;

- our failure to meet the performance estimates of investment research analysts;
- changes in recommendations and/or financial estimates by investment research analysts;
- strategic transactions, such as acquisitions, divestitures or spin-offs; and
- the occurrence of major catastrophic events.

Significant price and value fluctuations have occurred with respect to the publicly traded securities of the Company and technology companies generally. The price of our common shares is likely to be volatile in the future. In the past, securities class action litigation often has been brought against a company following periods of volatility in the market price of its securities. If similar litigation were pursued against us, it could result in substantial costs and a diversion of management's attention and resources, which could materially and adversely affect our results of operations, financial condition and liquidity.

Our inability to attract, retain, and motivate key employees could have a material adverse effect on our business.

Our success depends upon our ability to attract, retain, and motivate key employees, including those in executive, managerial, engineering and marketing positions, as well as highly skilled and qualified technical personnel and personnel to implement and monitor our financial and managerial controls and reporting systems. Attracting, retaining, and motivating such qualified personnel may be difficult due to challenging industry conditions, competition for such personnel by other technology companies, consolidations and relocations of operations and workforce reductions. While we have entered into Employment Agreements with certain key personnel, our inability to attract, retain, and motivate key personnel could have a material adverse effect on our business, financial condition or operating results.

We are subject to foreign currency exchange risks.

We are exposed to foreign currency exchange rate risks that are inherent in our anticipated sales, sales commitments and assets and liabilities that are denominated in currencies other than the United States dollar. Although we attempt to mitigate our exposure to fluctuations in currency exchange rates, hedging activities may not always be available or adequate to eliminate, or even mitigate, the impact of our exchange rate exposure. Failure to sufficiently hedge or otherwise manage foreign currency risks properly could materially and adversely affect our revenues and gross margins.

The enforcement and protection of our intellectual property rights may be expensive and could divert our limited resources.

Our success depends in part upon the protection of our intellectual property rights. We rely primarily on patent, copyright, trademark and trade secret laws, as well as nondisclosure and confidentiality agreements and other methods, to protect our proprietary information, technologies and processes. We own various United States and international patents and have additional pending patent applications relating to certain of our products and technologies. The process of seeking patent protection is lengthy and expensive, and we cannot be certain that pending or future applications will actually result in issued patents or that issued patents will be of sufficient scope or strength to provide meaningful protection or commercial advantage. In addition, our intellectual property rights may be circumvented, invalidated or rendered obsolete by the rapid pace of technological change. Policing unauthorized use of our products and technologies is difficult and time consuming. Furthermore, the laws of other countries may less effectively protect our proprietary rights than U.S. laws. Our outsourcing strategy requires that we share certain portions of our technology with our outsourcing partners, which poses additional risks of infringement and trade secret misappropriation. Infringement of our rights by a third party, possibly for purposes of developing and selling competing products, could result in uncompensated lost market and revenue opportunities. Similar exposure could result in the event that former employees seek to compete with us, through their unauthorized use of our intellectual property and proprietary information. We cannot be certain that the steps we have taken will prevent the misappropriation or unauthorized use of our proprietary information and technologies, particularly in foreign countries where the laws may not protect our proprietary intellectual property rights as fully or as readily as United States laws. Further, we cannot be certain that the laws and policies of any country, including the United States, with respect to intellectual property enforcement or licensing will not be changed in a way detrimental to the sale or use of our products or technology.

We may need to litigate to enforce our intellectual property rights, protect our trade secrets or determine the validity and scope of proprietary rights of others. As a result of any such litigation, we could lose our ability to enforce one or more patents or incur substantial unexpected operating costs. Any action we take to enforce our intellectual property rights could be costly and could absorb significant management time and attention, which, in turn, could negatively impact our operating results. In addition, failure to protect our trademark rights could impair our brand identity.

We may be subject to claims of intellectual property infringement by others.

From time to time we have received communications from other parties asserting the existence of patent or other rights which they believe cover certain of our products. We also periodically receive notice from customers who believe that we are required to indemnify them for damages they may incur related to infringement claims made against these customers by third parties. Our customary practice is to evaluate such assertions and to consider the available alternatives, including whether to seek a license, if appropriate. However, we cannot ensure that licenses can be obtained or, if obtained, will be on acceptable terms or that costly litigation or other administrative proceedings will not occur. If we are not able to resolve a claim, negotiate a settlement of the matter, obtain necessary licenses on commercially reasonable terms, and/or successfully prosecute or defend our position, our business, financial condition, and results of operations could be materially and adversely affected.

If we are subject to cyber-attacks we could incur substantial costs and, if such attacks are successful, could result in significant liabilities, reputational harm and disruption of our operations.

We manage, store and transmit various proprietary information and sensitive data relating to our operations. We may be subject to breaches of the information technology systems we use for these purposes. Experienced computer programmers and hackers may be able to penetrate our network security and misappropriate or compromise our confidential information or those of third parties, create system disruptions, or cause shutdowns. Computer programmers and hackers also may be able to develop and deploy viruses, worms, and other malicious software programs that attack our systems or our products, or that otherwise exploit any security vulnerabilities.

The costs to address the foregoing security problems and security vulnerabilities before or after a cyber-incident could be significant. Our remediation efforts may not be successful and could result in interruptions, delays, or cessation of service, and loss of existing or potential customers that may impede our sales, manufacturing, distribution, or other critical functions. In addition, breaches of our security measures and the unapproved dissemination of proprietary information or sensitive data about us or our customers or other third parties, could expose us, our customers, or other third parties to a risk of loss or misuse of this information, result in litigation and potential liability for us, damage our reputation, or otherwise harm our business.

Our acquisition strategy subjects us to risks associated with evaluating and pursuing these opportunities and integrating these businesses.

We have considered numerous acquisition opportunities and completed several significant acquisitions in the past. We may consider acquisitions of, or investments in, other businesses in the future. Acquisitions involve numerous risks, many of which are unpredictable and beyond our control, including:

- difficulties and increased costs in integrating the personnel, operations, technologies and products of acquired companies;
- diversion of management’s attention while evaluating, pursuing, and integrating the business to be acquired;
- potential loss of key employees of acquired companies, especially if a relocation or change in responsibilities is involved;
- difficulties in managing geographically dispersed operations in a cost-effective manner;
- lack of synergy or inability to realize expected synergies;

- unknown, underestimated and/or undisclosed commitments or liabilities;
- increased amortization expense relating to intangible assets; and
- the potential impairment and write-down of amounts capitalized as intangible assets and goodwill as part of the acquisition, as a result of technological advancements or worse-than-expected performance by the acquired company.

Our inability to effectively manage these risks could materially and adversely affect our business, financial condition, and operating results. We are subject to many of these risks in connection with our recent acquisition of Synos.

In addition, if we issue equity securities to pay for an acquisition, the ownership percentage of our then-existing shareholders would be reduced and the value of the shares held by these shareholders could be diluted, which could adversely affect the price of our stock. If we use cash to pay for an acquisition, the payment could significantly reduce the cash that would be available to fund our operations or other purposes.

We may be required to take additional impairment charges for goodwill and indefinite-lived intangible assets or definite-lived intangible and long-lived assets.

We are required to assess goodwill and indefinite-lived intangible assets annually for impairment, or on an interim basis whenever certain events occur or circumstances change, such as an adverse change in business climate or a decline in the overall industry, that would more likely than not reduce the fair value of a reporting unit below its carrying amount. We are also required to test our definite-lived intangible and long-lived assets, including acquired intangible assets and property, plant and equipment, for recoverability and impairment whenever there are indicators of impairment, such as an adverse change in business climate.

As part of our long-term strategy, we may pursue future acquisitions of other companies or assets which could potentially increase our goodwill and intangible and long-lived assets. Adverse changes in business conditions could materially impact our estimates of future operations and result in additional impairment charges to these assets. If our goodwill or intangible and long-lived assets were to become further impaired, our results of operations could be materially and adversely affected.

Changes in accounting pronouncements or taxation rules or practices may adversely affect our financial results.

Changes in accounting pronouncements or taxation rules or practices can have a significant effect on our reported results. New accounting pronouncements or taxation rules and varying interpretations of accounting pronouncements or taxation practices have occurred and may occur in the future. New rules, changes to existing rules, if any, or the questioning of current practices may adversely affect our reported financial results or change the way we conduct our business.

We are subject to risks of non-compliance with environmental, health and safety regulations.

We are subject to environmental, health and safety regulations in connection with our business operations, including but not limited to regulations related to the research, development, and use of our products. Failure or inability to comply with existing or future environmental and safety regulations could result in significant remediation liabilities, the imposition of fines and/or the suspension or termination of research, development, or use of certain of our products, each of which could have a material adverse effect on our business, financial condition, and results of operation. In addition, some of our operations involve the storage, handling and use of hazardous materials that may pose a risk of fire, explosion, or environmental release. Such events could result from acts of terrorism, natural disasters or operational failures and may result in injury or loss of life to our employees and others, local environmental contamination and property damage. These events might cause a temporary shutdown of an affected facility, or portion thereof, and we could be subject to penalties or claims as a result. Each of these events could have a material adverse effect on our business, financial condition, and results of operation.

We have significant operations in locations which could be materially and adversely impacted in the event of a natural disaster or other significant disruption.

Our operations in the U.S., the Asia-Pacific region and in other areas could be subject to natural disasters or other significant disruptions, including earthquakes, tsunamis, fires, hurricanes, floods, water shortages, other extreme weather conditions, medical epidemics, acts of terrorism, power shortages and blackouts, telecommunications failures, and other natural and manmade disasters or disruptions. In the event of such a natural disaster or other disruption, we could experience disruptions or interruptions to our operations or the operations of our suppliers, distributors, resellers or customers; destruction of facilities; and/or loss of life, all of which could materially increase our costs and expenses and materially and adversely affect our business, revenue and financial condition.

We have adopted certain measures that may have anti-takeover effects which may make an acquisition of our Company by another company more difficult.

We have adopted, and may in the future adopt, certain measures that may have the effect of delaying, deferring or preventing a takeover or other change in control of our Company, any of which a holder of our common stock might not consider in the holder's best interest. These measures include:

- "blank check" preferred stock;
- classified board of directors; and
- certain certificate of incorporation and bylaws provisions.

Our board of directors has the authority to issue up to 500,000 shares of preferred stock and to fix the rights (including voting rights), preferences and privileges of these shares ("blank check" preferred). Such preferred stock may have rights, including economic rights, senior to our common stock. As a result, the issuance of the preferred stock could have a material adverse effect on the price of our common stock and could make it more difficult for a third party to acquire a majority of our outstanding common stock.

Our board of directors is divided into three classes with each class serving a staggered three-year term. The existence of a classified board will make it more difficult for our shareholders to change the composition (and therefore the policies) of our board of directors in a relatively short period of time.

We have adopted certain certificate of incorporation and bylaws provisions which may have anti-takeover effects. These include: (a) requiring certain actions to be taken at a meeting of shareholders rather than by written consent, (b) requiring a super-majority of shareholders to approve certain amendments to our bylaws, (c) limiting the maximum number of directors, and (d) providing that directors may be removed only for "cause." These measures and those described above may have the effect of delaying, deferring or preventing a takeover or other change in control of Veeco that a holder of our common stock might consider in its best interest.

In addition, we are subject to the provisions of Section 203 of the General Corporation Law of the State of Delaware, which prohibits a Delaware corporation from engaging in any business combination, including mergers and asset sales, with an interested stockholder (generally, a 15% or greater stockholder) for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is approved in a prescribed manner. The operation of Section 203 may have anti-takeover effects, which could delay, defer or prevent a takeover attempt that a holder of our common stock might consider in its best interest.

New regulations related to conflict minerals will force us to incur additional expenses, and may make our supply chain more complex, and may result in damage to our relationships with customers.

On August 22, 2012, under the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, or the Dodd-Frank Act, the SEC adopted new requirements for companies that manufacture products that contain certain minerals and metals, known as conflict minerals. These rules require public companies to perform diligence and to report annually to the SEC whether such minerals originate from the Democratic Republic of Congo and adjoining countries. The implementation of these new requirements could adversely affect the sourcing, availability and pricing of minerals we use in the manufacture of our products. In addition, we will incur additional costs to comply with the disclosure requirements, including costs related to determining the source of any of the relevant minerals used in our products. Given the complexity of our supply chain, we may not be able to ascertain the origins of these minerals used in our products through the due diligence procedures that we implement, which may harm our reputation. We may also face difficulties in satisfying customers who may require that our products be certified as conflict mineral free, which could harm our relationships with these customers and lead to a loss of revenue. These new requirements could limit the pool of suppliers that can provide conflict-free minerals, and we may be unable to obtain conflict-free minerals at competitive prices, which could increase our costs and adversely affect our manufacturing operations and our profitability.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our corporate headquarters and our principal product development and marketing, manufacturing, research and development and training facilities, as well as the approximate size and the segments which utilize such facilities, are:

Owned Facilities Location	Approximate Size (sq. ft.)	Mortgaged	Use
Plainview, NY	80,000	No	Data Storage and Corporate Headquarters
Somerset, NJ	80,000	No	LED & Solar
Somerset, NJ	38,000	No	LED & Solar
St. Paul, MN(1)	111,000	Yes	LED & Solar
Yongin-city, South Korea	56,000	No	Sales Office, Customer Training Center and R&D Center
Hyeongok-ri, South Korea	18,000	No	Sales Office and Clean Room

Leased Facilities Location	Approximate Size (sq. ft.)	Lease Expires	Use
Camarillo, CA	23,000	2015	Data Storage
Fort Collins, CO	26,000	2018	Data Storage
Peabody, MA	30,000	2014	Held for Sublease
Somerset, NJ	14,000	2014	LED & Solar
Poughkeepsie, NY	9,000	2015	LED & Solar
Kingston, NY	44,000	2018	LED & Solar
Fremont, CA	17,000	2015	LED & Solar
Shanghai, China (2)	18,700	2014	Customer Training Center
Hsinchu City, Taiwan	13,500	2015	Sales Office, Process Development, and Customer Training Center

(1) Our LED & Solar segment utilizes approximately 95,000 square feet of this facility. The balance is available for expansion.
(2) We have the option to renew this lease for two consecutive two year terms and also have the option to purchase this facility.

The St. Paul, Minnesota facility is subject to a mortgage which, as of December 31, 2013, had an outstanding balance of $2.1 million. We also lease small offices in Santa Clara, California and Edina, Minnesota for sales and service. Our foreign sales and service subsidiaries lease office space in Germany, Japan, South Korea, Malaysia, Singapore, Thailand, Philippines and China. We believe our facilities are adequate to meet our current needs.

Item 3. Legal Proceedings

Environmental

We are aware that petroleum hydrocarbon contamination has been detected in the soil at the site of a facility formerly leased by us in Santa Barbara, California. We have been indemnified for any liabilities we may incur which arise from environmental contamination at the site. Even without consideration of such indemnification, we do not believe that any material loss or expense is probable in connection with any such liabilities. The former owner of the land and building in Santa Barbara, California in which our former Metrology operations were located (which business was sold to Bruker Corporation ("Bruker") on October 7, 2010), has disclosed that there are hazardous substances present in the ground under the building. Management believes that the comprehensive indemnification clause that was part of the purchase contract relating to the purchase of such land provides adequate protection against any environmental issues that may arise. We have provided Bruker with similar indemnification as part of the sale.

Non-Environmental

Veeco and certain other parties were named as defendants in a lawsuit filed on April 25, 2013 in the Superior Court of California, County of Sonoma. The plaintiff in the lawsuit, Patrick Colbus, seeks unspecified damages and asserts claims that he suffered burns and other injuries while he was cleaning a molecular beam epitaxy system alleged to have been manufactured by Veeco. The lawsuit alleges, among other things, that the molecular beam epitaxy system was defective and that Veeco failed to adequately warn of the potential risks of the system. Veeco believes this lawsuit is without merit and intends to defend vigorously against the claims. Veeco is unable to predict the outcome of this action or to reasonably estimate the possible loss or range of loss, if any, arising from the claims asserted therein. The Company believes that, in the event of any recovery by the plaintiff from Veeco, such recovery would be fully covered by Veeco's insurance.

We are involved in various other legal proceedings arising in the normal course of our business. We do not believe that the ultimate resolution of these matters will have a material adverse effect on our consolidated financial position, results of operations or cash flows.

Item 4. Mine Safety Disclosures

Not Applicable.

PART II

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

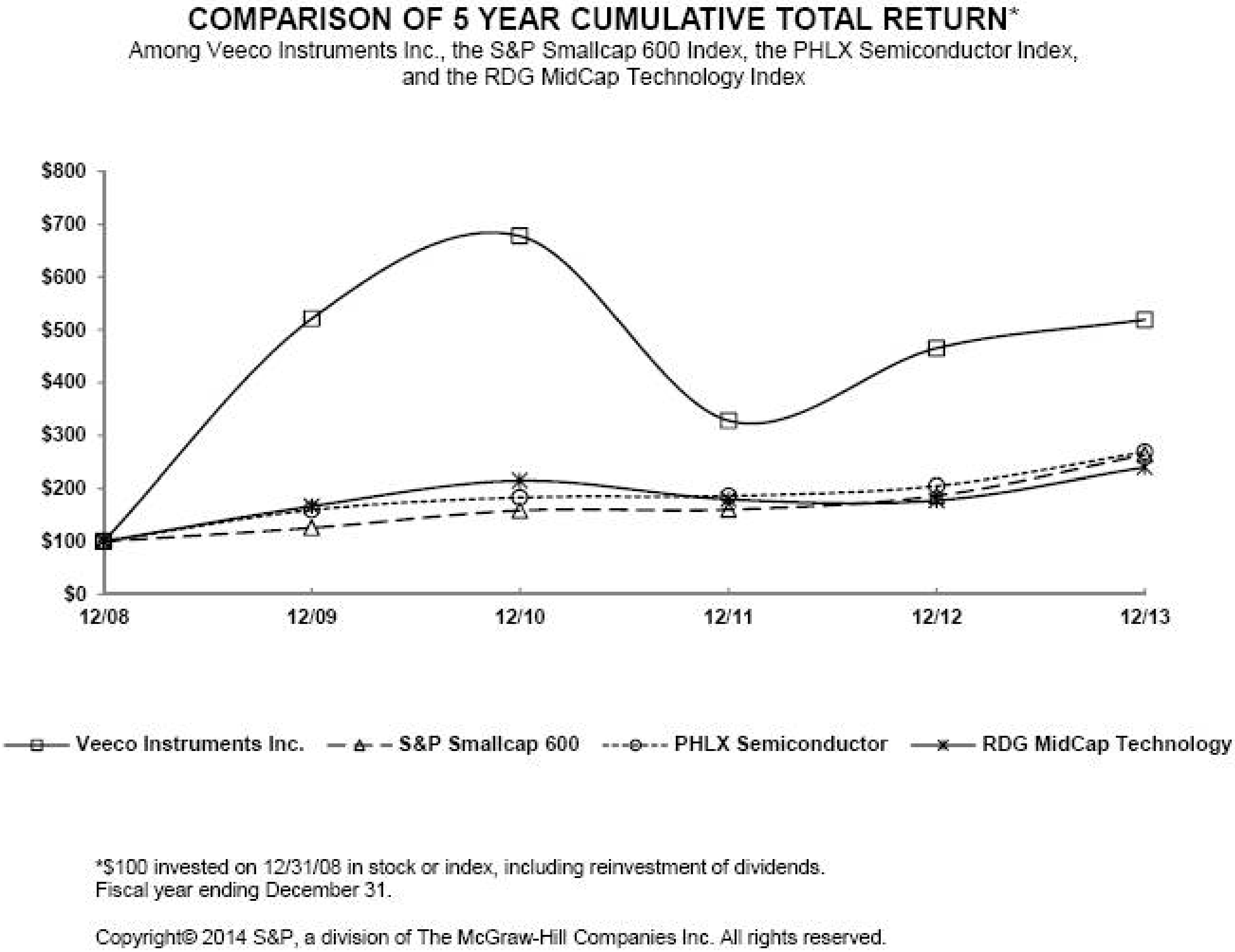
Our common stock is quoted on The NASDAQ National Market under the symbol "VECO." The 2013 and 2012 high and low closing bid prices by quarter are as follows:

	2013		2012	
	High	Low	High	Low
First Quarter	$ 38.41	$ 28.71	$ 33.40	$ 21.46
Second Quarter	42.60	32.23	36.97	26.54
Third Quarter	36.41	33.16	38.11	30.00
Fourth Quarter	38.15	28.44	31.52	26.89

On February 18, 2014, the closing bid price for our common stock on The NASDAQ National Market was $41.13 and we had 120 shareholders of record.

We have not paid dividends on our common stock. The Board of Directors will determine future dividend policy based on our consolidated results of operations, financial condition, capital requirements and other circumstances.

Stock Performance Graph



ASSUMES $100 INVESTED ON DEC. 31 , 2008
ASSUMES DIVIDENDS REINVESTED
FISCAL YEAR ENDING DEC. 31

	2008	2009	2010	2011	2012	2013
Veeco Instruments Inc.	100.00	521.14	677.60	328.08	465.14	519.09
S&P Smallcap 600	100.00	125.57	158.60	160.22	186.37	263.37
PHLX Semiconductor	100.00	159.68	183.23	186.05	204.93	268.55
RDG MidCap Technology	100.00	166.67	214.78	179.75	177.47	239.71

Item 6. Selected Consolidated Financial Data

The financial data set forth below should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our Consolidated Financial Statements and notes thereto included elsewhere in this Form 10-K.

	Year ended December 31,				
	2013	2012	2011	2010	2009
	(in thousands, except per share data)				
Statement of Operations Data:					
Net sales	$ 331,749	$ 516,020	$ 979,135	$ 930,892	$ 282,262
Operating income (loss)	(71,812)	37,212	276,259	303,253	7,631
Income (loss) from continuing operations net of income taxes	(42,263)	26,529	190,502	277,176	(1,777)
Income (loss) from discontinued operations net of income taxes	—	4,399	(62,515)	84,584	(13,855)
Net income (loss) attributable to noncontrolling interest	—	—	—	—	(65)
Net income (loss) attributable to Veeco	$ (42,263)	$ 30,928	$ 127,987	$ 361,760	$ (15,567)
Income (loss) per common share attributable to Veeco:					
Basic:					
Continuing operations	$ (1.09)	$ 0.69	$ 4.80	$ 7.02	$ (0.05)
Discontinued operations	—	0.11	(1.57)	2.14	(0.43)
Income (loss)	$ (1.09)	$ 0.80	$ 3.23	$ 9.16	$ (0.48)
Diluted :					
Continuing operations	$ (1.09)	$ 0.68	$ 4.63	$ 6.52	$ (0.05)
Discontinued operations	—	0.11	(1.52)	1.99	(0.43)
Income (loss)	$ (1.09)	$ 0.79	$ 3.11	$ 8.51	$ (0.48)
Weighted average shares outstanding:					
Basic	38,807	38,477	39,658	39,499	32,628
Diluted	38,807	39,051	41,155	42,514	32,628

	December 31,				
	2013	2012	2011	2010	2009
	(in thousands)				
Balance Sheet Data:					
Cash and cash equivalents	$ 210,799	$ 384,557	$ 217,922	$ 245,132	$ 148,500
Short-term investments	281,538	192,234	273,591	394,180	135,000
Restricted cash	2,738	2,017	577	76,115	—
Working capital	485,452	632,197	587,076	640,139	317,317
Goodwill	91,348	55,828	55,828	52,003	52,003
Total assets	947,969	937,304	936,063	1,148,034	605,372
Long-term debt (including current installments)	2,137	2,406	2,654	104,021	101,176
Total equity	780,230	811,212	760,520	762,512	359,059

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

Executive Summary

Veeco Instruments Inc. (together with its consolidated subsidiaries, "Veeco", the "Company", "we", "us", and "our", unless the context indicates otherwise) creates process equipment that enables technologies for a cleaner and more productive world. We design, manufacture and market equipment primarily sold to make LEDs and hard-disk drives, as well as for concentrator photovoltaics, power semiconductors, wireless components, and micro-electro-mechanical systems ("MEMS").

Veeco develops highly differentiated, "best-in-class" process equipment for critical performance steps. Our products feature leading technology, low cost-of-ownership and high throughput. Core competencies in advanced thin film technologies, over 300 patents, and decades of specialized process know-how helps us to stay at the forefront of these demanding industries.

Veeco's LED & Solar segment designs and manufactures metal organic chemical vapor deposition ("MOCVD") and molecular beam epitaxy ("MBE") systems and components sold to manufacturers of LEDs, wireless components, power semiconductors, and concentrator photovoltaics, as well as for R&D applications. Our ALD technology is used by the manufacturers of OLED displays and has further applications in the semiconductor and solar markets.

Veeco's Data Storage segment designs and manufactures systems used to create thin film magnetic heads ("TFMH"s) that read and write data on hard disk drives. These include ion beam etch, ion beam deposition, diamond-like carbon, physical vapor deposition, chemical vapor deposition, and slicing, dicing and lapping systems. While our systems are primarily sold to hard drive customers, they also have applications in optical coatings, MEMS and magnetic sensors, and extreme ultraviolet ("EUV") lithography.

As of December 31, 2013, Veeco had approximately 800 employees to support our customers through product and process development, training, manufacturing, and sales and service sites in the U.S., South Korea, Taiwan, China, Singapore, Japan, Europe and other locations.

Veeco Instruments Inc. was organized as a Delaware corporation in 1989.

Summary of Results for 2013

Selected financial highlights include:

- Revenue decreased 35.7% to $331.7 million in 2013 from $516.0 million in 2012. LED & Solar revenues decreased 31.2% to $249.7 million from $363.2 million in 2012. Data Storage revenues decreased 46.3% to $82.0 million from $152.8 million in 2012;

- Orders were down 15.4%, to $331.6 million in 2013, compared to $391.9 million in 2012;

- Our gross margin decreased, to 31.1%, in 2013 compared to 41.7% in 2012. Gross margins in LED & Solar decreased from 40.9% in 2012 to 28.0%. Data Storage gross margins also decreased from 43.7% to 40.4%.

- Our selling, general and administrative expenses increased to $85.5 million, from $73.1 million in 2012. Selling, general and administrative expenses were 25.8% of net sales in 2013, compared to 14.2% in 2012;

- Our research and development expenses decreased to $81.4 million from $95.2 million in 2012. Research and development expenses were 24.5% of net sales in 2013, compared to 18.4% in 2012;

- Net income (loss) from continuing operations in 2013 was $(42.3) million compared to $26.5 million in 2012;

- Diluted net income (loss) from continuing operations per share in 2013 was $(1.09) compared to $0.68 in 2012.

Outlook

As we begin 2014, it is unclear when business conditions may improve for Veeco.

We are seeing some positive signs in our MOCVD business. LED customer facility utilization rates are stable and at a high level. It is clear that LED lighting adoption is accelerating. Some of our key customers are currently contemplating capacity additions. However, it remains difficult to accurately predict if, and when, a turnaround will happen and to what extent we will see growth in our MOCVD business. Competitive pricing pressure, which had a dramatic effect on our gross margins in 2013, is also difficult to predict. Our focus is to introduce next-generation products that will offer our customers additional value, and that, combined with potentially higher volumes, could help restore gross margins in MOCVD.

Our new ALD business was acquired as a "pre-revenue" business and thus decreased our earnings in 2013. The timing of production ALD orders from our key customer could have a significant impact on our expected revenue growth and potential return to profitability.

While Data Storage orders increased 8.4% from the prior year period and low growth is expected in hard drives, our customers have excess manufacturing capacity and they have only been making select technology purchases. Future demand for our Data Storage products is unclear.

Our priorities for 2014 include taking the steps we believe are necessary to transition us back to profitable growth. We are focused on four areas to improve our financial performance: 1) developing and launching new products that enable cost effective LED lighting, flexible OLED encapsulation and other emerging technologies; 2) executing manufacturing cost reduction programs; 3) driving process improvement initiatives to make us more efficient; and 4) improving product differentiation and customer value to stem margin erosion. We currently anticipate that our losses will continue in the near term.

Our outlook discussion above constitutes "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Our expectations regarding future results are subject to risks and uncertainties. Our actual results may differ materially from those anticipated.

You should not place undue reliance on any forward-looking statements, which speak only as of the dates they are made.

Results of Operations

Years Ended December 31, 2013 and 2012

The following table shows our Consolidated Statements of Operations, percentages of sales and comparisons between 2013 and 2012 (dollars in thousands):

	Year ended December 31, 2013		2012		Dollar and Percentage Change Year to Year	
Net sales	$ 331,749	100.0%	$ 516,020	100.0%	$ (184,271)	(35.7)%
Cost of sales	228,607	68.9%	300,887	58.3%	(72,280)	(24.0)%
Gross profit	103,142	31.1%	215,133	41.7%	(111,991)	(52.1)%
Operating expenses:						
Selling, general and administrative	85,486	25.8%	73,110	14.2%	12,376	16.9%
Research and development	81,424	24.5%	95,153	18.4%	(13,729)	(14.4)%
Amortization	5,527	1.7%	4,908	1.0%	619	12.6%
Restructuring	1,485	0.4%	3,813	0.7%	(2,328)	(61.1)%
Asset impairment	1,220	0.4%	1,335	0.3%	(115)	(8.6)%
Total operating expenses	175,142	52.8%	178,319	34.6%	(3,177)	(1.8)%
Other, net	(1,017)	(0.3)%	(398)	(0.1)%	(619)	155.5%
Changes in contingent consideration	829	0.2%	—	0.0%	829	*
Operating income (loss)	(71,812)	(21.6)%	37,212	7.2%	(109,024)	*
Interest income (expense), net	602	0.2%	974	0.2%	(372)	(38.2)%
Income (loss) from continuing operations before income taxes	(71,210)	(21.5)%	38,186	7.4%	(109,396)	*
Income tax provision (benefit)	(28,947)	(8.7)%	11,657	2.3%	(40,604)	*
Income (loss) from continuing operations	(42,263)	(12.7)%	26,529	5.1%	(68,792)	*
Discontinued operations:						
Income (loss) from discontinued operations before income taxes	—	0.0%	6,269	1.2%	(6,269)	*
Income tax provision (benefit)	—	0.0%	1,870	0.4%	(1,870)	*
Income (loss) from discontinued operations	—	0.0%	4,399	0.9%	(4,399)	*
Net income (loss)	$ (42,263)	(12.7)%	$ 30,928	6.0%	$ (73,191)	*

* Not Meaningful

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Net Sales

The following is an analysis of sales by segment and by region (dollars in thousands):

	For the year ended December 31, 2013	Percent of total	2012	Percent of total	Dollar and Percentage Change Year to Year	
Segment Analysis						
LED & Solar	$ 249,742	75.3%	$ 363,181	70.4%	$ (113,439)	(31.2)%
Data Storage	82,007	24.7%	152,839	29.6%	(70,832)	(46.3)%
Total	$ 331,749	100.0%	$ 516,020	100.0%	$ (184,271)	(35.7)%
Regional Analysis						
Asia Pacific	$ 252,199	76.0%	$ 390,995	75.8%	$ (138,796)	(35.5)%
Americas (1)	57,609	17.4%	83,317	16.1%	(25,708)	(30.9)%
Europe, Middle East and Africa	21,941	6.6%	41,708	8.1%	(19,767)	(47.4)%
Total	$ 331,749	100.0%	$ 516,020	100.0%	$ (184,271)	(35.7)%

(1) Less than 1% of sales included within the Americas caption above have been derived from other regions outside the United States.

LED & Solar segment sales decreased in 2013 primarily due to lower MOCVD sales as a result of continued industry manufacturing overcapacity and our customer's hesitancy to make new investments. Data Storage sales decreased in 2013 due to customer fabrication facility overcapacity and weak hard drive demand. Our Data Storage sales in 2012 were favorably impacted by the replacement of equipment at one of our customer's sites that was damaged by the floods in Thailand. By region, net sales decreased in Asia Pacific ("APAC"), primarily due to a significant decrease in MOCVD sales in China resulting from industry manufacturing overcapacity. Net sales in the Americas and Europe, Middle East and Africa ("EMEA") also decreased, due to reduced end-market demand resulting from the weak global economy. We believe that there will continue to be year-to-year variations in the geographic distribution of sales.

Orders decreased 15.4% to $331.6 million from $391.9 million in the prior year, primarily attributable to a 22.1% decrease in LED & Solar orders, principally driven by a decline in MOCVD orders due to industry manufacturing overcapacity. Since hitting a peak in the second quarter of 2011, our orders have slowed dramatically. While Data Storage orders increased 8.4% from the prior year period and low growth is expected in hard drives, our customers have excess manufacturing capacity and they have only been making select technology purchases. We continue to experience weak overall market conditions due to overcapacity in all of our businesses.

Our book-to-bill ratio for 2013, which is calculated by dividing orders recorded in a given time period by revenue recognized in the same time period, was 1 to 1 compared to 0.76 to 1 in 2012. Our backlog as of December 31, 2013 was $143.3 million, compared to $150.2 million as of December 31, 2012. During the year ended December 31, 2013, we recorded backlog adjustments of approximately $6.8 million, consisting of a $5.6 million adjustment related to orders that no longer met our bookings criteria as well as an adjustment related to foreign currency translation of $1.2 million. For certain sales arrangements we require a deposit for a portion of the sales price before shipment. As of December 31, 2013 and 2012, we had customer deposits of $27.5 million and $32.7 million, respectively.

Gross Profit

(dollars in thousands)	Year ended December 31, 2013	Year ended December 31, 2012	Dollar and Percentage Change Year to Year	
Gross profit - LED & Solar	$ 69,998	$ 148,383	$ (78,385)	(52.8)%
Gross margin	28.0%	40.9%		
Gross profit - Data Storage	$ 33,144	$ 66,750	$ (33,606)	(50.3)%
Gross margin	40.4%	43.7%		
Gross profit - Total Veeco	$ 103,142	$ 215,133	$ (111,991)	(52.1)%
Gross margin	31.1%	41.7%		

LED & Solar gross margins decreased primarily due to lower average selling prices, reduced volume and fewer final acceptances partially offset by cost reductions associated with reduced volumes and reduced expenses in 2013 for slow moving inventory items. Data Storage gross margins decreased primarily due to a significant reduction in volume.

Operating Expenses

(dollars in thousands)	Year ended December 31, 2013	Year ended December 31, 2012	Dollar and Percentage Change Year to Year	
Selling, general and administrative	$ 85,486	$ 73,110	$ 12,376	16.9%
Percentage of sales	25.8%	14.2%		

Selling, general and administrative expenses increased primarily from professional fees associated with our review of our revenue accounting that began in 2012 and completed in October 2013, partially offset by a reduction in bonus and profit sharing expense and increased cost control measures put into place in response to weak market conditions, which resulted in lower personnel-related costs and discretionary expenses. The addition of our ALD business in the fourth quarter of 2013 has also contributed to an increase in our selling, general and administrative expenses.

(dollars in thousands)	Year ended December 31, 2013	Year ended December 31, 2012	Dollar and Percentage Change Year to Year	
Research and development	$ 81,424	$ 95,153	$ (13,729)	(14.4)%
Percentage of sales	24.5%	18.4%		

Research and development expense decreased as we sharpened our focus on product development in areas of anticipated high-growth. We selectively funded certain product development activities which resulted in reduced spending for project materials and professional consultants as well as lower personnel and personnel-related costs.

(dollars in thousands)	Year ended December 31, 2013	Year ended December 31, 2012	Dollar and Percentage Change Year to Year	
Amortization	$ 5,527	$ 4,908	$ 619	12.6%
Percentage of sales	1.7%	1.0%		

Amortization expense increased primarily due to additional amortization associated with intangible assets acquired as part of our acquisition of Synos during the fourth quarter of 2013, partially offset by certain intangible assets becoming fully amortized.

(dollars in thousands)	Year ended December 31, 2013	2012	Dollar and Percentage Change Year to Year	
Restructuring	$ 1,485	$ 3,813	$ (2,328)	(61.1)%
Percentage of sales	0.4%	0.7%		

During 2013, we recorded $1.5 million in personnel severance and related costs principally resulting from the transition from a direct sales presence to a distributor in one of our international sales offices and the consolidation of certain sales, business and administrative functions. During 2012, we took measures to improve profitability, including a reduction in discretionary expenses, realignment of our senior management team and consolidation of certain sales, business and administrative functions. As a result of these actions, we recorded a restructuring charge in 2012 consisting of $3.0 million in personnel severance and related costs, $0.4 million in equity compensation and related costs and $0.4 million in other severance costs resulting from a headcount reduction of 52 employees.

(dollars in thousands)	Year ended December 31, 2013	2012	Dollar and Percentage Change Year to Year	
Asset impairment	$ 1,220	$ 1,335	$ (115)	(8.6)%
Percentage of sales	0.4%	0.3%		

During 2013, we recorded asset impairment charges in LED & Solar of $0.9 million related to certain lab tools carried in property, plant and equipment which we are holding for sale and $0.3 million related to another asset carried in Other assets. During 2012, we recorded an asset impairment charge related to a license agreement in our Data Storage segment.

Income Taxes

(dollars in thousands)	Year ended December 31, 2013	2012	Dollar and Percentage Change Year to Year	
Income tax provision (benefit)	$ (28,947)	$ 11,657	$ (40,604)	*
Effective tax rate	40.7%	30.5%		

* Not Meaningful

The 2013 net benefit for income taxes included a $3.5 million provision relating to our foreign operations and $32.4 million benefit relating to our domestic operations. The 2012 provision for income taxes included $8.3 million relating to our foreign operations and $3.4 million relating to our domestic operations. Our 2013 effective tax rate is higher than the statutory rate as a result of the jurisdictional mix of earnings in our foreign locations, an income tax benefit related to the generation of current year research and development tax credits and legislation enacted in the first quarter of 2013 which extended the Federal Research and Development Credit for both the 2012 and 2013 tax years.

During the fourth quarter of 2012, we determined that we may not meet the criteria required to receive a certain incentive tax rate pursuant to a negotiated tax holiday in one foreign jurisdiction. Although we are continuing to negotiate the criteria for the incentive, for financial reporting purposes we have recorded additional tax provisions of $0.9 million and $4.0 million in 2013 and 2012, respectively, totaling $4.9 million, which represents the cumulative effect of calculating the tax provision using the incentive tax rate as compared to the foreign country's statutory rate. If we successfully renegotiate the incentive criteria, this additional tax provision could be reversed as a future benefit in the period in which the negotiations are finalized.

During 2012, we recorded an income tax expense of $1.9 million related to discontinued operations, with no comparable amount in 2013. In addition, we recorded a current tax benefit of $2.1 million related to equity-based compensation in 2012 for which no current tax benefit was recorded in 2013.

Discontinued Operations

(dollars in thousands)	Year ended December 31, 2013	2012	Dollar and Percentage Change Year to Year	
Income (loss) from discontinued operations before income taxes	$ —	$ 6,269	$ (6,269)	*
Income tax provision (benefit)	—	1,870	(1,870)	*
Income (loss) from discontinued operations	$ —	$ 4,399	$ (4,399)	*

* Not Meaningful

Discontinued operations represent the results of the operations of our disposed Metrology segment, which was sold to Bruker on October 7, 2010, and our CIGS solar systems business, which was discontinued on September 27, 2011. The 2012 results included a $1.4 million gain ($1.1 million net of taxes) on the sale of the assets of discontinued segment held for sale and a $5.4 million gain ($4.1 million net of taxes) associated with the closing of the sale to Bruker.

Years Ended December 31, 2012 and 2011

The following table shows our Consolidated Statements of Operations, percentages of sales and comparisons between 2012 and 2011 (dollars in thousands):

	Year ended December 31, 2012		Year ended December 31, 2011		Dollar and Percentage Change Year to Year	
Net sales	$ 516,020	100.0%	$ 979,135	100.0%	$ (463,115)	(47.3)%
Cost of sales	300,887	58.3%	504,801	51.6%	(203,914)	(40.4)%
Gross profit	215,133	41.7%	474,334	48.4%	(259,201)	(54.6)%
Operating expenses:						
Selling, general and administrative	73,110	14.2%	95,134	9.7%	(22,024)	(23.2)%
Research and development	95,153	18.4%	96,596	9.9%	(1,443)	(1.5)%
Amortization	4,908	1.0%	4,734	0.5%	174	3.7%
Restructuring	3,813	0.7%	1,288	0.1%	2,525	196.0%
Asset impairment	1,335	0.3%	584	0.1%	751	128.6%
Total operating expenses	178,319	34.6%	198,336	20.3%	(20,017)	(10.1)%
Other, net	(398)	(0.1)%	(261)	(0.0)%	(137)	52.5%
Operating income (loss)	37,212	7.2%	276,259	28.2%	(239,047)	(86.5)%
Interest income (expense), net	974	0.2%	(824)	(0.1)%	1,798	*
Loss on extinguishment of debt	—	0.0%	(3,349)	(0.3)%	3,349	*
Income (loss) from continuing operations before income taxes	38,186	7.4%	272,086	27.8%	(233,900)	(86.0)%
Income tax provision (benefit)	11,657	2.3%	81,584	8.3%	(69,927)	(85.7)%
Income (loss) from continuing operations	26,529	5.1%	190,502	19.5%	(163,973)	(86.1)%
Discontinued operations:						
Income (loss) from discontinued operations before income taxes	6,269	1.2%	(91,885)	(9.4)%	98,154	*
Income tax provision (benefit)	1,870	0.4%	(29,370)	(3.0)%	31,240	*
Income (loss) from discontinued operations	4,399	0.9%	(62,515)	(6.4)%	66,914	*
Net income (loss)	$ 30,928	6.0%	$ 127,987	13.1%	$ (97,059)	(75.8)%

* Not Meaningful

Net Sales

The following is an analysis of sales by segment and by region (dollars in thousands):

	For the year ended December 31,				Dollar and Percentage Change Year to Year	
	2012	Percent of total	2011	Percent of total		
Segment Analysis						
LED & Solar	$ 363,181	70.4%	$ 827,797	84.5%	$ (464,616)	(56.1)%
Data Storage	152,839	29.6%	151,338	15.5%	1,501	1.0%
Total	$ 516,020	100.0%	$ 979,135	100.0%	$ (463,115)	(47.3)%
Regional Analysis						
Asia Pacific	$ 390,995	75.8%	$ 820,883	83.8%	$ (429,888)	(52.4)%
Americas (1)	83,317	16.1%	100,635	10.3%	(17,318)	(17.2)%
Europe, Middle East and Africa	41,708	8.1%	57,617	5.9%	(15,909)	(27.6)%
Total	$ 516,020	100.0%	$ 979,135	100.0%	$ (463,115)	(47.3)%

(1) Less than 1%, of sales included within the United States caption above has been derived from other regions within the Americas.

By segment, LED & Solar sales decreased from the prior year primarily due to a 62.0% decrease in MOCVD reactor shipments as a result of industry overcapacity following over two years of strong customer investments. Data Storage sales increased slightly from the prior year, primarily due to an increase in shipments to replace equipment destroyed by flooding in customer facilities in Thailand offset by reduced demand due to our customers' hesitancy to add manufacturing capacity during weak global economic conditions. By region, net sales decreased in APAC, primarily due to lower MOCVD sales to LED customers. Sales in the Americas and EMEA also decreased due to reduced end market demand resulting from the weak global economy. We believe that there will continue to be year-to-year variations in the geographic distribution of sales.

Orders in 2012 decreased 52.1% compared to 2011, primarily attributable to a 53.1% decrease in LED & Solar orders that were principally driven by a decline in MOCVD bookings due to industry overcapacity. After hitting a peak in the second quarter of 2011, our bookings slowed dramatically in the second half of 2011, which continued throughout 2012. Data Storage orders decreased 48.1% as strong prior year orders from hard drive customers recovering from the flood in Thailand resulted in those customers being over-invested in capacity. In addition, the industry appears to have frozen further investments as end-user hard drive demand has slowed.

Our book-to-bill ratio for 2012, which is calculated by dividing orders received in a given time period by revenue recognized in the same time period, was 0.76 to 1 compared to 0.84 to 1 in 2011. Our backlog as of December 31, 2012 was $150.2 million, compared to $332.9 million as of December 31, 2011. During the year ended December 31, 2012, we recorded net backlog adjustments of approximately $58.5 million. The adjustments consisted of $42.0 million related to orders that no longer met our booking criteria, primarily due to contracts being extended past a twelve month delivery time frame, and $15.4 million of order cancellations and order adjustments of $1.1 million. For certain sales arrangements we require a deposit for a portion of the sales price before shipment. As of December 31, 2012 and 2011, we had customer deposits of $32.7 million and $57.1 million, respectively.

Gross Profit

(dollars in thousands)	Year ended December 31, 2012	2011	Dollar and Percentage Change Year to Year	
Gross profit - LED & Solar	$ 148,383	$ 397,614	$ (249,231)	(62.7)%
Gross margin	40.9%	48.0%		
Gross profit - Data Storage	$ 66,750	$ 76,720	$ (9,970)	(13.0)%
Gross margin	43.7%	50.7%		
Gross profit - Total Veeco	$ 215,133	$ 474,334	$ (259,201)	(54.6)%
Gross margin	41.7%	48.4%		

Total Veeco gross margins decreased primarily due to the weak business environment. As a result, we recorded a total expense for slow moving items in 2012 of approximately $9.6 million, which negatively impacted our gross margins.

LED & Solar gross margins decreased from the prior year, primarily due to a significant decrease in sales volumes, lower average selling prices and fewer final acceptances partially offset by lower plant and service spending associated with reduced volumes and cost reductions in response to lower business levels. Data Storage gross margins decreased from the prior year, primarily due to a sales mix of lower margin products. We anticipate a continuing weak business environment resulting in persistent selling price pressure in our MOCVD business.

Operating Expenses

(dollars in thousands)	Year ended December 31, 2012	2011	Dollar and Percentage Change Year to Year	
Selling, general and administrative	$ 73,110	$ 95,134	$ (22,024)	(23.2)%
Percentage of sales	14.2%	9.7%		

Selling, general and administrative expenses decreased primarily due to lower commissions and bonus and profit sharing expenses from the reduced level of business in each of our segments. In addition our cost control measures put into place throughout the year resulting in lower personnel-related costs, travel and entertainment expense, professional consulting fees and other discretionary expenses.

(dollars in thousands)	Year ended December 31, 2012	2011	Dollar and Percentage Change Year to Year	
Research and development	$ 95,153	$ 96,596	$ (1,443)	(1.5)%
Percentage of sales	18.4%	9.9%		

We continued to invest, at approximately the prior year levels, in the development of products in areas of high-growth for end market opportunities in our LED & Solar segment.

(dollars in thousands)	Year ended December 31, 2012	2011	Dollar and Percentage Change Year to Year	
Amortization	$ 4,908	$ 4,734	$ 174	3.7%
Percentage of sales	1.0%	0.5%		

Amortization expense increased from the prior year, primarily due to additional amortization associated with intangible assets acquired as part of our acquisition of a privately held company during the second quarter of 2011, partially offset by certain intangible assets becoming fully amortized.

(dollars in thousands)	Year ended December 31, 2012		2011		Dollar and Percentage Change Year to Year		
Restructuring	$	3,813	$	1,288	$	2,525	196.0%
Percentage of sales		0.7%		0.1%			

During 2012, we took measures to improve profitability, including a reduction in discretionary expenses, realignment of our senior management team and consolidation of certain sales, business and administrative functions. As a result of these actions, we recorded a restructuring charge consisting of $3.0 million in personnel severance and related costs, $0.4 million in equity compensation and related costs and $0.4 million in other severance costs resulting from a headcount reduction of 52 employees. During 2011, we recorded $1.3 million in personnel severance and related costs related to a companywide reorganization resulting in a headcount reduction of 65 employees. These reductions in workforce included executives, management, administration, sales and service personnel and manufacturing employees companywide.

(dollars in thousands)	Year ended December 31, 2012		2011		Dollar and Percentage Change Year to Year		
Asset impairment	$	1,335	$	584	$	751	128.6%
Percentage of sales		0.3%		0.1%			

During 2012, we recorded an asset impairment charge related to a license agreement in our Data Storage segment. During 2011, we recorded an asset impairment charge for property, plant and equipment related to the discontinuance of a certain product line in our LED & Solar segment.

Interest Income (Expense), Net

(dollars in thousands)	Year ended December 31, 2012		2011		Dollar and Percentage Change Year to Year		
Interest income (expense), net	$	974	$	(824)	$	1,798	*
Percentage of sales		0.2%		(0.1)%			

* Not Meaningful

Interest income, net for 2012 was comprised of $2.5 million in cash interest income, partially offset by $0.2 million in cash interest expense and $1.3 million in non-cash interest expense relating to net amortization of our short-term investments. Interest expense, net for 2011 was comprised of $1.4 million in cash interest expense, $1.9 million in non-cash interest expense relating to net amortization of our short-term investments and $1.3 million in non-cash interest expense relating to our convertible debt, which was retired during the first half of 2011 creating a loss on extinguishment of approximately $3.3 million. Interest expense in 2011 was partially offset by $3.8 million in interest income earned on our cash and short-term investment balances. The non-cash interest expense is related to accounting rules that requires a portion of convertible debt to be allocated to equity in 2011 and accretion of debt discounts and amortization of debt premiums related to our short-term investments in 2012 and 2011.

Income Taxes

(dollars in thousands)	Year ended December 31, 2012	Year ended December 31, 2011	Dollar and Percentage Change Year to Year	
Income tax provision (benefit)	$ 11,657	$ 81,584	$ (69,927)	(85.7)%
Effective tax rate	30.5%	30.0%		

The 2012 provision for income taxes included $8.3 million relating to our foreign operations and $3.4 million relating to our domestic operations. The 2011 provision for income taxes included $9.6 million relating to our foreign operations and $72.0 million relating to our domestic operations. Our 2012 effective tax rate is lower than the statutory rate as a result of the jurisdictional mix of earnings in our foreign locations and other favorable tax benefits including the Domestic Production Activities Deduction and an adjustment for the Research and Development Credit related to the filing of our 2011 Federal income tax return.

During the fourth quarter of 2012, we determined that we may not meet the criteria required to receive a certain incentive tax rate pursuant to a negotiated tax holiday in one foreign jurisdiction. Although we are continuing to negotiate the criteria for the incentive, for financial reporting purposes we have recorded an additional tax provision of $4.0 million which represents the cumulative effect of calculating the tax provision using the incentive tax rate as compared to the foreign country's statutory rate. As such amount is not expected to be paid within twelve months, we have recorded the $4.0 million as a long term taxes payable. If we successfully renegotiate the incentive criteria, this additional tax provision could be reversed as a future benefit in the period in which the successful negotiations are finalized.

During 2012, we recorded an income tax expense of $1.9 million related to discontinued operations compared to the $29.4 million income tax benefit from discontinued operations in the prior year which was reported in accordance with the intraperiod tax allocation provisions. In addition, we recorded a current tax benefit of $2.1 million related to equity-based compensation which was a credit to additional paid in capital compared to $10.4 million tax benefit recorded in the prior year.

Discontinued Operations

(dollars in thousands)	Year ended December 31, 2012	Year ended December 31, 2011	Dollar and Percentage Change Year to Year	
Income (loss) from discontinued operations before income taxes	$ 6,269	$ (91,885)	$ 98,154	*
Income tax provision (benefit)	1,870	(29,370)	31,240	*
Income (loss) from discontinued operations	$ 4,399	$ (62,515)	$ 66,914	*

* Not Meaningful

Discontinued operations represent the results of the operations of our disposed Metrology segment, which was sold to Bruker on October 7, 2010, and our CIGS solar systems business, which was discontinued on September 27, 2011, reported as discontinued operations. The 2012 results included a $1.4 million gain ($1.1 million net of taxes) on the sale of the assets of discontinued segment held for sale and a $5.4 million gain ($4.1 million net of taxes) associated with the closing of the China Assets with Bruker. The 2011 results reflect an operational loss before taxes of $1.6 million related to the Metrology segment and an operational loss before taxes of $90.3 million related to the CIGS solar systems business.

Liquidity and Capital Resources

As of December 31, 2013 and 2012, we had cash and cash equivalents of $210.8 million and $384.6 million, respectively, of which $150.6 million and $128.0 million, respectively, were held outside the United States. Liquidity is affected by many factors, some of which are based on normal ongoing operations of our business and some of which arise from fluctuations related to global economics and markets. Cash balances are generated and held in many locations throughout the world. It is our current intent to permanently reinvest our funds from Singapore, China, Taiwan, South Korea, and Malaysia outside of the United States and our current plans do not demonstrate a need to repatriate them to fund our United States operations. As of December 31, 2013, we had $115.0 million in cash held offshore on which we would have to pay significant United States income taxes to repatriate in the event that we need the funds for our operations in the United

States. Additionally, local government regulations may restrict our ability to move cash balances to meet cash needs under certain circumstances. We currently do not expect such regulations and restrictions to impact our ability to make acquisitions, pay vendors, or conduct operations throughout the global organization. As of December 31, 2013 and 2012, in addition to our cash balances, we also had short-term investments in the United States of $281.5 million and $192.2 million, respectively, and restricted cash in Germany of $2.7 million and $2.0 million, respectively. We believe that our projected cash flow from operations combined with our cash and short term investments will be sufficient to meet our projected working capital and other cash flow requirements for the next twelve months, as well as our contractual obligations.

A summary of cash flow activity is as follows (*in thousands*):

	Year ended December 31,	
	2013	2012
Net income (loss)	$ (42,263)	$ 30,928
Net cash provided by (used in) operating activities	727	111,963
Net cash provided by (used in) investing activities	(168,056)	48,321
Net cash provided by (used in) financing activities	(5,766)	5,555
Effect of exchange rate changes on cash and cash equivalents	(663)	796
Net increase (decrease) in cash and cash equivalents	(173,758)	166,635
Cash and cash equivalents as of beginning of year	384,557	217,922
Cash and cash equivalents as of end of year	$ 210,799	$ 384,557

During 2013, we continued to generate cash from operations despite the $184.3 million decrease in revenues. Cash provided by operations declined primarily due to a $73.2 million reduction in net income, generating a net loss for 2013. The net loss for 2013 included $22.5 million of noncash items. A $38.8 million decrease in accounts receivable and $7.5 million increase in accounts payable contributed most significantly to our cash provided from operations. This was partially offset by a $17.3 million reduction of accrued expenses, customer deposits and deferred revenue and a $12.6 million increase in income taxes receivable, primarily resulting from a net operating loss carryback claim.

Net cash from investing activities in 2013 declined by $216.4 million compared to the prior year. The cash used in investing activities was primarily driven by our acquisition of Synos, which consumed $71.5 million and the $89.3 million increase in short-term investments. This was partially offset by a $15.8 million reduction in capital expenditures from the prior year.

Net cash from financing activities in 2013 declined by $11.3 million compared to the prior year. This change results primarily from a $5.0 million payment of a contingent consideration milestone made in accordance with the terms of our agreement to purchase Synos and a change of $6.3 million related to option and restricted stock activity, including tax impacts.

On October 1, 2013, we acquired Synos for an initial purchase price of $71.5 million. Synos develops atomic layer deposition technology. As a result of this purchase, we acquired $99.3 million of definite-lived intangibles, of which $78.2 million is related to core technology, and $35.5 million of goodwill. The financial results of this acquisition are included in our LED & Solar segment as of the acquisition date. As of October 1, 2013, we had a contingent obligation to pay up to an additional $115.0 million if certain conditions are met. The first $5.0 million of the $115.0 million was earned and paid in the fourth quarter of 2013. Up to $35.0 million of the remaining contingent obligation could be payable in the first quarter of 2014, if the conditions related to earning the payments are met. The remaining $75.0 million contingent consideration could be payable in 2015 if the conditions related to earning the payments are met. As part of the purchase price allocation, we recorded a liability of $33.5 million related to the fair value of the contingent consideration.

As of December 31, 2013, our contractual cash obligations and commitments are as follows (*in thousands*):

	Payments due by period				
	Total	**Less than 1 year**	**1-3 years**	**3-5 years**	**More than 5 years**
Long-term debt (1)	$ 2,137	$ 290	$ 654	$ 766	$ 427
Interest on debt (1)	553	159	244	132	18
Operating leases (2)	8,082	3,076	3,418	1,588	—
Letters of credit and bank guarantees (3)	6,493	6,493	—	—	—
Purchase commitments (4)	60,290	60,290	—	—	—
	$ 77,555	$ 70,308	$ 4,316	$ 2,486	$ 445

(1) Long-term debt obligations consist of mortgage and interest payments for our St. Paul, MN facility.

(2) In accordance with relevant accounting guidance, we account for our office leases as operating leases with expiration dates ranging from 2014 through 2018, excluding renewal options. There are future minimum annual rental payments required under the leases. Leasehold improvements made at the beginning of or during a lease are amortized over the shorter of the remaining lease term or the estimated useful lives of the assets. This also includes other operating leases we hold, such as cars, apartments and office equipment. There are no material sublease payments receivable associated with the leases.

(3) Issued by a bank on our behalf as needed. We had letters of credit outstanding of $0.6 million and bank guarantees outstanding of $5.9 million, of which, $2.7 million is collateralized against cash that is restricted from use. As of December 31, 2013, we had $40.4 million of unused lines of credit available. The line of credit is available to draw upon to cover performance bonds as required by our customers.

(4) Purchase commitments are primarily for inventory used in manufacturing our products. It has been our practice not to enter into purchase commitments extending beyond one year. We have $9.4 million of offsetting supplier deposits against these purchase commitments as of December 31, 2013.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements that have, or are reasonably likely to have, a current or future material effect on our financial condition, changes in financial condition, revenue or expenses, results of operations, liquidity, capital expenditures or capital resources other than operating leases, letters of credit and bank guarantees, and purchase commitments disclosed in the preceding “Contractual Cash Obligations and Commitments” table.

Application of Critical Accounting Policies

General: 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 accounting principles generally accepted in the United States. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses. Management continually monitors and evaluates its estimates and judgments, including those related to bad debts, inventories, intangible and other long-lived assets, income taxes, warranty obligations, restructuring costs, and contingent liabilities, including potential litigation. Management bases its estimates and judgments on historical experience and on various other factors that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. We consider certain accounting policies related to revenue recognition, short-term investments, the valuation of inventories, the impairment of goodwill and indefinite-lived intangible assets, the impairment of long-lived assets, accounting for acquisitions, fair value measurements, warranty costs, income taxes and equity-based compensation to be critical policies due to the estimation processes involved in each. We have reclassified certain amounts previously reported in our financial statements to conform to the current presentation, including amounts related to discontinued operations.

Revenue Recognition: We recognize revenue when all of the following criteria have been met: persuasive evidence of an arrangement exists with a customer; delivery of the specified products has occurred or services have been rendered; prices are contractually fixed or determinable; and collectability is reasonably assured. Revenue is recorded including shipping and handling costs and excluding applicable taxes related to sales. A significant portion of our revenue is derived from contractual arrangements with customers that have multiple elements, such as systems, upgrades, components, spare parts, maintenance and service plans. For sales arrangements that contain multiple elements, we split the arrangement into separate units of accounting if the individually delivered elements have value to the customer on a standalone basis. We also evaluate whether multiple transactions with the same customer or related party should be considered part of a multiple element arrangement, whereby we assess, among other factors, whether the contracts or agreements are negotiated or executed within a short time frame of each other or if there are indicators that the contracts are negotiated in contemplation of each other. When we have separate units of accounting, we allocate revenue to each element based on the following selling price hierarchy: vendor-specific objective evidence (“VSOE”) if available; third party evidence (“TPE”) if VSOE is not available; or our best estimate of selling price (“BESP”) if neither VSOE nor TPE is available. We utilize BESP for the majority of the elements in our arrangements. The accounting guidance for selling price hierarchy did not include BESP for arrangements entered into prior to January 1, 2011, and as such we recognized revenue for those arrangements as described below.

We consider many facts when evaluating each of our sales arrangements to determine the timing of revenue recognition, including the contractual obligations, the customer’s creditworthiness and the nature of the customer’s post-delivery acceptance provisions. Our system sales arrangements, including certain upgrades, generally include field acceptance provisions that may include functional or mechanical test procedures. For the majority of our arrangements, a customer source inspection of the system is performed in our facility or test data is sent to the customer documenting that the system is functioning to the agreed upon specifications prior to delivery. Historically, such source inspection or test data replicates the field acceptance provisions that will be performed at the customer’s site prior to final acceptance of the system. As such, we objectively demonstrate that the criteria specified in the contractual acceptance provisions are achieved prior to delivery and, therefore, we recognize revenue upon delivery since there is no substantive contingency remaining related to the acceptance provisions at that date, subject to the retention amount constraint described below. For new products, new applications of existing products or for products with substantive customer acceptance provisions where we cannot objectively demonstrate that the criteria specified in the contractual acceptance provisions have been achieved prior to delivery, revenue and the associated costs are deferred and fully recognized upon the receipt of final customer acceptance, assuming all other revenue recognition criteria have been met.

Our system sales arrangements, including certain upgrades, generally do not contain provisions for right of return or forfeiture, refund, or other purchase price concessions. In the rare instances where such provisions are included, we defer all revenue until such rights expire. In many cases our products are sold with a billing retention, typically 10% of the sales price (the “retention amount”), which is typically payable by the customer when field acceptance provisions are completed. The amount of revenue recognized upon delivery of a system or upgrade, if any, is limited to the lower of i) the amount billed that is not contingent upon acceptance provisions or ii) the value of the arrangement consideration allocated to the delivered elements, if such sale is part of a multiple-element arrangement.

For transactions entered into prior to January 1, 2011, under the accounting rules for multiple-element arrangements in place at that time, we deferred the greater of the retention amount or the relative fair value of the undelivered elements based on VSOE. When we could not establish VSOE or TPE for all undelivered elements of an arrangement, revenue on the entire arrangement was deferred until the earlier of the point when we did have VSOE for all undelivered elements or the delivery of all elements of the arrangement.

Our sales arrangements, including certain upgrades, generally include installation. The installation process is not deemed essential to the functionality of the equipment since it is not complex; that is, it does not require significant changes to the features or capabilities of the equipment or involve building elaborate interfaces or connections subsequent to factory acceptance. We have a demonstrated history of consistently completing installations in a timely manner and can reliably estimate the costs of such activities. Most customers engage us to perform the installation services, although there are other third-party providers with sufficient knowledge who could complete these services. Based on these factors, we deem the installation of our systems to be inconsequential or perfunctory relative to the system as a whole, and as a result, do not consider such services to be a separate element of the arrangement. As such, we accrue the cost of the installation at the time of revenue recognition for the system.

In Japan, where our contractual terms with customers generally specify title and risk and rewards of ownership transfer upon customer acceptance, revenue is recognized and the customer is billed upon the receipt of written customer acceptance. During the fourth quarter of fiscal 2013, we began using a distributor for almost all of our product and service sales to customers in Japan. Title and risk and rewards of ownership of our system sales still transfer to our end-customers upon their acceptance. As such, there is no impact to our policy of recognizing revenue upon receipt of written acceptance from the end customer.

Revenue related to maintenance and service contracts is recognized ratably over the applicable contract term. Component and spare part revenue are recognized at the time of delivery in accordance with the terms of the applicable sales arrangement.

Short-Term Investments: We determine the appropriate balance sheet classification of our investments at the time of purchase and evaluate the classification at each balance sheet date. As part of our cash management program, we maintain a portfolio of marketable securities which are classified as available-for-sale. These securities include U.S. treasuries and government agency securities with maturities of greater than three months. Securities classified as available-for-sale are carried at fair market value, with the unrealized gains and losses, net of tax, included in the determination of comprehensive income (loss) and reported in equity. Net realized gains and losses are included in net income (loss).

Inventory Valuation: Inventories are stated at the lower of cost (principally first-in, first-out method) or market. On a quarterly basis, management assesses the valuation and recoverability of all inventories, classified as materials (which include raw materials, spare parts and service inventory), work-in-process and finished goods.

Materials inventory is used primarily to support the installed tool base and spare parts sales and is reviewed for excess quantities or obsolescence by comparing on-hand balances to historical usage, and adjusted for current economic conditions and other qualitative factors. Historically, the variability of such estimates has been impacted by customer demand and tool utilization rates.

The work-in-process and finished goods inventory is principally used to support system sales and is reviewed for recoverability by considering whether on hand inventory would be utilized to fulfill the related backlog. As we typically receive deposits for our orders, the variability of this estimate is reduced as customers have a vested interest in the orders they place with us. Recoverability of such inventory is evaluated by monitoring customer demand, current sales trends and product gross margins. Management also considers qualitative factors such as future product demand based on market outlook, which is based principally upon production requirements resulting from customer purchase orders received with a customer-confirmed shipment date within the next twelve months. Historically, the variability of these estimates of future product demand has been impacted by backlog cancellations or modifications resulting from unanticipated changes in technology or customer demand.

Following identification of potential excess or obsolete inventory, management evaluates the need to write down inventory balances to its estimated market value, if less than its cost. Inherent in the estimates of market value are management's estimates related to our future manufacturing schedules, customer demand, technological and/or market obsolescence, possible alternative uses, and ultimate realization of potential excess inventory. Unanticipated changes in demand for our products may require a write down of inventory that could materially affect our operating results.

Goodwill and Indefinite-Lived Intangible Asset Impairment: Goodwill represents the excess of the cost of an acquisition over the fair value of the net assets acquired. We account for goodwill and intangible assets with indefinite useful lives in accordance with relevant accounting guidance related to goodwill and other intangible assets, which states that goodwill and intangible assets with indefinite useful lives should not be amortized, but instead tested for impairment at least annually at the reporting unit level. Our policy is to perform this annual impairment test in the fourth quarter, using a measurement date of October 1st, of each fiscal year or more frequently if impairment indicators arise. Impairment indicators include, among other conditions, cash flow deficits, a historical or anticipated decline in revenue or operating profit, adverse legal or regulatory developments and a material decrease in the fair value of some or all of the assets.

The guidance provides an option for an entity to first assess qualitative factors to determine whether the existence of events or circumstances leads to a determination that it is more likely than not (that is, a likelihood of more than 50%) that the fair value of a reporting unit is less than its carrying amount. If, after assessing the totality of events or circumstances, an entity determines it is not more likely than not that the fair value of a reporting unit is less than its carrying amount, then performing the two-step impairment test is unnecessary.

If we determine the two-step impairment test is necessary, we are required to determine if it is appropriate to use the operating segment, as defined under guidance for segment reporting, as the reporting unit, or one level below the operating segment, depending on whether certain criteria are met. We have identified five reporting units that are required to be reviewed for impairment. The five reporting units are aggregated into two segments: the VIBE and Mechanical reporting units which are reported in our Data Storage segment; and the MOCVD, MBE and ALD reporting units which are reported in our LED & Solar segment. In identifying the reporting units management considered the economic characteristics of operating segments including the products and services provided, production processes, types or classes of customer and product distribution.

We perform this impairment test by first comparing the fair value of our reporting units to their respective carrying amount. When determining the estimated fair value of a reporting unit, we utilize a discounted future cash flow approach since reported quoted market prices are not available for our reporting units. Developing the estimate of the discounted future cash flow requires significant judgment and projections of future financial performance. The key assumptions used in developing the discounted future cash flows are the projection of future revenues and expenses, working capital requirements, residual growth rates and the weighted average cost of capital. In developing our financial projections, we consider historical data, current internal estimates and market growth trends. Changes to any of these assumptions could materially change the fair value of the reporting unit. We reconcile the aggregate fair value of our reporting units to our adjusted market capitalization as a supporting calculation. The adjusted market capitalization is calculated by multiplying the average share price of our common stock for the last ten trading days prior to the measurement date by the number of outstanding common shares and adding a control premium.

If the carrying value of the reporting units exceed the fair value we would then compare the implied fair value of our goodwill to the carrying amount in order to determine the amount of the impairment, if any.

Definite-Lived Intangible and Long-Lived Assets: Definite-lived intangible assets consist of purchased technology, customer-related intangible assets, patents, trademarks, covenants not-to-compete, software licenses and deferred financing costs. Purchased technology consists of the core proprietary manufacturing technologies associated with the products and offerings obtained through acquisition and are initially recorded at fair value. Customer-related intangible assets, patents, trademarks, covenants not-to-compete and software licenses that are obtained in an acquisition are initially recorded at fair value. Other software licenses and deferred financing costs are initially recorded at cost. Intangible assets with definitive useful lives are amortized using the straight-line method over their estimated useful lives for periods ranging from 2 years to 17 years.

Property, plant and equipment are recorded at cost. Depreciation is provided over the estimated useful lives of the related assets using the straight-line method for financial statement purposes. Amortization of leasehold improvements is computed using the straight-line method over the shorter of the remaining lease term or the estimated useful lives of the improvements.

Long-lived assets, such as property, plant, and equipment and intangible assets with definite useful lives, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Impairment indicators include, among other conditions, cash flow deficits, a historical or anticipated decline in revenue or operating profit, adverse legal or regulatory developments and a material decrease in the fair value of some or all of the assets. Assets are grouped at the lowest level for which there are identifiable cash flows that are largely independent of the cash flows generated by other asset groups. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to the estimated undiscounted future cash flow expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated future cash flows, an impairment charge is recognized by the amount by which the carrying amount of the asset exceeds the fair value of the asset.

Accounting for Acquisitions: Our growth strategy has included the acquisition of businesses. The purchase price of these acquisitions has been determined after due diligence of the acquired business, market research, strategic planning, and the forecasting of expected future results and synergies. Estimated future results and expected synergies are subject to judgment as we integrate each acquisition and attempt to leverage resources.

The accounting for the acquisitions we have made requires that the assets and liabilities acquired, as well as any contingent consideration that may be part of the agreement, be recorded at their respective fair values at the date of acquisition. This requires management to make significant estimates in determining the fair values, especially with respect to intangible assets, including estimates of expected cash flows, expected cost savings and the appropriate weighted average cost of capital. As a result of these significant judgments to be made we often obtain the assistance of independent valuation firms. We complete these assessments as soon as practical after the closing dates. Any excess of the purchase price over the estimated fair values of the identifiable net assets acquired is recorded as goodwill

Fair Value Measurements: Accounting guidance requires that we disclose the type of inputs we use to value our assets and liabilities that are required to be measured at fair value, based on three categories of inputs as defined in such. Level 1 inputs are quoted, unadjusted prices in active markets for identical assets or liabilities that we have the ability to access at the measurement date. Level 2 inputs are other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly, such as quoted prices for similar assets or liabilities. Level 3 inputs are unobservable inputs for the asset or liability. Unobservable inputs are used to measure fair value to the extent that observable inputs are not available, thereby allowing for situations in which there is little, if any, market activity for the asset or liability at the measurement date. These requirements apply to our long-lived assets, goodwill, cost method investment and intangible assets. We use Level 3 inputs to value all of such assets. We primarily apply the market approach for recurring fair value measurements.

Warranty Costs: Our warranties are typically valid for one year from the date of final acceptance. We estimate the costs that may be incurred under the warranty we provide and record a liability in the amount of such costs at the time the related revenue is recognized. Estimated warranty costs are determined by analyzing specific product and historical configuration statistics and regional warranty support costs. Our warranty obligation is affected by product failure rates, material usage, and labor costs incurred in correcting product failures during the warranty period. Unforeseen component failures or exceptional component performance can also result in changes to warranty costs. If actual warranty costs differ substantially from our estimates, revisions to the estimated warranty liability would be required.

Income Taxes: We are required to estimate our income taxes in each of the jurisdictions in which we operate. This process involves estimating the actual current tax expense, together with assessing temporary differences resulting from differing treatment of items for tax and financial reporting purposes. These differences result in deferred tax assets and liabilities, which are included within our Consolidated Balance Sheets. The carrying value of our deferred tax assets is adjusted by a partial valuation allowance to recognize the extent to which the future tax benefits will be recognized on a more likely than not basis. Our net deferred tax assets consist primarily of tax credit carry forwards and timing differences between the book and tax treatment of inventory, acquired intangible assets and other asset valuations. Realization of these net deferred tax assets is dependent upon our ability to generate future taxable income.

We record valuation allowances in order to reduce our deferred tax assets to the amount expected to be realized. In assessing the adequacy of recorded valuation allowances, we consider a variety of factors, including the scheduled reversal of deferred tax liabilities, future taxable income and prudent and feasible tax planning strategies. Under the relevant accounting guidance, factors such as current and previous operating losses are given significantly greater weight than the outlook for future profitability in determining the deferred tax asset carrying value.

Relevant accounting guidance addresses the determination of how tax benefits claimed or expected to be claimed on a tax return should be recorded in the financial statements. Under such guidance, we must recognize the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities, based on the technical merits of the position. The tax benefits recognized in the financial statements from such uncertain tax positions are measured based on the largest benefit that has a greater than fifty percent likelihood of being realized upon ultimate resolution.

Equity-Based Compensation: We grant equity-based awards, such as stock options and restricted stock or restricted stock units, to certain key employees to create a clear and meaningful alignment between compensation and shareholder return and to enable the employees to develop and maintain a stock ownership position. While the majority of our equity awards feature time-based vesting, performance-based equity awards, which are awarded from time to time to certain key Company executives, vest as a function of performance, and may also be subject to the recipient's continued employment which also acts as a significant retention incentive.

Equity-based compensation cost is measured at the grant date, based on the fair value of the award and is recognized as expense over the employee requisite service period. In order to determine the fair value of stock options on the date of grant, we apply the Black-Scholes option-pricing model. Inherent in the model are assumptions related to risk-free interest rate, dividend yield, expected stock-price volatility and option life.

The risk-free rate assumed in valuing the options is based on the U.S. Treasury yield curve in effect at the time of grant for the expected term of the option. The dividend yield assumption is based on our historical and future expectation of dividend payouts. While the risk-free interest rate and dividend yield are less subjective assumptions, typically based on objective data derived from public sources, the expected stock-price volatility and option life assumptions require a level of judgment which make them critical accounting estimates.

We use an expected stock-price volatility assumption that is a combination of both historical volatility calculated based on the daily closing prices of our common stock over a period equal to the expected term of the option and implied volatility, and utilization of market data of actively traded options on our common stock, which are obtained from public data sources. We believe that the historical volatility of the price of our common stock over the expected term of the option is a strong indicator of the expected future volatility and that implied volatility takes into consideration market expectations of how future volatility will differ from historical volatility. Accordingly, we believe a combination of both historical and implied volatility provides the best estimate of the future volatility of the market price of our common stock.

The expected option term, representing the period of time that options granted are expected to be outstanding, is estimated using a lattice-based model incorporating historical post vest exercise and employee termination behavior.

We estimate forfeitures using our historical experience, which is adjusted over the requisite service period based on the extent to which actual forfeitures differ or are expected to differ, from such estimates. Because of the significant amount of judgment used in these calculations, it is reasonably likely that circumstances may cause the estimate to change.

With regard to the weighted-average option life assumption, we consider the exercise behavior of past grants and model the pattern of aggregate exercises.

We settle the exercise of stock options with newly issued shares.

With respect to grants of performance based awards, we assess the probability that such performance criteria will be met in order to determine the compensation expense. Consequently, the compensation expense is recognized straight-line over the vesting period. If that assessment of the probability of the performance condition being met changes, we would recognize the impact of the change in estimate in the period of the change. As with the use of any estimate, and owing to the significant judgment used to derive those estimates, actual results may vary.

We have elected to treat awards with only service conditions and with graded vesting as one award. Consequently, the total compensation expense is recognized straight-line over the entire vesting period, so long as the compensation cost recognized at any date at least equals the portion of the grant date fair value of the award that is vested at that date.

Recent Accounting Pronouncements

Presentation of an Unrecognized Tax Benefit When a Net Operating Loss Carryforward, a Similar Tax Loss, or Tax Credit Carryforward Exists: In July 2013, the FASB issued ASU No. 2013-11, *Presentation of an Unrecognized Tax Benefit When a Net Operating Loss Carryforward, a Similar Tax Loss, or Tax Credit Carryforward Exists* . ASU 2013-11 requires entities to present an unrecognized tax benefit, or a portion of an unrecognized tax benefit, as a reduction to a deferred tax asset for a net operating loss carryforward, a similar tax loss, or a tax credit carryforward when settlement in this manner is available under the tax law. This ASU is effective prospectively for fiscal years, and interim periods within those years, beginning after December 15, 2013. We are evaluating the potential impact of this adoption on our consolidated financial statements.

Presentation of Financial Statements: In April 2013, the FASB issued ASU No. 2013-07, “Presentation of Financial Statements (Topic 205): Liquidation Basis of Accounting.” The objective of ASU 2013-07 is to clarify when an entity should apply the liquidation basis of accounting. The update provides principles for the recognition and measurement of assets and liabilities and requirements for financial statements prepared using the liquidation basis of accounting. This ASU is effective prospectively for fiscal years, and interim periods within those years, beginning after December 15, 2013. We do not anticipate that the adoption of this standard will have a material impact on our consolidated financial statements, absent any indications that liquidation is imminent.

Parent’s Accounting for the Cumulative Translation Adjustment: In March 2013, the FASB issued ASU No. 2013-05, *Parent’s Accounting for the Cumulative Translation Adjustment upon Derecognition of Certain Subsidiaries or Groups of Assets within a Foreign Entity or of an Investment in a Foreign Entity* . This new standard is intended to resolve diversity in practice regarding the release into net income of a cumulative translation adjustment (“CTA”) upon derecognition of a subsidiary or group of assets within a foreign entity. ASU No. 2013-05 is effective prospectively for fiscal years (and interim reporting periods within those years) beginning after December 15, 2013. We currently anticipate that its adoption could have an impact on our consolidated financial statements, in the event of derecognition of a foreign subsidiary in 2014 or subsequently. We cannot estimate the amount of CTA to be released into income from any potential derecognition.

Obligations Resulting from Joint and Several Liability Arrangements for Which the Total Amount of the Obligation Is Fixed at the Reporting Date: In February 2013, the FASB issued Accounting Standards Update No. 2013-04, *“Obligations Resulting from Joint and Several Liability Arrangements for Which the Total Amount of the Obligation Is Fixed at the Reporting Date”* . ASU No. 2013-04 provides guidance for the recognition, measurement, and disclosure of obligations resulting from joint and several liability arrangements for which the total amount of the obligation within the scope of the guidance is fixed at the reporting date, as the sum of the amount the reporting entity agreed to pay on the basis of its arrangement among its co-obligors and any additional amount the reporting entity expects to pay on behalf of its co-obligors. In addition, ASU No. 2013-04 requires an entity to disclose the nature and amount of the obligation, as well as other information about the obligations. ASU No. 2013-04 is effective for interim and annual periods beginning after December 15, 2013 and is to be applied retrospectively. We do not anticipate that the adoption of this standard will have a material impact on our consolidated financial statements.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

Market Risk

The principal market risks (such as the risk of loss arising from adverse changes in market rates and prices) to which we are exposed are:

- rates on investment portfolios, and
- exchange rates, generating translation and transaction gains and losses.

Interest Rates

We centrally manage our investment portfolios considering investment opportunities and risk, tax consequences and overall financing strategies. Our investment portfolio includes fixed-income securities with a fair value of approximately $281.5 million as of December 31, 2013. These securities are subject to interest rate risk and will decline in value if interest rates increase. Based on our investment portfolio as of December 31, 2013, an immediate 100 basis point increase in interest rates may result in a decrease in the fair value of the portfolio of approximately $2.0 million. While an increase in interest rates may reduce the fair value of the investment portfolio, we will not realize the losses in the Consolidated Statements of Operations unless the individual fixed-income securities are sold prior to recovery or the loss is determined to be other-than-temporary.

Foreign Operations

Operating in international markets involves exposure to movements in currency exchange rates, which are volatile at times. The economic impact of currency exchange rate movements is complex because such changes are often linked to variability in real growth, inflation, interest rates, governmental actions and other factors. These changes, if material, could cause us to adjust our financing and operating strategies. Consequently, isolating the effect of changes in currency does not incorporate these other important economic factors.

Our net sales to foreign customers represented approximately 83%, 84% and 90% of our total net sales in 2013, 2012 and 2011, respectively. We expect that net sales to foreign customers will continue to represent a large percentage of our total net sales. Our net sales denominated in foreign currencies represented approximately 4%, 4% and 3% of total net sales in 2013, 2012 and 2011, respectively.

We are exposed to financial market risks, including changes in foreign currency exchange rates. To mitigate these risks, we use derivative financial instruments. We do not use derivative financial instruments for speculative or trading purposes. We enter into monthly forward contracts to reduce the effect of fluctuating foreign currencies on short-term foreign currency-denominated intercompany transactions and other known currency exposures. The foreign currency that has the largest impact on translating our international operating profit (loss) is the Japanese Yen. We believe that based upon our hedging program, a 10% change in foreign exchange rates would have an immaterial impact on the consolidated results of operations. We believe that this quantitative measure has inherent limitations because it does not take into account any governmental actions or changes in either customer purchasing patterns or our financing and operating strategies.

(in thousands)	Component of	Fair Value	Maturity Dates	Notional Amount
	As of December 31, 2013			
Not Designated as Hedges under ASC 815				
Foreign currency exchange forwards	Prepaid and other current assets	1	January 2014	4,700
Foreign currency collar	Prepaid and other current assets	906	October 2014	34,069
Total Derivative Instruments		$ 907		$ 38,769

(in thousands)	Component of	Fair Value	Maturity Dates	Notional Amount
	As of December 31, 2012			
Not Designated as Hedges under ASC 815				
Foreign currency exchange forwards	Prepaid and other current assets	248	January 2013	9,590
Total Derivative Instruments		$ 248		$ 9,590

(in thousands)	Location of realized net gain (loss) and changes in the fair value of derivatives	Amount of realized net gain (loss) and changes in the fair value of derivatives for the year ended December 31, 2013	2012	2011
Foreign currency exchange forwards	Other, net	$ 248	$ 333	$ 553
Foreign currency collar	Other, net	$ 906	$ —	$ —

Item 8. Financial Statements and Supplementary Data

Our Consolidated Financial Statements are listed in the Index to Consolidated Financial Statements and Financial Statement Schedule filed as part of this Form 10-K.

Item 9 . Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management, under the supervision and with the participation of our Chief Executive Officer and Chief Financial Officer, carried out an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures as of December 31, 2013 (the “Evaluation”). Based upon the Evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures (as defined in Rule 13a-15(e) of the Securities Exchange Act of 1934) are effective.

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate "internal control over financial reporting" (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)). Management evaluates the effectiveness of our internal control over financial reporting using the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (1992 framework). Management, under the supervision and with the participation of our Chief Executive Officer and Chief Financial Officer, assessed the effectiveness of our internal control over financial reporting as of December 31, 2013, and concluded that it is effective.

We acquired Synos during the quarter ended December 31, 2013, which is included in our 2013 consolidated financial statements and constituted 14.6 percent and 17.0 percent of total and net assets, respectively, as of December 31, 2013 and 0.1 percent and 15.3 percent of our consolidated net sales and net loss, respectively, for the year ended December 31, 2013. We have excluded Synos from our annual assessment of and conclusion on the effectiveness of our internal control over financial reporting.

Our independent registered public accounting firm, Ernst & Young LLP, has audited the effectiveness of our internal control over financial reporting as of December 31, 2013, as stated in their report, which is included herein.

Changes in Internal Control Over Financial Reporting

We monitor and evaluate, on an ongoing basis, our disclosure controls and procedures in order to improve their overall effectiveness. In the course of these evaluations, we modify and refine our internal processes as conditions warrant. As required by Rule 13a-15(d), our management including the Chief Executive Officer and the Chief Financial Officer, also conducted an evaluation of our internal control over financial reporting to determine whether any changes occurred during the quarter ended December 31, 2013 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. We implemented a material change in internal control over financial reporting during the quarter ended December 31, 2013. The change related to the remediation of internal controls of revenue recognition and related costs. Specifically, we completed the implementation of redesigned processes and increased the level of review of work performed by our personnel and third-party professionals in the identification and calculation of revenue and cost of revenue. We have completed our testing of the additional control processes outlined above and conclude that our previously reported material weakness has been satisfactorily remediated as of December 31, 2013.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Shareholders
Veeco Instruments Inc.

We have audited Veeco Instruments Inc.'s (the "Company") internal control over financial reporting as of December 31, 2013, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (1992 framework) (the COSO criteria). The Company's management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

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

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

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

As indicated in the accompanying Management's Report on Internal Control Over Financial Reporting, management's assessment of and conclusion on the effectiveness of internal control over financial reporting did not include the internal controls of Synos Technology, Inc. which is included in the 2013 consolidated financial statements of Veeco Instruments Inc. and constituted 14.6 percent and 17.0 percent of total and net assets, respectively, as of December 31, 2013 and 0.1 percent and 15.3 percent of net sales and net loss, respectively, for the year then ended. Our audit of internal control over financial reporting of the Company also did not include an evaluation of the internal control over financial reporting of Synos Technology, Inc.

In our opinion, Veeco Instruments Inc. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2013, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Veeco Instruments Inc. as of December 31, 2013 and 2012, and the related consolidated statements of operations, comprehensive income (loss), equity, and cash flows for each of the three years in the period ended December 31, 2013 and our report dated February 28, 2014 expressed an unqualified opinion thereon.

/s/ ERNST & YOUNG LLP

New York, New York
February 28, 2014

Item 9B. Other Information

None.

PART III

Portions of the information required by Part III of Form 10-K are incorporated by reference from Veeco's Proxy Statement to be filed with the SEC in connection with Veeco's 2014 Annual Meeting of Stockholders (the "Proxy Statement").

Item 10. Directors, Executive Officers, and Corporate Governance

The information required by Item 10 of Form 10-K is incorporated by reference to our Proxy Statement under the headings "Corporate Governance," "Executive Officers" and "Section 16(a) Reporting Compliance."

We have adopted a Code of Ethics for Senior Officers (the "Code") which applies to our chief executive officer, principal financial officer, principal accounting officer, and persons performing similar functions. A copy of the Code can be found on our website (*www.veeco.com*). We intend to disclose on our website the nature of any future amendments to and waivers of the Code that apply to the chief executive officer, principal financial officer, principal accounting officer or persons performing similar functions. We have also adopted a Code of Business Conduct which applies to all of our employees, including those listed above, as well as to our directors. A copy of the Code of Business Conduct can be found on our website (*www.veeco.com*). The website address above is intended to be an inactive, textual reference only. None of the material on this website is part of this report.

Item 11. Executive Compensation

The information required by Item 11 of Form 10-K is incorporated by reference to our Proxy Statement under the heading "Executive Compensation."

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

The information required by Item 12 of Form 10-K is incorporated by reference to our Proxy Statement under the heading "Security Ownership of Certain Beneficial Owners and Management" and "Equity Compensation Plan Information."

The following table gives information about our common stock that may be issued under our equity compensation plans as of December 31, 2013. See our footnote *Equity Compensation Plans and Equity* in the notes to the Consolidated Financial Statements included herein for information regarding the material features of these plans.

	Number of securities to be issued upon exercise of outstanding options, warrants, and rights (a)	Weighted average exercise price of outstanding options, warrants, and rights (1) (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders	2,870,301	$ 28.17	2,775,167
Equity compensation plans not approved by security holders (2)	210,800	$ 37.70	—
Total	3,081,101		2,775,167

(1) The calculation of the weighted average exercise price includes only stock options and does not include the outstanding restricted stock units which do not have an exercise price.

(2) In connection with our acquisition of Synos on October 1, 2013, equity awards were granted to Synos' employees, pursuant to our 2013 Inducement Stock Incentive Plan, in order to create a retention incentive for those employees. Shares issued in connection with this

equity award may be granted under the Veeco Instruments, Inc. 2010 Stock Incentive Plan. There are no awards available for future grant under the Inducement Plan.

Item 13. Certain Relationships, Related Transactions and Director Independence

The information required by Item 13 of Form 10-K is incorporated by reference to our Proxy Statement under the headings "Independence of the Board of Directors" and "Certain Relationships and Related Transactions."

Item 14. Principal Accounting Fees and Services

The information required by Item 14 of Form 10-K is incorporated by reference to our Proxy Statement under the heading "Proposal 3—Ratification of the Appointment of Ernst & Young LLP as Independent Registered Public Accounting Firm."

PART IV

Item 15. Exhibits and Financial Statements and Schedule

(a) The Registrant's financial statements together with a separate table of contents are annexed hereto. The financial statement schedule is listed in the separate table of contents annexed hereto.

(b) Exhibits

Unless otherwise indicated, each of the following exhibits has been previously filed with the Securities and Exchange Commission by the Company under File No. 0-16244.

Number	Exhibit	Incorporated by Reference to the Following Documents
2.1	Agreement and Plan of Merger, dated September 18, 2013, by and among Veeco, Veeco Wyoming Inc., Synos Technology, Inc. certain stockholders of Synos Technology, Inc., and Shareholder Representative Services LLC	Filed herewith
3.1	Amended and Restated Certificate of Incorporation of Veeco dated December 1, 1994, as amended June 2, 1997 and July 25, 1997.	Quarterly Report on Form 10-Q for the quarter ended June 30, 1997, Exhibit 3.1
3.2	Amendment to Certificate of Incorporation of Veeco dated May 29, 1998.	Annual Report on Form 10-K for the year ended December 31, 2000, Exhibit 3.2
3.3	Amendment to Certificate of Incorporation of Veeco dated May 5, 2000.	Quarterly Report on Form 10-Q for the quarter ended June 30, 2000, Exhibit 3.1
3.4	Certificate of Designation, Preferences, and Rights of Series A Junior Participating Preferred Stock of Veeco.	Quarterly Report on Form 10-Q for the quarter ended March 31, 2001, Exhibit 3.1
3.5	Amendment to Certificate of Incorporation of Veeco dated May 16, 2002	Quarterly Report on Form 10-Q for the quarter ended September 30, 2009, Exhibit 3.1
3.6	Amendment to Certificate of Incorporation of Veeco dated May 14, 2010	Annual Report on Form 10-K for the year ended December 31, 2010, Exhibit 3.8
3.7	Fourth Amended and Restated Bylaws of Veeco, effective October 23, 2008	Current Report on Form 8-K filed October 27, 2008, Exhibit 3.1
3.8	Amendment No. 1 to the Fourth Amended and Restated Bylaws of Veeco effective May 20, 2010	Current Report on Form 8-K, filed May 26, 2010, Exhibit 3.1
3.9	Amendment No. 2 to the Fourth Amended and Restated Bylaws of Veeco effective October 20, 2011	Current Report on Form 8-K, filed October 24, 2011, Exhibit 3.1
10.1	Loan Agreement dated as of December 15, 1999 between Applied Epi, Inc. and Jackson National Life Insurance Company.	Quarterly Report on Form 10-Q for the quarter ended September 30, 2001, Exhibit 10.2
10.2	Amendment to Loan Documents effective as of September 17, 2001 between Applied Epi, Inc. and Jackson National Life Insurance Company (executed in June 2002).	Quarterly Report on Form 10-Q for the quarter ended June 30, 2002, Exhibit 10.2
10.3	Promissory Note dated as of December 15, 1999 issued by Applied Epi, Inc. to Jackson National Life Insurance Company.	Quarterly Report on Form 10-Q for the quarter ended September 30, 2001, Exhibit 10.3
10.4*	Form of Indemnification Agreement entered into between Veeco and each of its directors and executive officers.	Current Report on Form 8-K filed on October 23, 2006, Exhibit 10.1

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Number	Exhibit	Incorporated by Reference to the Following Documents
10.5*	Veeco Amended and Restated 2000 Stock Incentive Plan, effective July 20, 2006.	Quarterly Report on Form 10-Q for the quarter ended June 30, 2006, Exhibit 10.4
10.6*	Amendment No. 1 effective April 18, 2007 (ratified by the Board August 7, 2007) to Veeco Amended and Restated 2000 Stock Incentive Plan.	Quarterly Report on Form 10-Q for the quarter ended June 30, 2007, Exhibit 10.1
10.7*	Amendment No. 2 dated January 22, 2009 to Veeco Amended and Restated 2000 Stock Incentive Plan.	Annual Report on Form 10-K for the year ended December 31, 2008, Exhibit 10.41
10.8*	Form of Restricted Stock Agreement pursuant to the Veeco 2000 Stock Incentive Plan, effective November 2005	Quarterly Report on Form 10-Q for the quarter ended September 30, 2005, Exhibit 10.3
10.9*	Form of Notice of Restricted Stock Award and related terms and conditions pursuant to the Veeco 2000 Stock Incentive Plan, effective June 2006	Quarterly Report on Form 10-Q for the quarter ended September 30, 2006, Exhibit 10.3
10.10*	Veeco Amended and Restated 2010 Stock Incentive Plan, effective May 14, 2010	Proxy Statement on Schedule 14A, filed November 4, 2013, Appendix A
10.11*	Form of 2010 Stock Incentive Plan Stock Option Agreement (2012 rev.)	Quarterly Report on Form 10-Q for the quarter ended June 30, 2012, Exhibit 10.2
10.12*	Form of 2010 Stock Incentive Plan Restricted Stock Agreement (2012 rev.)	Quarterly Report on Form 10-Q for the quarter ended June 30, 2012, Exhibit 10.3
10.13*	Form of 2010 Stock Incentive Plan Restricted Stock Unit Agreement (2012 rev.)	Quarterly Report on Form 10-Q for the quarter ended June 30, 2012, Exhibit 10.4
10.14*	Form of 2010 Stock Incentive Plan Restricted Stock Agreement (Non-Employee Director) (2011 rev.)	Quarterly Report on Form 10-Q for the quarter ended June 30, 2012, Exhibit 10.5
10.15*	Form of 2010 Stock Incentive Plan Restricted Stock Agreement (Performance Based) (2012 rev.)	Quarterly Report on Form 10-Q for the quarter ended June 30, 2012, Exhibit 10.6
10.16*	Veeco 2013 Inducement Stock Incentive Plan, effective September 26, 2013	Quarterly Report on Form 10-Q for the quarter ended September 30, 2012, Exhibit 10.1
10.17*	Form of 2013 Inducement Stock Incentive Plan Stock Option Agreement	Quarterly Report on Form 10-Q for the quarter ended September 30, 2012, Exhibit 10.2
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10.20*	Senior Executive Change in Control Policy effective as of September 12, 2008	Quarterly Report on Form 10-Q for the quarter ended September 30, 2008, Exhibit 10.3
10.21*	Amendment No. 1 dated December 23, 2008 (effective September 12, 2008) to Veeco Senior Executive Change in Control Policy	Annual Report on Form 10-K for the year ended December 31, 2008, Exhibit 10.37
10.22*	Veeco Amended and Restated Senior Executive Change in Control Policy, effective as of January 1, 2014	Filed herewith
10.23*	Amendment effective December 31, 2008 to Employment Agreement between Veeco and John R. Peeler	Annual Report on Form 10-K for the year ended December 31, 2008, Exhibit 10.38
10.24*	Second Amendment effective June 11, 2010 to Employment Agreement between Veeco and John R. Peeler	Quarterly Report on Form 10-Q for the quarter ended June 30, 2010, Exhibit 10.1

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10.26*	Employment Agreement dated December 17, 2009 (effective January 18, 2010) between Veeco and David D. Glass	Quarterly Report on Form 10-Q for the quarter ended March 31, 2010, Exhibit 10.1
10.27*	Letter Agreement dated January 21, 2004 between Veeco and John P. Kiernan.	Annual Report on Form 10-K for the year ended December 31, 2003, Exhibit 10.38
10.28*	Amendment effective June 9, 2006 to Letter Agreement between Veeco and John P. Kiernan	Quarterly Report on Form 10-Q for the quarter ended June 30, 2006, Exhibit 10.3
10.29*	Amendment effective December 31, 2008 to Letter Agreement between Veeco and John P. Kiernan	Annual Report on Form 10-K for the year ended December 31, 2008, Exhibit 10.40
10.30*	Letter agreement effective as of June 19, 2009 between Veeco and John P. Kiernan	Quarterly Report on Form 10-Q for the quarter ended June 30, 2009, Exhibit 10.2
10.31*	Letter agreement effective as of January 4, 2010 between Veeco and Peter Collingwood	Quarterly Report on Form 10-Q for the quarter ended March 31, 2012, Exhibit 10.1
10.32*	Letter Agreement dated January 30, 2012 between Veeco and Dr. William J. Miller	Annual Report on Form 10-K for the year ended December 31, 2011, Exhibit 10.30
21.1	Subsidiaries of the Registrant.	Filed herewith
23.1	Consent of Ernst & Young LLP.	Filed herewith
31.1	Certification of Chief Executive Officer pursuant to Rule 13a—14(a) or Rule 15d—14(a) of the Securities and Exchange Act of 1934.	Filed herewith
31.2	Certification of Chief Financial Officer pursuant to Rule 13a—14(a) or Rule 15d—14(a) of the Securities and Exchange Act of 1934.	Filed herewith
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes- Oxley Act of 2002	Filed herewith
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes- Oxley Act of 2002	Filed herewith
101.INS	XBRL Instance	**
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* Indicates a management contract or compensatory plan or arrangement, as required by Item 15(a) (3) of Form 10-K.
** Filed herewith electronically

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SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on February 28, 2014.

Veeco Instruments Inc.

By: /S/ JOHN R. PEELER
John R. Peeler
Chairman and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, this report has been signed below by the following persons on behalf of the Registrant and in the capacities indicated, on February 28, 2014.

Signature	Title
/s/ JOHN R. PEELER John R. Peeler	Chairman and Chief Executive Officer (principal executive officer)
/s/ DAVID D. GLASS David D. Glass	Executive Vice President and Chief Financial Officer (principal financial officer)
/s/ JOHN P. KIERNAN John P. Kiernan	Senior Vice President, Finance, Chief Accounting Officer, Corporate Controller and Treasurer (principal accounting officer)
/s/ EDWARD H. BRAUN Edward H. Braun	Director
/s/ RICHARD A. D’AMORE Richard A. D’Amore	Director
/s/ GORDON HUNTER Gordon Hunter	Director
/s/ KEITH D. JACKSON Keith D. Jackson	Director
/s/ ROGER D. MCDANIEL Roger D. McDaniel	Director
/s/ PETER J. SIMONE Peter J. Simone	Director

INDEX TO EXHIBITS

Unless otherwise indicated, each of the following exhibits has been previously filed with the Securities and Exchange Commission by the Company under File No. 0-16244.

Number	Exhibit	Incorporated by Reference to the Following Documents
2.1	Agreement and Plan of Merger, dated September 18, 2013, by and among Veeco, Veeco Wyoming Inc., Synos Technology, Inc. certain stockholders of Synos Technology, Inc., and Shareholder Representative Services LLC	Filed herewith
3.1	Amended and Restated Certificate of Incorporation of Veeco dated December 1, 1994, as amended June 2, 1997 and July 25, 1997.	Quarterly Report on Form 10-Q for the quarter ended June 30, 1997, Exhibit 3.1
3.2	Amendment to Certificate of Incorporation of Veeco dated May 29, 1998.	Annual Report on Form 10-K for the year ended December 31, 2000, Exhibit 3.2
3.3	Amendment to Certificate of Incorporation of Veeco dated May 5, 2000.	Quarterly Report on Form 10-Q for the quarter ended June 30, 2000, Exhibit 3.1
3.4	Certificate of Designation, Preferences, and Rights of Series A Junior Participating Preferred Stock of Veeco.	Quarterly Report on Form 10-Q for the quarter ended March 31, 2001, Exhibit 3.1
3.5	Amendment to Certificate of Incorporation of Veeco dated May 16, 2002	Quarterly Report on Form 10-Q for the quarter ended September 30, 2009, Exhibit 3.1
3.6	Amendment to Certificate of Incorporation of Veeco dated May 14, 2010	Annual Report on Form 10-K for the year ended December 31, 2010, Exhibit 3.8
3.7	Fourth Amended and Restated Bylaws of Veeco, effective October 23, 2008	Current Report on Form 8-K filed October 27, 2008, Exhibit 3.1
3.8	Amendment No. 1 to the Fourth Amended and Restated Bylaws of Veeco effective May 20, 2010	Current Report on Form 8-K, filed May 26, 2010, Exhibit 3.1
3.9	Amendment No. 2 to the Fourth Amended and Restated Bylaws of Veeco effective October 20, 2011	Current Report on Form 8-K, filed October 24, 2011, Exhibit 3.1
10.1	Loan Agreement dated as of December 15, 1999 between Applied Epi, Inc. and Jackson National Life Insurance Company.	Quarterly Report on Form 10-Q for the quarter ended September 30, 2001, Exhibit 10.2
10.2	Amendment to Loan Documents effective as of September 17, 2001 between Applied Epi, Inc. and Jackson National Life Insurance Company (executed in June 2002).	Quarterly Report on Form 10-Q for the quarter ended June 30, 2002, Exhibit 10.2
10.3	Promissory Note dated as of December 15, 1999 issued by Applied Epi, Inc. to Jackson National Life Insurance Company.	Quarterly Report on Form 10-Q for the quarter ended September 30, 2001, Exhibit 10.3
10.4*	Form of Indemnification Agreement entered into between Veeco and each of its directors and executive officers.	Current Report on Form 8-K filed on October 23, 2006, Exhibit 10.1
10.5*	Veeco Amended and Restated 2000 Stock Incentive Plan, effective July 20, 2006.	Quarterly Report on Form 10-Q for the quarter ended June 30, 2006, Exhibit 10.4
10.6*	Amendment No. 1 effective April 18, 2007 (ratified by the Board August 7, 2007) to Veeco Amended and Restated 2000 Stock Incentive Plan.	Quarterly Report on Form 10-Q for the quarter ended June 30, 2007, Exhibit 10.1
10.7*	Amendment No. 2 dated January 22, 2009 to Veeco Amended and Restated 2000 Stock Incentive Plan.	Annual Report on Form 10-K for the year ended December 31, 2008, Exhibit 10.41

Number	Exhibit	Incorporated by Reference to the Following Documents
10.8*	Form of Restricted Stock Agreement pursuant to the Veeco 2000 Stock Incentive Plan, effective November 2005	Quarterly Report on Form 10-Q for the quarter ended September 30, 2005, Exhibit 10.3
10.9*	Form of Notice of Restricted Stock Award and related terms and conditions pursuant to the Veeco 2000 Stock Incentive Plan, effective June 2006	Quarterly Report on Form 10-Q for the quarter ended September 30, 2006, Exhibit 10.3
10.10*	Veeco Amended and Restated 2010 Stock Incentive Plan, effective May 14, 2010	Proxy Statement on Schedule 14A, filed November 4, 2013, Appendix A
10.11*	Form of 2010 Stock Incentive Plan Stock Option Agreement (2012 rev.)	Quarterly Report on Form 10-Q for the quarter ended June 30, 2012, Exhibit 10.2
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* Indicates a management contract or compensatory plan or arrangement, as required by Item 15(a) (3) of Form 10-K.
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Veeco Instruments Inc. and Subsidiaries

Index to Consolidated Financial Statements and Financial Statement Schedule

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Shareholders
Veeco Instruments Inc.

We have audited the accompanying consolidated balance sheets of Veeco Instruments Inc. (the “Company”) as of December 31, 2013 and 2012 and the related consolidated statements of operations, comprehensive income (loss) , equity, and cash flows for each of the three years in the period ended December 31, 2013. Our audits also included the financial statement schedule listed in the Index at Item 15(a). These financial statements and the schedule are the responsibility of the Company’s management. Our responsibility is to express an opinion on these financial statements and schedule based on our audits.

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

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Veeco Instruments Inc. at December 31, 2013 and 2012, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2013, in conformity with U.S. generally accepted accounting principles. Also, in our opinion, the related financial statement schedule, when considered in relation to the basic financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Veeco Instruments Inc.’s internal control over financial reporting as of December 31, 2013, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (1992 framework) and our report dated February 28, 2014 expressed an unqualified opinion thereon.

/s/ ERNST & YOUNG LLP

New York, New York
February 28, 2014

Veeco Instruments Inc. and Subsidiaries
Consolidated Balance Sheets
(in thousands, except share data)

	December 31, 2013	December 31, 2012
Assets		
Current assets:		
Cash and cash equivalents	$ 210,799	$ 384,557
Short-term investments	281,538	192,234
Restricted cash	2,738	2,017
Accounts receivable, net	23,823	63,169
Inventories	59,726	59,807
Deferred cost of goods sold	724	1,797
Prepaid expenses and other current assets	22,579	30,358
Deferred income taxes	11,716	10,545
Total current assets	613,643	744,484
Property, plant and equipment at cost, net	89,139	98,302
Goodwill	91,348	55,828
Intangible assets, net	114,716	20,974
Other assets	38,726	16,781
Deferred income taxes	397	935
Total assets	$ 947,969	$ 937,304
Liabilities and equity		
Current liabilities:		
Accounts payable	$ 35,755	$ 26,087
Accrued expenses and other current liabilities	51,084	41,401
Customer deposits and deferred revenue	34,754	42,099
Income taxes payable	6,149	2,292
Deferred income taxes	159	140
Current portion of long-term debt	290	268
Total current liabilities	128,191	112,287
Deferred income taxes	28,052	7,137
Long-term debt	1,847	2,138
Other liabilities	9,649	4,530
Total liabilities	167,739	126,092
Equity:		
Preferred stock, 500,000 shares authorized; no shares issued and outstanding	—	—
Common stock; $.01 par value; authorized 120,000,000 shares; 39,666,195 shares issued and outstanding in 2013; and 39,328,503 shares issued and outstanding in 2012	397	393
Additional paid-in capital	721,352	708,723
Retained earnings	53,860	96,123
Accumulated other comprehensive income	4,621	5,973
Total equity	780,230	811,212
Total liabilities and equity	$ 947,969	$ 937,304

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

Veeco Instruments Inc. and Subsidiaries
Consolidated Statements of Operations
(in thousands, except per share data)

	For the year ended December 31,		
	2013	2012	2011
Net sales	$ 331,749	$ 516,020	$ 979,135
Cost of sales	228,607	300,887	504,801
Gross profit	103,142	215,133	474,334
Operating expenses:			
Selling, general and administrative	85,486	73,110	95,134
Research and development	81,424	95,153	96,596
Amortization	5,527	4,908	4,734
Restructuring	1,485	3,813	1,288
Asset impairment	1,220	1,335	584
Total operating expenses	175,142	178,319	198,336
Other, net	(1,017)	(398)	(261)
Changes in contingent consideration	829	—	—
Operating income (loss)	(71,812)	37,212	276,259
Interest income	1,200	2,476	3,776
Interest expense	(598)	(1,502)	(4,600)
Interest income (expense), net	602	974	(824)
Loss on extinguishment of debt	—	—	(3,349)
Income (loss) from continuing operations before income taxes	(71,210)	38,186	272,086
Income tax provision (benefit)	(28,947)	11,657	81,584
Income (loss) from continuing operations	(42,263)	26,529	190,502
Discontinued operations:			
Income (loss) from discontinued operations before income taxes	—	6,269	(91,885)
Income tax provision (benefit)	—	1,870	(29,370)
Income (loss) from discontinued operations	—	4,399	(62,515)
Net income (loss)	$ (42,263)	$ 30,928	$ 127,987
Net Income (loss) per common share:			
Basic:			
Continuing operations	$ (1.09)	$ 0.69	$ 4.80
Discontinued operations	—	0.11	(1.57)
Income (loss)	$ (1.09)	$ 0.80	$ 3.23
Diluted :			
Continuing operations	$ (1.09)	$ 0.68	$ 4.63
Discontinued operations	—	0.11	(1.52)
Income (loss)	$ (1.09)	$ 0.79	$ 3.11
Weighted average shares outstanding:			
Basic	38,807	38,477	39,658
Diluted	38,807	39,051	41,155

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

Veeco Instruments Inc. and Subsidiaries
Consolidated Statements of Comprehensive Income (Loss)
(Dollars in thousands)

	For the year ended December 31,		
	2013	2012	2011
Net income (loss)	$ (42,263)	$ 30,928	$ 127,987
Other comprehensive income (loss), net of tax			
Available-for-sale securities			
Unrealized gain (loss) on available-for-sale securities	34	(118)	393
Benefit (provision) for income taxes	11	50	(79)
Less: Reclassification adjustments for gains included in net income (loss)	(61)	(24)	(271)
Net unrealized gain (loss) on available-for-sale securities	(16)	(92)	43
Minimum pension liability			
Minimum pension liability	125	(216)	(73)
Benefit (provision) for income taxes	(86)	79	30
Net minimum pension liability	39	(137)	(43)
Foreign currency translation			
Foreign currency translation	(1,322)	(1,071)	1,228
Benefit (provision) for income taxes	(53)	683	(434)
Net foreign currency translation	(1,375)	(388)	794
Other comprehensive income (loss), net of tax	(1,352)	(617)	794
Comprehensive income (loss)	$ (43,615)	$ 30,311	$ 128,781

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

Veeco Instruments Inc. and Subsidiaries
Consolidated Statements of Equity
(Dollars in thousands)

	Common Stock		Treasury	Additional	Retained	Accumulated Other	Total
	Shares	Amount	Stock	Paid-in Capital	Earnings	Comprehensive Income	Equity
Balance as of January 1, 2011	**40,337,950**	**$ 409**	**$ (38,098)**	**$ 656,969**	**$ 137,436**	**$ 5,796**	**$ 762,512**
Exercise of stock options	688,105	7	—	10,707	—	—	10,714
Equity-based compensation expense-continuing operations	—	—	—	12,807	—	—	12,807
Equity-based compensation expense-discontinued operations	—	—	—	689	—	—	689
Issuance, vesting and cancellation of restricted stock	131,196	1	—	(3,175)	—	—	(3,174)
Treasury stock	(4,160,228)	—	(162,077)	—	—	—	(162,077)
Debt Conversion	1,771,413	18	—	(50)	—	—	(32)
Excess tax benefits from stock option exercises	—	—	—	10,406	—	—	10,406
Other comprehensive income (loss), net of tax	—	—	—	—	(106)	794	688
Net income (loss)	—	—	—	—	127,987	—	127,987
Balance as of December 31, 2011	**38,768,436**	**435**	**(200,175)**	**688,353**	**265,317**	**6,590**	**760,520**
Exercise of stock options	351,436	4	—	5,405	—	—	5,409
Equity-based compensation expense-continuing operations	—	—	—	14,268	—	—	14,268
Issuance, vesting and cancellation of restricted stock	208,631	7	—	(1,732)	—	—	(1,725)
Treasury stock	—	(53)	200,175	—	(200,122)	—	—
Prior period debt conversion adjustment	—	—	—	310	—	—	310
Excess tax benefits from stock option exercises	—	—	—	2,119	—	—	2,119
Other comprehensive income (loss), net of tax	—	—	—	—	—	(617)	(617)
Net income (loss)	—	—	—	—	30,928	—	30,928
Balance as of December 31, 2012	**39,328,503**	**393**	**—**	**708,723**	**96,123**	**5,973**	**811,212**
Exercise of stock options	149,170	2	—	2,197	—	—	2,199
Equity-based compensation expense-continuing operations	—	—	—	13,130	—	—	13,130
Issuance, vesting and cancellation of restricted stock	188,522	2	—	(2,698)	—	—	(2,696)
Other comprehensive income (loss), net of tax	—	—	—	—	—	(1,352)	(1,352)
Net income (loss)	—	—	—	—	(42,263)	—	(42,263)
Balance as of December 31, 2013	**39,666,195**	**$ 397**	**$ —**	**$ 721,352**	**$ 53,860**	**$ 4,621**	**$ 780,230**

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

Veeco Instruments Inc. and Subsidiaries
Consolidated Statements of Cash Flows
(Dollars in thousands)

	Year ended December 31,		
	2013	2012	2011
Cash Flows from Operating Activities			
Net income (loss)	$ (42,263)	$ 30,928	$ 127,987
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:			
Depreciation and amortization	18,425	16,192	12,892
Amortization of debt discount	—	—	1,260
Non-cash equity-based compensation	13,130	14,268	12,807
Non-cash asset impairment	1,220	1,335	584
Loss on extinguishment of debt	—	—	3,349
Deferred income taxes	(12,264)	(340)	11,276
Gain on disposal of segment	—	(4,112)	—
Gain on sale of lab tools	(767)	—	—
Excess tax benefits from stock option exercises	—	(2,119)	(10,406)
Change in contingent consideration	829	—	—
Other, net	1,971	262	(31)
Non-cash items from discontinued operations	—	(706)	44,381
Changes in operating assets and liabilities:			
Accounts receivable	38,844	31,215	56,843
Inventories	2,753	53,937	(18,627)
Prepaid expenses and other current assets	842	8,524	(13,087)
Income taxes receivable	(12,604)	654	(9,076)
Accounts payable	7,542	(12,106)	8,098
Accrued expenses, customer deposits, deferred revenue and other current liabilities	(17,329)	(34,227)	(72,723)
Income taxes payable	(130)	1,199	(42,204)
Transfers to restricted cash	(721)	(1,440)	—
Other, net	1,249	10,431	2,119
Discontinued operations	—	(1,932)	—
Net cash provided by (used in) operating activities	727	111,963	115,442
Cash Flows from Investing Activities			
Capital expenditures	(9,174)	(24,994)	(60,364)
Payments for net assets of businesses acquired	(71,488)	—	(28,273)
Payment for purchase of cost method investment	(2,391)	(10,341)	—
Transfers from (to) restricted cash related to discontinued operations	—	—	75,540
Proceeds from short-term investments	499,645	244,929	707,649
Payments for purchases of short-term investments	(589,099)	(165,080)	(588,453)
Proceeds from the sale of lab tools	4,440	—	—
Other	11	49	195
Proceeds from sale of assets from discontinued segment	—	3,758	—
Net cash provided by (used in) investing activities	(168,056)	48,321	106,294
Cash Flows from Financing Activities			
Proceeds from stock option exercises	2,199	5,409	10,714
Contingent consideration payments	(5,000)	—	—
Restricted stock tax withholdings	(2,696)	(1,725)	(3,173)
Excess tax benefits from stock option exercises	—	2,119	10,406
Purchases of treasury stock	—	—	(162,077)
Repayments of long-term debt	(269)	(248)	(105,803)
Other	—	—	(2)
Net cash provided by (used in) financing activities	(5,766)	5,555	(249,935)
Effect of exchange rate changes on cash and cash equivalents	(663)	796	989
Net increase (decrease) in cash and cash equivalents	(173,758)	166,635	(27,210)
Cash and cash equivalents as of beginning of year	384,557	217,922	245,132
Cash and cash equivalents as of end of year	$ 210,799	$ 384,557	$ 217,922

Supplemental disclosure of cash flow information			
Interest paid	$ 357	$ 209	$ 1,393
Income taxes paid	8,001	11,566	89,745
Non-cash investing and financing activities			
Accrual of fair value of contingent consideration	$ 33,539	$ —	$ —
Merger consideration adjustment	2,695	—	—

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

Veeco Instruments Inc. and Subsidiaries
Notes to Consolidated Financial Statements
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1. Description of Business and Significant Accounting Policies

Business

Veeco Instruments Inc. (together with its consolidated subsidiaries, “Veeco,” the “Company” or “we”) creates process equipment solutions that enable technologies for a cleaner and more productive world. We design, manufacture and market equipment primarily sold to make light emitting diodes (“LED”s) and hard-disk drives, as well as for emerging applications such as concentrator photovoltaics, power semiconductors, wireless components, micro-electromechanical systems (“MEMS”), and other next-generation devices.

Our *LED & Solar segment* designs and manufactures metal organic chemical vapor deposition (“MOCVD”) and molecular beam epitaxy (“MBE”) systems as well as newly acquired atomic layer deposition (“ALD”) technology. Our MOCVD and MBE systems are sold to manufacturers of LEDs, wireless devices, power semiconductors, and concentrator photovoltaics, as well as for R&D applications. Our ALD technology is used by the manufacturers of OLED displays and has further applications in the semiconductor and solar markets. In 2011 we discontinued the sale of our products related to Copper, Indium, Gallium, Selenide (“CIGS”) solar systems technology.

Our *Data Storage segment* designs and manufactures systems used to create thin film magnetic heads (“TFMH”s) that read and write data on hard disk drives. These include ion beam etch, ion beam deposition, diamond-like carbon, physical vapor deposition, chemical vapor deposition, and slicing, dicing and lapping systems. While our systems are primarily sold to hard drive customers, they also have applications in optical coatings, micro-electro mechanical systems (“MEMS”) and magnetic sensors, and extreme ultraviolet (“EUV”) lithography.

Basis of Presentation

We report interim quarters, other than fourth quarters which always end on December 31, on a 13-week basis ending on the last Sunday within such period. The interim quarter ends are determined at the beginning of each year based on the 13-week quarters. The 2013 interim quarter ends were March 31, June 30 and September 29. The 2012 interim quarter ends were April 1, July 1 and September 30. The 2011 interim quarter ends were April 3, July 3 and October 2. For ease of reference, we report these interim quarter ends as March 31, June 30 and September 30 in our interim consolidated financial statements. We have reclassified certain amounts previously reported in our financial statements to conform to the current presentation, including amounts related to discontinued operations.

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles in the United States (“U.S. GAAP”) requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Significant estimates made by management include: the best estimate of selling price for our products and services; allowance for doubtful accounts; inventory obsolescence; recoverability and useful lives of property, plant and equipment and identifiable intangible assets; investment valuations; fair value of derivatives; recoverability of goodwill and long lived assets; recoverability of deferred tax assets; liabilities for product warranty; accounting for acquisitions; accruals for contingencies; equity-based payments, including forfeitures and performance based vesting; and liabilities for tax uncertainties. Actual results could differ from those estimates.

Principles of Consolidation

The accompanying Consolidated Financial Statements include the accounts of Veeco and its subsidiaries. Intercompany items and transactions have been eliminated in consolidation.

Revenue Recognition

We recognize revenue when all of the following criteria have been met: persuasive evidence of an arrangement exists with a customer; delivery of the specified products has occurred or services have been rendered; prices are contractually fixed or determinable; and collectability is reasonably assured. Revenue is recorded including shipping and handling costs and

Veeco Instruments Inc. and Subsidiaries
Notes to Consolidated Financial Statements (continued)
December 31, 2013

excluding applicable taxes related to sales. A significant portion of our revenue is derived from contractual arrangements with customers that have multiple elements, such as systems, upgrades, components, spare parts, maintenance and service plans. For sales arrangements that contain multiple elements, we split the arrangement into separate units of accounting if the individually delivered elements have value to the customer on a standalone basis. We also evaluate whether multiple transactions with the same customer or related party should be considered part of a multiple element arrangement, whereby we assess, among other factors, whether the contracts or agreements are negotiated or executed within a short time frame of each other or if there are indicators that the contracts are negotiated in contemplation of each other. When we have separate units of accounting, we allocate revenue to each element based on the following selling price hierarchy: vendor-specific objective evidence ("VSOE") if available; third party evidence ("TPE") if VSOE is not available; or our best estimate of selling price ("BESP") if neither VSOE nor TPE is available. We utilize BESP for the majority of the elements in our arrangements. The accounting guidance for selling price hierarchy did not include BESP for arrangements entered into prior to January 1, 2011, and as such we recognized revenue for those arrangements as described below.

We consider many facts when evaluating each of our sales arrangements to determine the timing of revenue recognition, including the contractual obligations, the customer's creditworthiness and the nature of the customer's post-delivery acceptance provisions. Our system sales arrangements, including certain upgrades, generally include field acceptance provisions that may include functional or mechanical test procedures. For the majority of our arrangements, a customer source inspection of the system is performed in our facility or test data is sent to the customer documenting that the system is functioning to the agreed upon specifications prior to delivery. Historically, such source inspection or test data replicates the field acceptance provisions that will be performed at the customer's site prior to final acceptance of the system. As such, we objectively demonstrate that the criteria specified in the contractual acceptance provisions are achieved prior to delivery and, therefore, we recognize revenue upon delivery since there is no substantive contingency remaining related to the acceptance provisions at that date, subject to the retention amount constraint described below. For new products, new applications of existing products or for products with substantive customer acceptance provisions where we cannot objectively demonstrate that the criteria specified in the contractual acceptance provisions have been achieved prior to delivery, revenue and the associated costs are deferred and fully recognized upon the receipt of final customer acceptance, assuming all other revenue recognition criteria have been met.

Our system sales arrangements, including certain upgrades, generally do not contain provisions for right of return or forfeiture, refund, or other purchase price concessions. In the rare instances where such provisions are included, we defer all revenue until such rights expire. In many cases our products are sold with a billing retention, typically 10% of the sales price (the "retention amount"), which is typically payable by the customer when field acceptance provisions are completed. The amount of revenue recognized upon delivery of a system or upgrade, if any, is limited to the lower of i) the amount billed that is not contingent upon acceptance provisions or ii) the value of the arrangement consideration allocated to the delivered elements, if such sale is part of a multiple-element arrangement.

For transactions entered into prior to January 1, 2011, under the accounting rules for multiple-element arrangements in place at that time, we deferred the greater of the retention amount or the relative fair value of the undelivered elements based on VSOE. When we could not establish VSOE or TPE for all undelivered elements of an arrangement, revenue on the entire arrangement was deferred until the earlier of the point when we did have VSOE for all undelivered elements or the delivery of all elements of the arrangement.

Our sales arrangements, including certain upgrades, generally include installation. The installation process is not deemed essential to the functionality of the equipment since it is not complex; that is, it does not require significant changes to the features or capabilities of the equipment or involve building elaborate interfaces or connections subsequent to factory acceptance. We have a demonstrated history of consistently completing installations in a timely manner and can reliably estimate the costs of such activities. Most customers engage us to perform the installation services, although there are other third-party providers with sufficient knowledge who could complete these services. Based on these factors, we deem the installation of our systems to be inconsequential or perfunctory relative to the system as a whole, and as a result, do not consider such services to be a separate element of the arrangement. As such, we accrue the cost of the installation at the time of revenue recognition for the system.

Veeco Instruments Inc. and Subsidiaries
Notes to Consolidated Financial Statements (continued)
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In Japan, where our contractual terms with customers generally specify title and risk and rewards of ownership transfer upon customer acceptance, revenue is recognized and the customer is billed upon the receipt of written customer acceptance. During the fourth quarter of fiscal 2013, we began using a distributor for almost all of our product and service sales to customers in Japan. Title and risk and rewards of ownership of our system sales still transfer to our end-customers upon their acceptance. As such, there is no impact to our policy of recognizing revenue upon receipt of written acceptance from the end customer.

Revenue related to maintenance and service contracts is recognized ratably over the applicable contract term. Component and spare part revenue are recognized at the time of delivery in accordance with the terms of the applicable sales arrangement.

Cash and Cash Equivalents

Cash and cash equivalents include cash and certain highly liquid investments. Highly liquid investments with maturities of three months or less when purchased may be classified as cash equivalents. Such items may include liquid money market accounts, U.S. treasuries, government agency securities and corporate debt. The investments that are classified as cash equivalents are carried at cost, which approximates fair value.

Short-Term Investments

We determine the appropriate balance sheet classification of our investments at the time of purchase and evaluate the classification at each balance sheet date. As part of our cash management program, we maintain a portfolio of marketable securities which are classified as available-for-sale. These securities include U.S. treasuries and government agency securities with maturities of greater than three months when purchased. Securities classified as available-for-sale are carried at fair market value, with the unrealized gains and losses, net of tax, included in the determination of comprehensive income (loss) and reported in equity. Net realized gains and losses are included in net income (loss).

Accounts Receivable, Net

Accounts receivable are presented net of allowance for doubtful accounts of $2.4 million and $0.5 million as of December 31, 2013 and 2012, respectively. We evaluate the collectability of accounts receivable based on a combination of factors. In cases where we become aware of circumstances that may impair a customer’s ability to meet its financial obligations subsequent to the original sale, we will record an allowance against amounts due, and thereby reduce the net recognized receivable to the amount the we reasonably believes will be collected. For all other customers, we recognize an allowance for doubtful accounts based on the length of time the receivables are past due and consideration of other factors such as industry conditions, the current business environment and its historical experience.

Concentration of Credit Risk

Financial instruments, which potentially subject us to concentrations of credit risk, consist primarily of accounts receivable, short-term investments and cash and cash equivalents. We perform ongoing credit evaluations of our customers and, where appropriate, require that letters of credit be provided on certain foreign sales arrangements. We maintain allowances for potential credit losses and make investments with strong, higher credit quality issuers and continuously monitor the amount of credit exposure to any one issuer.

Inventories

Inventories are stated at the lower of cost (principally first-in, first-out method) or market. On a quarterly basis, management assesses the valuation and recoverability of all inventories, classified as materials (which include raw materials, spare parts and service inventory), work-in-process and finished goods.

Veeco Instruments Inc. and Subsidiaries
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Materials inventory is used primarily to support the installed tool base and spare parts sales and is reviewed for excess quantities or obsolescence by comparing on-hand balances to historical usage, and adjusted for current economic conditions and other qualitative factors. Historically, the variability of such estimates has been impacted by customer demand and tool utilization rates.

The work-in-process and finished goods inventory is principally used to support system sales and is reviewed for recoverability by considering whether on hand inventory would be utilized to fulfill the related backlog. As we typically receive deposits for our orders, the variability of this estimate is reduced as customers have a vested interest in the orders they place with us. Recoverability of such inventory is evaluated by monitoring customer demand, current sales trends and product gross margins. Management also considers qualitative factors such as future product demand based on market outlook, which is based principally upon production requirements resulting from customer purchase orders received with a customer-confirmed shipment date within the next twelve months. Historically, the variability of these estimates of future product demand has been impacted by backlog cancellations or modifications resulting from unanticipated changes in technology or customer demand.

Following identification of potential excess or obsolete inventory, management evaluates the need to write down inventory balances to its estimated market value, if less than its cost. Inherent in the estimates of market value are management’s estimates related to our future manufacturing schedules, customer demand, technological and/or market obsolescence, possible alternative uses, and ultimate realization of potential excess inventory. Unanticipated changes in demand for our products may require a write down of inventory that could materially affect our operating results.

Goodwill and Indefinite-Lived Intangibles

Goodwill represents the excess of the cost of an acquisition over the fair value of the net assets acquired. We account for goodwill and intangible assets with indefinite useful lives in accordance with relevant accounting guidance related to goodwill and other intangible assets, which states that goodwill and intangible assets with indefinite useful lives should not be amortized, but instead tested for impairment at least annually at the reporting unit level. Our policy is to perform this annual impairment test in the fourth quarter, using a measurement date of October 1st, of each fiscal year or more frequently if impairment indicators arise. Impairment indicators include, among other conditions, cash flow deficits, a historical or anticipated decline in revenue or operating profit, adverse legal or regulatory developments and a material decrease in the fair value of some or all of the assets.

The guidance provides an option for an entity to first assess qualitative factors to determine whether the existence of events or circumstances leads to a determination that it is more likely than not (that is, a likelihood of more than 50%) that the fair value of a reporting unit is less than its carrying amount. If, after assessing the totality of events or circumstances, an entity determines it is not more likely than not that the fair value of a reporting unit is less than its carrying amount, then performing the two-step impairment test is unnecessary.

If we determine the two-step impairment test is necessary, we are required to determine if it is appropriate to use the operating segment, as defined under guidance for segment reporting, as the reporting unit, or one level below the operating segment, depending on whether certain criteria are met. We have identified five reporting units that are required to be reviewed for impairment. The five reporting units are aggregated into two segments: the VIBE and Mechanical reporting units which are reported in our Data Storage segment; and the MOCVD, MBE and ALD reporting units which are reported in our LED & Solar segment. In identifying the reporting units management considered the economic characteristics of operating segments including the products and services provided, production processes, types or classes of customer and product distribution.

If required, we perform this impairment test by first comparing the fair value of our reporting units to their respective carrying amount. When determining the estimated fair value of a reporting unit, we utilize a discounted future cash flow approach since reported quoted market prices are not available for our reporting units. Developing the estimate of the discounted future cash flow requires significant judgment and projections of future financial performance. The key assumptions used in developing the discounted future cash flows are the projection of future revenues and expenses, working capital requirements, residual growth rates and the weighted average cost of capital. In developing our financial projections, we consider historical data, current internal estimates and market growth trends. Changes to any of these assumptions could materially change the fair value of the reporting unit. We reconcile the aggregate fair value of our reporting units to our adjusted market capitalization as a supporting calculation. The adjusted market capitalization is calculated by multiplying the average share price of our common stock for the last ten trading days prior to the measurement date by the number of outstanding common shares and adding a control premium.

If the carrying value of the reporting units exceed the fair value we would then compare the implied fair value of our goodwill to the carrying amount in order to determine the amount of the impairment, if any.

Definite-Lived Intangible and Long-Lived Assets

Definite-lived intangible assets consist of purchased technology, customer-related intangible assets, patents, trademarks, covenants not-to-compete, software licenses and deferred financing costs. Purchased technology consists of the core proprietary manufacturing technologies associated with the products and offerings obtained through acquisition and are initially recorded at fair value. Customer-related intangible assets, patents, trademarks, covenants not-to-compete and software licenses that are obtained in an acquisition are initially recorded at fair value. Other software licenses and deferred financing costs are initially recorded at cost. Intangible assets with definitive useful lives are amortized using the straight-line method over their estimated useful lives for periods up to 17 years.

Property, plant and equipment are recorded at cost. Depreciation is provided over the estimated useful lives of the related assets using the straight-line method for financial statement purposes. Amortization of leasehold improvements is computed using the straight-line method over the shorter of the remaining lease term or the estimated useful lives of the improvements.

Long-lived assets, such as property, plant, and equipment and intangible assets with definite useful lives, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Impairment indicators include, among other conditions, cash flow deficits, a historical or anticipated decline in revenue or operating profit, adverse legal or regulatory developments and a material decrease in the fair value of some or all of the assets. Assets are grouped at the lowest level for which there are identifiable cash flows that are largely independent of the cash flows generated by other asset groups. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to the estimated undiscounted future cash flow expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated future cash flows, an impairment charge is recognized by the amount by which the carrying amount of the asset exceeds the fair value of the asset.

Accounting for Acquisitions

Our growth strategy has included the acquisition of businesses. The purchase price of these acquisitions has been determined after due diligence of the acquired business, market research, strategic planning, and the forecasting of expected future results and synergies. Estimated future results and expected synergies are subject to judgment as we integrate each acquisition and attempt to leverage resources.

The accounting for the acquisitions we have made requires that the assets and liabilities acquired, as well as any contingent consideration that may be part of the agreement, be recorded at their respective fair values at the date of acquisition. This requires management to make significant estimates in determining the fair values, especially with respect to intangible assets, including estimates of expected cash flows, expected cost savings and the appropriate weighted average cost of capital. As a result of these significant judgments to be made we often obtain the assistance of independent valuation firms. We complete these assessments as soon as practical after the closing dates. Any excess of the purchase price over the estimated fair values of the identifiable net assets acquired is recorded as goodwill. Please see our footnote *Business Combinations* in these Notes to Consolidated Financial Statements .

Cost Method of Accounting for Investments

Investee companies not accounted for under the consolidation or the equity method of accounting are accounted for under the cost method of accounting. Under this method, our share of the earnings or losses of such investee companies are not included in the Consolidated Balance Sheet or Statements of Operations. However, impairment charges are recognized in the Consolidated Statements of Operations. If circumstances suggest that the value of the investee company has subsequently recovered, such recovery is not recorded.

Fair Value of Financial Instruments

We believe the carrying amounts of our financial instruments, including cash and cash equivalents, accounts receivable, accounts payable and accrued expenses, reflected in the consolidated financial statements approximate fair value due to their short-term maturities. The fair value of our debt, including current maturities, is estimated using a discounted cash flow analysis, based on the estimated current incremental borrowing rates for similar types of securities.

Translation of Foreign Currencies

Certain of our international subsidiaries operate using local functional currencies. Foreign currency denominated assets and liabilities are translated into U.S. dollars at exchange rates in effect at the balance sheet date, and income and expense accounts and cash flow items are translated at average monthly exchange rates during the respective periods. Net exchange gains or losses resulting from the translation of foreign financial statements and the effect of exchange rates on intercompany transactions of a long-term investment nature are recorded as a separate component of equity in accumulated other comprehensive income. Any foreign currency gains or losses related to transactions are included in operating results.

Environmental Compliance and Remediation

Environmental compliance costs include ongoing maintenance, monitoring and similar costs. Such costs are expensed as incurred. Environmental remediation costs are accrued when environmental assessments and/or remedial efforts are probable and the cost can be reasonably estimated.

Research and Development Costs

Research and development costs are charged to expense as incurred and include expenses for the development of new technology and the transition of technology into new products or services.

Warranty Costs

Our warranties are typically valid for one year from the date of final acceptance. We estimate the costs that may be incurred under the warranty that we provide for our products. We record a liability in the amount of such costs at the time the related revenue is recognized. Estimated warranty costs are determined by analyzing specific product and historical configuration statistics and regional warranty support costs. Our warranty obligation is affected by product failure rates, material usage, and labor costs incurred in correcting product failures during the warranty period. Unforeseen component failures or exceptional component performance can also result in changes to warranty costs. If actual warranty costs differ substantially from our estimates, revisions to the estimated warranty liability would be required.

Veeco Instruments Inc. and Subsidiaries
Notes to Consolidated Financial Statements (continued)
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Income Taxes

We are required to estimate our income taxes in each of the jurisdictions in which we operate. This process involves estimating the actual current tax expense, together with assessing temporary differences resulting from differing treatment of items for tax and financial reporting purposes. These differences result in deferred tax assets and liabilities, which are included within our Consolidated Balance Sheets. The carrying value of our deferred tax assets is adjusted by a partial valuation allowance to recognize the extent to which the future tax benefits will be recognized on a more likely than not basis. Our net deferred tax assets consist primarily of tax credit carry forwards and timing differences between the book and tax treatment of inventory, acquired intangible assets and other asset valuations. Realization of these net deferred tax assets is dependent upon our ability to generate future taxable income.

We record valuation allowances in order to reduce our deferred tax assets to the amount expected to be realized. In assessing the adequacy of recorded valuation allowances, we consider a variety of factors, including the scheduled reversal of deferred tax liabilities, future taxable income, and prudent and feasible tax planning strategies. Under the relevant accounting guidance, factors such as current and previous operating losses are given significantly greater weight than the outlook for future profitability in determining the deferred tax asset carrying value.

Relevant accounting guidance addresses the determination of how tax benefits claimed or expected to be claimed on a tax return should be recorded in the financial statements. Under such guidance, we must recognize the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities, based on the technical merits of the position. The tax benefits recognized in the financial statements from such uncertain tax positions are measured based on the largest benefit that has a greater than fifty percent likelihood of being realized upon ultimate resolution.

Advertising Expense

The cost of advertising is expensed as of the first showing of each advertisement. We incurred $0.5 million, $0.8 million and $1.4 million in advertising expenses during 2013, 2012 and 2011, respectively.

Shipping and Handling Costs

Shipping and handling costs are costs that are incurred to move, package and prepare our products for shipment and then to move the products to the customer’s designated location. These costs are generally comprised of payments to third-party shippers. Shipping and handling costs are included in cost of sales in our Consolidated Statements of Operations.

Equity-Based Compensation

We grant equity-based awards, such as stock options and restricted stock or restricted stock units, to certain key employees to create a clear and meaningful alignment between compensation and shareholder return and to enable the employees to develop and maintain a stock ownership position. While the majority of our equity awards feature time-based vesting, performance-based equity awards, which are awarded from time to time to certain of our key executives, vest as a function of performance, and may also be subject to the recipient’s continued employment which also acts as a significant retention incentive.

Equity-based compensation cost is measured at the grant date, based on the fair value of the award and is recognized as expense over the employee requisite service period. In order to determine the fair value of stock options on the date of grant, we apply the Black-Scholes option-pricing model. Inherent in the model are assumptions related to risk-free interest rate, dividend yield, expected stock-price volatility and option life.

The risk-free rate assumed in valuing the options is based on the U.S. Treasury yield curve in effect at the time of grant for the expected term of the option. The dividend yield assumption is based on our historical and future expectation of dividend payouts. While the risk-free interest rate and dividend yield are less subjective assumptions, typically based on objective data derived from public sources, the expected stock-price volatility and option life assumptions require a level of judgment which results in more subjective accounting estimates.

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We use an expected stock-price volatility assumption that is a combination of both historical volatility calculated based on the daily closing prices of our common stock over a period equal to the expected term of the option and implied volatility which utilizes market data of actively traded options on our common stock, which are obtained from public data sources. We believe that the historical volatility of the price of our common stock over the expected term of the option is a strong indicator of the expected future volatility and that implied volatility takes into consideration market expectations of how future volatility will differ from historical volatility. Accordingly, we believe a combination of both historical and implied volatility provides the best estimate of the future volatility of the market price of our common stock.

The expected option term, representing the period of time that options granted are expected to be outstanding, is estimated using a lattice-based model incorporating historical post vest exercise and employee termination behavior.

We estimate forfeitures using our historical experience, which is adjusted over the requisite service period based on the extent to which actual forfeitures differ or are expected to differ, from such estimates. Because of the significant amount of judgment used in these calculations, it is reasonably likely that circumstances may cause the estimate to change.

We settle the exercise of stock options with newly issued shares.

With respect to grants of performance based awards, we assess the probability that such performance criteria will be met in order to determine the compensation expense. Consequently, the compensation expense is recognized straight-line over the vesting period. If that assessment of the probability of the performance condition being met changes, we would recognize the impact of the change in estimate in the period of the change. As with the use of any estimate, and due to the significant judgment used to derive those estimates, actual results may vary.

We have elected to treat awards with only service conditions and with graded vesting as one award. Consequently, the total compensation expense is recognized straight-line over the entire vesting period, so long as the compensation cost recognized at any date at least equals the portion of the grant date fair value of the award that is vested at that date.

Negotiable Letters of Credit

For certain transactions, we request that our customers provide us with a negotiable irrevocable letter of credit drawn on a reputable financial institution. These irrevocable letters of credit are typically issued to mature, on average, for 0 to 90 days post documentation requirements, but occasionally for longer. For a fee, one of our banks confirms the reputation of the issuing institution and, at our option, monetizes these letters of credit on a non-recourse basis soon after they become negotiable. Once we monetize the letter of credit with the confirming bank, we have no further obligations or interest in the letter of credit and they are not included in our consolidated balance sheets. The fees that we pay are included in selling, general and administrative expense and are not material.

Recent Accounting Pronouncements

Presentation of an Unrecognized Tax Benefit When a Net Operating Loss Carryforward, a Similar Tax Loss, or Tax Credit Carryforward Exists: In July 2013, the FASB issued ASU No. 2013-11. ASU 2013-11 requires entities to present an unrecognized tax benefit, or a portion of an unrecognized tax benefit, as a reduction to a deferred tax asset for a net operating loss carryforward, a similar tax loss, or a tax credit carryforward when settlement in this manner is available under the tax law. This ASU is effective prospectively for fiscal years, and interim periods within those years, beginning after December 15, 2013. We are evaluating the potential impact of this adoption on our consolidated financial statements.

Presentation of Financial Statements: In April 2013, the FASB issued ASU No. 2013-07, “Presentation of Financial Statements (Topic 205): Liquidation Basis of Accounting.” The objective of ASU 2013-07 is to clarify when an entity should apply the liquidation basis of accounting. The update provides principles for the recognition and measurement of assets and liabilities and requirements for financial statements prepared using the liquidation basis of accounting. This ASU is effective prospectively for fiscal years, and interim periods within those years, beginning after December 15, 2013. We do not anticipate that the adoption of this standard will have a material impact on our consolidated financial statements, absent any indications that liquidation is imminent.

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Parent's Accounting for the Cumulative Translation Adjustment: In March 2013, the FASB issued ASU No. 2013-05, *Parent's Accounting for the Cumulative Translation Adjustment upon Derecognition of Certain Subsidiaries or Groups of Assets within a Foreign Entity or of an Investment in a Foreign Entity* . This new standard is intended to resolve diversity in practice regarding the release into net income of a cumulative translation adjustment ("CTA") upon derecognition of a subsidiary or group of assets within a foreign entity. ASU No. 2013-05 is effective prospectively for fiscal years (and interim reporting periods within those years) beginning after December 15, 2013. We currently anticipate that its adoption could have an impact on our consolidated financial statements, in the event of derecognition of a foreign subsidiary in 2014 or subsequently. We cannot estimate the amount of CTA to be released into income from any potential derecognition.

Obligations Resulting from Joint and Several Liability Arrangements for Which the Total Amount of the Obligation Is Fixed at the Reporting Date: In February 2013, the FASB issued Accounting Standards Update No. 2013-04, *"Obligations Resulting from Joint and Several Liability Arrangements for Which the Total Amount of the Obligation Is Fixed at the Reporting Date"* . ASU No. 2013-04 provides guidance for the recognition, measurement, and disclosure of obligations resulting from joint and several liability arrangements for which the total amount of the obligation within the scope of the guidance is fixed at the reporting date, as the sum of the amount the reporting entity agreed to pay on the basis of its arrangement among its co-obligors and any additional amount the reporting entity expects to pay on behalf of its co-obligors. In addition, ASU No. 2013-04 requires an entity to disclose the nature and amount of the obligation, as well as other information about the obligations. ASU No. 2013-04 is effective for interim and annual periods beginning after December 15, 2013 and is to be applied retrospectively. We do not anticipate that the adoption of this standard will have a material impact on our consolidated financial statements.

2. Income (Loss) Per Common Share

The following table sets forth basic and diluted net income (loss) per common share and the basic weighted average shares outstanding and diluted weighted average shares outstanding (*in thousands, except per share data*):

	Year ended December 31,		
	2013	2012	2011
Net income (loss)	$ (42,263)	$ 30,928	$ 127,987
Net income (loss) per common share:			
Basic	$ (1.09)	$ 0.80	$ 3.23
Diluted	$ (1.09)	$ 0.79	$ 3.11
Basic weighted average shares outstanding	38,807	38,477	39,658
Dilutive effect of stock options, restricted stock awards and units and convertible debt	—	574	1,497
Diluted weighted average shares outstanding	38,807	39,051	41,155

Basic income (loss) per common share is computed using the basic weighted average number of common shares outstanding during the period. Diluted income (loss) per common share is computed using the basic weighted average number of common shares and common equivalent shares outstanding during the period. For the year ended December 31, 2013, the effect of approximately 0.6 million common equivalent shares were excluded from the calculation of diluted net loss per share because their inclusion would have been anti-dilutive due to the net loss sustained during the period. Potentially dilutive securities attributable to outstanding stock options and restricted stock of approximately 1.3 million, 1.3 million and 0.7 million common equivalent shares during the years ended December 31, 2013, 2012 and 2011 were excluded from the calculation of diluted net income (loss) per share because their inclusion would have been anti-dilutive.

During the second quarter of 2011 the entire outstanding principal balance of our convertible debt was converted, with the principal amount paid in cash and the conversion premium paid in shares. The convertible notes met the criteria for determining the effect of the assumed conversion using the treasury stock method of accounting, since we had settled the principal amount of the notes in cash. Using the treasury stock method, it was determined that the impact of the assumed conversion for the years ended December 31, 2011 had a dilutive effect of 0.6 million shares.

3. Discontinued Operations

CIGS Solar Systems Business

On July 28, 2011, we announced a plan to discontinue our CIGS solar systems business. The results of operations for the CIGS solar systems business have been recorded as discontinued operations for all periods presented. During the year ended December 31, 2011, total discontinued operations related to the discontinued CIGS business include pre-tax charges totaling $69.8 million. These charges include an asset impairment charge totaling $6.2 million, a goodwill write-off of $10.8 million, an inventory write-off totaling $27.0 million, charges to settle contracts totaling $22.1 million, lease related charges totaling $1.4 million and personnel severance charges totaling $2.3 million.

Metrology

On August 15, 2010, we signed a definitive agreement to sell our Metrology business to Bruker. The results of operations for the Metrology business have been recorded as discontinued operations for all periods presented. The sale transaction closed on October 7, 2010, except for assets located in China due to local restrictions. Total proceeds, which included a working capital adjustment of $1 million, totaled $230.4 million of which $7.2 million relates to the assets in China. During 2010, we recognized a pre-tax gain on disposal of $156.3 million and a pre-tax deferred gain of $5.4 million related to the assets in China. We recognized into income the pre-tax deferred gain of $5.4 million during 2012 related to the completion of the sale of the assets in China to Bruker. We also recognized a $1.4 million gain ($1.1 million net of taxes) on the sale of assets of this discontinued segment that were previously held for sale and sold during 2012.

Summary information related to discontinued operations is as follows (*in thousands*):

	2012			2011		
	Solar Systems	Metrology	Total	Solar Systems	Metrology	Total
Net sales	$ —	$ —	$ —	$ —	$ —	$ —
Net income (loss) from discontinued operations	$ (62)	$ 4,461	$ 4,399	$ (61,453)	$ (1,062)	$ (62,515)

4. Fair Value Measurements

We have categorized our assets and liabilities recorded at fair value based upon the fair value hierarchy. The levels of fair value hierarchy are as follows:

- Level 1 inputs utilize quoted prices (unadjusted) in active markets for identical assets or liabilities that we have the ability to access.
- Level 2 inputs utilize other-than-quoted prices that are observable, either directly or indirectly. Level 2 inputs include quoted prices for similar assets and liabilities in active markets, and inputs such as interest rates and yield curves that are observable at commonly quoted intervals.
- Level 3 inputs are unobservable and are typically based on our own assumptions, including situations where there is little, if any, market activity.

In certain cases, the inputs used to measure fair value may fall into different levels of the fair value hierarchy. In such cases, we categorize such assets or liabilities based on the lowest level input that is significant to the fair value measurement in its entirety. Our assessment of the significance of a particular input to the fair value measurement in its entirety requires judgment and considers factors specific to the asset.

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Both observable and unobservable inputs may be used to determine the fair value of positions that are classified within the Level 3 category. As a result, the unrealized gains and losses for assets within the Level 3 category presented below may include changes in fair value that were attributable to both observable (e.g. changes in market interest rates) and unobservable (e.g. changes in historical company data) inputs.

The major categories of assets and liabilities measured on a recurring basis, at fair value, as of December 31, 2013 and 2012 are as follows (*in thousands*):

	December 31, 2013			
	Level 1	Level 2	Level 3	Total
U.S. treasuries	$ 130,977	$ —	$ —	$ 130,977
Corporate debt	—	77,601	—	77,601
Government agency securities	—	61,013	—	61,013
Commercial paper	—	11,947	—	11,947
Derivative instrument	—	907	—	907
Contingent consideration	—	—	(29,368)	(29,368)

	December 31, 2012 (1)			
	Level 1	Level 2	Level 3	Total
U.S. treasuries	$ 278,698	$ —	$ —	$ 278,698
Government agency securities	—	123,054	—	123,054
Derivative instrument	—	248	—	248

(1) December 31, 2012 table has been conformed to present year presentation.

Highly liquid investments with maturities of three months or less when purchased may be classified as cash equivalents. Such items may include liquid money market accounts, U.S. treasuries, government agency securities and corporate debt. The investments that are classified as cash equivalents are carried at cost, which approximates fair value. Accordingly, no gains or losses (realized/unrealized) have been incurred for cash equivalents. All investments classified as available-for-sale are recorded at fair value within short-term investments in the Consolidated Balance Sheets.

In determining the fair value of our investments and levels, through a third-party service provider, we use pricing information from pricing services that value securities based on quoted market prices in active markets and matrix pricing. Matrix pricing is a mathematical valuation technique that does not rely exclusively on quoted prices of specific investments, but on the investment's relationship to other benchmarked quoted securities. We have a process in place for investment valuations to facilitate identification and resolution of potentially erroneous prices. We review the information provided by the third-party service provider to record the fair value of its portfolio.

Consistent with Level 1 measurement principles, U.S. treasuries are priced using active market prices of identical securities. Consistent with Level 2 measurement principles, corporate debt, government agency securities, commercial paper, and derivative instruments are priced with matrix pricing.

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A reconciliation of the amount in Level 3 is as follows (*in thousands*):

		Level 3
Balance at December 31, 2012	$	—
Addition of contingent consideration		(33,539)
Payment on contingent consideration		5,000
Fair value adjustment of contingent consideration		(829)
Balance at December 31, 2013	$	(29,368)

We estimated the fair value of the contingent consideration by applying various probabilities and discount factors to each of the various performance milestones as further discussed in note *Business Combinations* . These fair value measurements are based on significant inputs not observable in the market and thus represent a Level 3 measurement as defined in ASC 820. The discount rates used ranged from 3.6% to 13.0% for the purchase order related contingent payments and from 15.5% to 30.5% for the revenue and gross margin related contingent payments. These rates were determined based on the nature of the milestone, the risks and uncertainties involved and the time period until the milestone was measured.

We measure certain assets for fair value on a non-recurring basis when there are indications of impairment.

In 2013 and 2012 we measured certain assets consistent with Level 3 measurement principles using an income approach based on a discounted cash flow model in order to determine the amount of impairment, if any. In 2013, we evaluated certain tangible assets in our LED & Solar segment for impairment. As a result of the evaluation we adjusted the carrying value by $0.9 million related to tools that we had previously used in our laboratories held in Property, plant and equipment which we are holding for sale and by $0.3 million related to an asset held in Other assets with $1.2 million of adjustments recorded as impairment in 2013. In 2012, we evaluated an asset in our Data Storage segment for impairment. As a result of the evaluation we adjusted the carrying value of the asset carried in Other assets from $1.4 million to $0.1 million with the $1.3 million adjustment recorded as impairment in 2012.

5. Business Combinations

On April 4, 2011, we purchased a privately-held company which supplies certain components to one of our businesses for $28.3 million in cash. As a result of this purchase, we acquired $16.4 million of definite-lived intangibles, of which $13.6 million related to core technology, and $14.7 million of goodwill. The financial results of this acquisition are included in our LED & Solar segment as of the acquisition date. We determined that this acquisition does not constitute a material business combination and therefore we have not included pro forma financial information in this report.

On October 1, 2013 (“the Acquisition Date”), Veeco acquired 100% of the outstanding common shares and voting interest of Synos Technology, Inc. (“Synos”). The results of Synos’ operations have been included in the consolidated financial statements since that date. Synos is an early stage manufacturer of fast array scanning atomic layer deposition (“FAST-ALD”) tools for OLED and other applications. As a result of the acquisition, the Company has entered the FAST-ALD market which is complimentary to the Company’s MOCVD LED offerings.

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The Acquisition Date fair value of the consideration totaled $102.3 million, net of cash acquired, which consisted of the following (*in thousands*):

	Acquisition Date (October 1, 2013)
Cash (net of cash acquired)	$ 71,488
Working capital adjustment	(2,695)
Contingent consideration	33,539
Total	$ 102,332

As part of Veeco's acquisition of Synos, we may be obligated to pay to the selling shareholders of Synos certain contingent consideration. The aggregate fair value of the contingent consideration arrangement at the acquisition date was $33.5 million. The contingency arrangements are generally as follows:

- Up to $40.0 million based on defined milestones tied to the receipt of certain purchase orders from customers by certain dates through the first quarter of 2014. The Company determined the fair value of these contingent payments to be $24.3 million. Of this amount, $5.0 million was earned and paid in the fourth quarter of 2013. The second milestone pertaining to this contingency is to be measured by March 31, 2014 and could result in either no payment, a payment of $17.5 million or a payment of $35 million. The difference between the amount earned and the fair value recorded will be recorded in the statement of operations for the period ended March 31, 2014. The outcome is currently unknown.
- Up to $75.0 million based on defined milestones tied to meeting certain revenue and gross margin thresholds based on full year 2014 results. The Company has determined the fair value of these contingent payments to be $9.2 million. The fair value of this contingency will continued to be measured at each reporting period and changes in fair value will be recorded in the statement of operations.

We estimated the fair value of the contingent consideration by applying various probabilities and discount factors to each of the various performance milestones. These fair value measurements are based on significant inputs not observable in the market and thus represent a Level 3 measurement as defined in ASC 820. The discount rates used ranged from 3.6% to 13.0% for the purchase order related contingent payments and from 15.5% to 30.5% for the revenue and gross margin related contingent payments. These rates were determined based on the nature of the milestone, the risks and uncertainties involved and the time period until the milestone was measured. The determination of the various probabilities and discount factors are highly subjective and require significant judgment and are influenced by a number of factors, including the adoption of OLED technology and limited history. While the use of OLED is expected to grow in the near future, it is difficult to predict the rate at which OLED will be adopted by the market and thus would impact the sales of our equipment.

As of December 31, 2013, the first milestone was achieved and we paid the former shareholders of Synos $5.0 million. In addition, the recognized amount for the contingencies increased by $0.8 million as of December 31, 2013 as a result of changes in the fair value of contingent consideration.

The following table summarizes the estimated fair values of the assets acquired, net of the cash acquired, and liabilities assumed at the Acquisition Date. Veeco utilized third-party valuations of the tangible and intangible assets acquired as well as the contingent consideration. The amounts below are preliminary and are subject to change (*in thousands*):

	Acquisition Date (October 1, 2013)
Accounts receivable	$ 1,523
Inventory	386
Other current assets	512
Property, plant, and equipment	1,917
Intangible assets	99,270
Total identifiable assets acquired	103,608
Current liabilities	4,370
Estimated deferred tax liability, net	32,426
Total liabilities assumed	36,796
Net identifiable assets acquired	66,812
Goodwill	35,520
Net assets acquired	$ 102,332

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The $35.5 million of goodwill was assigned to the LED & Solar segment. None of the goodwill is expected to be deductible for income tax purposes. As of December 31, 2013, there were no changes in the recognized amounts of goodwill resulting from the acquisition of Synos.

The classes of intangible assets acquired and the estimated weighted-average useful life of each class is presented in the table below (*in thousands*):

	Acquisition Date (October 1, 2013)	
	Amount	**Average useful life**
Technology	$ 73,160	14 years
In-process research and development	5,070	To be determined
Customer relationship	20,630	8 years
Trademark and trade name	140	1 year
Non-compete agreement	270	3 years
Intangible assets acquired	$ 99,270	

We determined the estimated fair value of the identifiable intangible assets based on various factors including: cost, discounted cash flow, income method, loss-of-revenue/income method and relief-from-royalty method in determining the purchase price allocation.

Technology is being amortized on an accelerated basis consistent with the timing of the cash flows it is expected to generate. Pursuant to the accounting guidance, acquired in-process research and development is not amortized until such time as it is completed or abandoned. Upon completion, we will amortize the acquired amount over its useful life. As noted earlier, the fair value of the acquired assets is provisional pending the final valuations for these assets.

We recognized $1.0 million of acquisition related costs that were expensed in 2013. These costs are included in the Consolidated Statements of Operations in the line item entitled “Selling, general and administrative.”

The amounts of revenue and income (loss) from continuing operations before income taxes of Synos included in the Company’s consolidated statement of operations from the acquisition date (October 1, 2013) to the period ending December 31, 2013 are as follows (*in thousands*):

Revenue	$ 409
Income (loss) from continuing operations before income taxes	$ (6,480)

The following represents the pro forma Consolidated Statements of Operations as if Synos had been included in our consolidated results (*in thousands*):

	For the year ended December 31, (unaudited)	
	2013	**2012**
Revenue	$ 346,319	$ 522,029
Income (loss) from continuing operations before income taxes	$ (60,983)	$ 16,840

These amounts have been calculated after applying our accounting policies to material amounts and also adjusting the results of Synos to reflect the additional amortization that would have been expensed assuming the fair value adjustments to intangible assets had been applied on January 1, 2012.

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Notes to Consolidated Financial Statements (continued)
December 31, 2013

6. Balance Sheet Information

Short-Term Investments

Available-for-sale securities consist of the following (*in thousands*):

	December 31, 2013			
	Amortized Cost	Gains in Accumulated Other Comprehensive Income	Losses in Accumulated Other Comprehensive Income	Estimated Fair Value
U.S. treasuries	$ 130,956	$ 22	$ (1)	$ 130,977
Government agency securities	61,004	9	—	61,013
Corporate debt	77,582	55	(36)	77,601
Commercial paper	11,947	—	—	11,947
Total available-for-sale securities	$ 281,489	$ 86	$ (37)	$ 281,538

During the year ended December 31, 2013, sales and maturities of available-for-sale securities provided total proceeds of $499.6 million. The gross realized gains on these sales were $0.1 million for the year ended December 31, 2013. For purpose of determining gross realized gains, the cost of securities sold is based on specific identification. The change in the net unrealized holding gain on available-for-sale securities was minimal for the year ended December 31, 2013, and has been included in accumulated other comprehensive income. The tax impact on the unrealized gains, which is excluded from the table above, was less than $0.1 million.

	December 31, 2012			
	Amortized Cost	Gains in Accumulated Other Comprehensive Income	Losses in Accumulated Other Comprehensive Income	Estimated Fair Value
U.S. treasuries	$ 184,102	$ 76	$ —	$ 184,178
Government agency securities	8,056	—	—	8,056
Total available-for-sale securities	$ 192,158	$ 76	$ —	$ 192,234

During the year ended December 31, 2012, sales and maturities of available-for-sale securities provided total proceeds of $244.9 million. The gross realized gains on these sales were minimal for the year ended December 31, 2012. For purpose of determining gross realized gains, the cost of securities sold is based on specific identification. The change in the net unrealized holding gain on available-for-sale securities amounted to $0.1 million for the year ended December 31, 2012, and has been included in accumulated other comprehensive income. The tax impact on the unrealized gains, which is excluded from the table above, was minimal.

Veeco Instruments Inc. and Subsidiaries
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December 31, 2013

Available-for-sale securities in a loss position at December 31, 2013 are as follows (*in thousands*):

	Less than 12 months		Total	
	Fair value	Gross Unrealized Losses	Fair value	Gross Unrealized Losses
Corporate debt	$ 37,654	$ (36)	$ 37,654	$ (36)
U.S. treasuries	29,068	(1)	29,068	(1)
Total	$ 66,722	$ (37)	$ 66,722	$ (37)

As of December 31, 2013 we had $66.7 million in short-term investments that had an aggregate unrealized fair value loss of less than $0.1 million none of which had been in an unrealized loss position for 12 months or longer. As of December 31, 2012 we did not hold any short-term investments that were in a loss position.

Contractual maturities of available-for-sale securities as of December 31, 2013 are as follows (*in thousands*):

	Estimated Fair Value
Due in one year or less	$ 196,015
Due in 1–2 years	64,156
Due in 2–3 years	21,367
Total investments in securities	$ 281,538

Actual maturities may differ from contractual maturities because some borrowers have the right to call or prepay obligations with or without call or prepayment penalties.

Restricted Cash

As of December 31, 2013 and 2012, restricted cash consisted of $2.7 million and $2.0 million, respectively, which serves as collateral for bank guarantees that provide financial assurance that the Company will fulfill certain customer obligations. This cash is held in custody by the issuing bank, and is restricted as to withdrawal or use while the related bank guarantees are outstanding.

Accounts Receivable, Net

Accounts receivable are shown net of the allowance for doubtful accounts of $2.4 million and $0.5 million as of December 31, 2013 and 2012, respectively.

Veeco Instruments Inc. and Subsidiaries
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December 31, 2013

Inventories (in thousands)

	December 31,	
	2013	2012
Materials	$ 34,301	$ 36,523
Work in process	12,900	13,363
Finished goods	12,525	9,921
	$ 59,726	$ 59,807

Property, Plant and Equipment (in thousands)

	December 31,		Estimated
	2013	2012	Useful Lives
Land	$ 12,535	$ 12,535	
Building and improvements	52,050	49,498	10-40 years
Machinery and equipment	110,228	110,150	3-10 years
Leasehold improvements	5,888	5,677	3-7 years
Gross property, plant and equipment at cost	180,701	177,860	
Less: accumulated depreciation and amortization	91,562	79,558	
Net property, plant and equipment	$ 89,139	$ 98,302	

For the years ended December 31, 2013, 2012 and 2011, depreciation expense was $12.9 million, $11.3 million and $8.2 million, respectively.

As of December 31, 2013, we had $7.2 million of tools that we previously used in our laboratories carried in machinery and equipment which we are holding for sale. These tools are the same type of tools we sell to our customers in the ordinary course of our business. In addition, during the year ended December 31, 2013, we converted and sold $3.7 million of tools that we had previously used in our laboratories as Veeco Certified Equipment at an aggregate selling price of $7.4 million which is included in revenue. During 2013, we recorded asset impairment charges in LED & Solar of $0.9 million related to certain tools used in our laboratories carried in machinery and equipment which we are holding for sale.

Goodwill and Indefinite-Lived Intangible Assets

In accordance with the relevant accounting guidance related to goodwill and other intangible assets, we conducted our annual impairment test of goodwill and indefinite-lived intangible assets during the fourth quarters of 2013 and 2012, using October 1st as our measurement date as described in our footnote *Description of Business and Significant Accounting Policies.* Based upon the results of the qualitative assessment we determined that it was not more likely than not that goodwill or our indefinite-lived intangible assets were impaired. Therefore, we determined that no impairment of goodwill and indefinite-lived intangible asset existed as of October 1, 2013. In 2012, we determined not to perform the optional qualitative assessment and performed our step 1 assessment utilizing discounted future cash flows and a reconciliation to our market capitalization. Based on our assessment we determined that there was no impairment of our goodwill or our indefinite-lived assets as of October 1, 2012.

Changes in our goodwill are as follows (*in thousands*):

	December 31,	
	2013	2012
Beginning balance	$ 55,828	$ 55,828
Acquisition (see *Business Combinations*)	35,520	—
Ending balance	$ 91,348	$ 55,828

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Intangible Assets

As of December 31, 2013, we had $8.0 million of indefinite-lived intangible assets consisting of trademarks, tradenames and in-process research and development ("IPR&D"). Pursuant to acquisition guidance, IPR&D is carried as an indefinite lived intangible until abandonment or completion. As of December 31, 2012, we had $2.9 million of indefinite-lived intangible assets consisting of trademarks and tradenames. These intangibles are included in the accompanying Consolidated Balance Sheets in the caption intangible assets, net.

	December 31, 2013			December 31, 2012		
(in thousands)	**Purchased technology**	**Other intangible assets**	**Total intangible assets**	**Purchased technology**	**Other intangible assets**	**Total intangible assets**
Gross intangible assets	$ 187,478	$ 40,675	$ 228,153	$ 109,248	$ 19,635	$ 128,883
Less accumulated amortization	(97,524)	(15,913)	(113,437)	(93,436)	(14,473)	(107,909)
Intangible assets, net	$ 89,954	$ 24,762	$ 114,716	$ 15,812	$ 5,162	$ 20,974

The estimated aggregate amortization expense for intangible assets with definite useful lives for each of the next five fiscal years is as follows (*in thousands*):

2014	$ 11,569
2015	19,376
2016	18,498
2017	15,876
2018	12,244

Other Assets

(in thousands)	**December 31, 2013**	**December 31, 2012**
Cost method investment	$ 16,884	$ 14,494
Income taxes receivable	21,128	—
Other	714	2,287
	$ 38,726	$ 16,781

Cost Method Investment

On September 28, 2010, we completed a $3 million investment in a rapidly developing organic light emitting diode (also known as OLED) equipment company (the "Investment"). We invested an additional $10.3 million and $1.2 million in the Investment during 2012 and 2011, respectively. In 2013, we invested an additional $2.4 million in the Investment in the form of bridge notes bearing 4% interest. The bridge notes are payable in equity at the time of a liquidity event or a qualifying equity investment round, otherwise they are payable in cash in June 2014. As of December 31, 2013, we have a 15.4% ownership of the preferred shares, and effectively hold a 11.0% ownership interest of the total company. Since we do not exert significant influence on the Investment, this investment is treated under the cost method in accordance with applicable accounting guidance. This investment is recorded in other assets in our Consolidated Balance Sheets as of December 31, 2013 and 2012.

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December 31, 2013

Accrued Expenses and Other Current Liabilities

(in thousands)	December 31, 2013	December 31, 2012
Payroll and related benefits	$ 11,020	$ 14,581
Sales, use and other taxes	5,402	6,480
Contingent consideration	20,098	—
Warranty	5,662	4,942
Restructuring liability	533	1,875
Other	8,369	13,523
	$ 51,084	$ 41,401

Customer deposits and deferred revenue

As of December 31, 2013 and 2012, we had customer deposits of $27.5 million and $32.7 million, respectively recorded as a component of customer deposits and deferred revenue.

Accrued Warranty

Typically, we provide our customers a one year manufacturer's warranty from the date of final acceptance on the products they purchase from us. We estimate the costs that may be incurred under the warranty we provide for our products and recognize a liability in the amount of such costs at the time the related revenue is recognized. Factors that affect our warranty liability include product failure rates, material usage and labor costs incurred in correcting product failures during the warranty period. Changes in our warranty liability during the year are as follows:

	December 31, 2013	December 31, 2012
Balance as of the beginning of year	$ 4,942	$ 8,731
Warranties issued during the year	5,291	3,563
Settlements made during the year	(5,580)	(7,060)
Changes in estimate during the period	1,009	(292)
Balance as of the end of year	$ 5,662	$ 4,942

Other Liabilities

(in thousands)	December 31, 2013	December 31, 2012
Contingent consideration	$ 9,270	$ —
Income taxes payable	—	3,986
Other	379	544
	$ 9,649	$ 4,530

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Notes to Consolidated Financial Statements (continued)
December 31, 2013

Accumulated Other Comprehensive Income

The components of accumulated other comprehensive income are:

As of December 31, 2013	Gross	Taxes	Net
Translation adjustments	$ 5,718	$ (392)	$ 5,326
Minimum pension liability	(1,160)	424	(736)
Unrealized gain on available-for-sale securities	49	(18)	31
Accumulated other comprehensive income	$ 4,607	$ 14	$ 4,621

As of December 31, 2012	Gross	Taxes	Net
Translation adjustments	$ 7,040	$ (339)	$ 6,701
Minimum pension liability	(1,285)	510	(775)
Unrealized gain on available-for-sale securities	76	(29)	47
Accumulated other comprehensive income	$ 5,831	$ 142	$ 5,973

7. Debt

Long-Term Debt

Long-term debt as of December 31, 2013, consists of a mortgage note payable, which is secured by certain land and buildings with carrying amounts aggregating approximately $4.7 million and $4.8 million as of December 31, 2013 and December 31, 2012, respectively. The mortgage note payable ($2.1 million as of December 31, 2013 and $2.4 million as of December 31, 2012) bears interest at an annual rate of 7.91%, with the final payment due on January 1, 2020. We estimate the fair market value of this note as of December 31, 2013 and 2012 was approximately $2.3 million and $2.6 million, respectively.

Maturity of Long-Term Debt

Long-term debt matures as follows (*in thousands*):

2014	$ 290
2015	314
2016	340
2017	368
2018	398
Thereafter	427
	2,137
Less current portion	290
	$ 1,847

Convertible Notes

In 2011, we retired our convertible notes which were initially convertible into 36.7277 shares of common stock per $1,000 principal amount of notes (equivalent to a conversion price of $27.23 per share or a premium of 38% over the closing market price for Veeco’s common stock on April 16, 2007). We paid interest on these notes on April 15 and October 15 of each year. The notes were unsecured and were effectively subordinated to all of our senior and secured indebtedness and to all indebtedness and other liabilities of our subsidiaries.

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During the first quarter of 2011, at the option of the holders, $7.5 million of notes were tendered for conversion at a price of $45.95 per share in a net share settlement. We paid the principal amount of $7.5 million in cash and issued 111,318 shares of our common stock. We recorded a loss on extinguishment totaling $0.3 million related to these transactions.

During the second quarter of 2011, we issued a notice of redemption on the remaining outstanding principal balance of notes outstanding. As a result, at the option of the holders, the notes were tendered for conversion at a price of $50.59 per share, calculated as defined in the indenture relating to the notes, in a net share settlement. As a result, we paid the principal amount of $98.1 million in cash and issued 1,660,095 shares of our common stock. We recorded a loss on extinguishment totaling $3.0 million related to these transactions.

Certain accounting guidance requires a portion of convertible debt to be allocated to equity. This guidance requires issuers of convertible debt that can be settled in cash to separately account for (*i.e.* bifurcate) a portion of the debt associated with the conversion feature and reclassify this portion to equity. The liability portion, which represents the fair value of the debt without the conversion feature, is accreted to its face value over the life of the debt using the effective interest method by amortizing the discount between the face amount and the fair value. The amortization is recorded as interest expense. Our convertible notes were subject to this accounting guidance. This additional interest expense did not require the use of cash.

The components of interest expense recorded on the notes were as follows (*in thousands*):

	For the year ended December 31, 2011
Contractual interest	$ 2,025
Accretion of the discount on the notes	1,260
Total interest expense on the notes	$ 3,285
Effective interest rate	6.7%

8. Equity Compensation Plans and Equity

Stock Option and Restricted Stock Plans

We have several stock option and restricted stock plans. In connection with our acquisition of Synos Technology, Inc. on October 1, 2013, the Board of Directors granted equity awards to the Synos employees. Pursuant to Nasdaq Listing Rules, the equity awards were granted under our 2013 Inducement Stock Incentive Plan (the “Inducement Plan”), which the Board of Directors adopted to facilitate the granting of equity awards as an inducement to these employees to commence employment with us. We issued 124,500 stock options and 87,000 restricted stock units under this plan. The stock options will vest over a three year period and have a 10-year term and the restricted stock units will vest over a two or four year period. As of December 31, 2013, the Inducement Plan was effectively merged into the 2010 Stock Incentive Plan (as amended to date, the “2010 Plan”), and is therefore considered an inactive plan with no further shares available for future grant. As of December 31, 2013, there are 124,500 options outstanding under the Inducement Plan.

On April 1, 2010, our Board of Directors, and on May 14, 2010, our shareholders, approved the 2010 Plan. The 2010 Plan replaced the 2000 Stock Incentive Plan, as amended (the “2000 Plan”), as the Company’s active stock plan. Our employees, directors and consultants are eligible to receive awards under the 2010 Plan. The 2010 Plan permits the granting of a variety of awards, including both non-qualified and incentive stock options, share appreciation rights, restricted shares, restricted share units and dividend equivalent rights. We are authorized to issue up to 6,750,000 shares under the 2010 Plan, including an additional 3,250,000 shares (including up to 2,995,000 shares of Common Stock available for issuance under the 2010 Plan and up to 255,000 shares underlying awards granted under the Inducement Plan) that were approved by the shareholders on December 10, 2013. Option awards are generally granted with an exercise price equal to the closing price of our stock on the trading day prior to the date of grant; those option awards generally vest over a 3 year period and have a 7 or 10-year term. Restricted share awards generally vest over 1-5 years. Certain option and share awards provide for accelerated vesting if there is a change in control, as defined in the 2010 Plan. As of December 31, 2013, there are 1,746,092 options outstanding under the 2010 Plan.

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The 2000 Plan was approved by our Board of Directors and shareholders in May 2000. The 2000 Plan provides for the grant to officers and key employees of stock awards, either in the form of options to purchase shares of our common stock or restricted stock awards. Stock awards granted pursuant to the 2000 Plan expire after seven years and generally vest over a two-year to five-year period following the grant date. In addition, the 2000 Plan provides for automatic annual grants of restricted stock to each member of our Board of Directors who is not an employee. As of December 31, 2013, there are 727,552 options outstanding under the 2000 Plan.

Equity-Based Compensation Expense, Stock Option and Restricted Stock Activity

Equity-based compensation cost is measured at the grant date, based on the fair value of the award, and is recognized as expense over the employee requisite service period . We recorded equity compensation expense of $13.1 million, $14.3 million and $12.8 million for the years ended December 31, 2013, 2012 and 2011, respectively. We did not capitalize any equity compensation in the years ended December 31, 2013, 2012 and 2011.

During the year ended December 31, 2011, we discontinued our CIGS solar systems business and as a result the equity-based compensation expense related to each CIGS solar systems business employee has been classified as discontinued operations in determining the consolidated results of operations for the years ended December 31, 2011. For the year ended December 31, 2011 discontinued operations included compensation expense of $0.7 million.

As of December 31, 2013, the total unrecognized compensation cost related to nonvested stock awards and option awards expected to vest is $33.2 million and $12.3 million, respectively, and the related weighted average period over which it is expected that such unrecognized compensation costs will be recognized is approximately 3.1 years and 2.2 years for the nonvested stock awards and for option awards, respectively.

The fair value of each option granted during the years ended December 31, 2013, 2012 and 2011, was estimated on the date of grant using the Black-Scholes option-pricing model with the following assumptions:

	For the year ended December 31,		
	2013	2012	2011
Weighted-average expected stock-price volatility	48%	59%	55%
Weighted-average expected option life	5 years	5 years	4 years
Average risk-free interest rate	1.27%	0.70%	1.40%
Average dividend yield	0%	0%	0%

A summary of our restricted stock awards including restricted stock units as of December 31, 2013 is presented below:

	Shares (000's)	Weighted-Average Grant-Date Fair Value
Nonvested as of December 31, 2012	693	$ 36.11
Granted	798	33.16
Vested	(207)	32.44
Forfeited (including cancelled awards)	(126)	34.33
Nonvested as of December 31, 2013	1,158	$ 34.93

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During the year ended December 31, 2013, we granted 797,583 shares of restricted common stock and restricted stock units to key employees, which generally vest over a four year period. Included in this grant were 16,165 shares of restricted common stock granted to the non-employee members of the Board of Directors, which vest over the lesser of one year or at the time of the next annual meeting. The vested shares include the impact of 71,342 shares of restricted stock which were cancelled in 2013 due to employees electing to receive fewer shares in lieu of paying withholding taxes. The total fair value of shares that vested during the years ended December 31, 2013, 2012 and 2011 was $7.9 million, $5.4 million and $9.7 million, respectively.

A summary of our stock option plans as of the year ended December 31, 2013 is presented below:

	Shares (000's)	Weighted-Average Exercise Price	Aggregate Intrinsic Value (000's)	Weighted-Average Remaining Contractual Life (in years)
Outstanding as of December 31, 2012	2,322	$ 28.63		
Granted	539	32.68		
Exercised	(149)	14.74		
Forfeited (including cancelled options)	(114)	35.22		
Outstanding as of December 31, 2013	2,598	$ 29.98	$ 14,277	6.5
Options exercisable as of December 31, 2013	1,567	$ 27.19	$ 13,208	4.7

The weighted-average grant date fair value of stock options granted for the years ended December 31, 2013, 2012 and 2011 was $13.47, $15.56 and $21.90 per option, respectively. The total intrinsic value of stock options exercised during the years ended December 31, 2013, 2012 and 2011 was $2.5 million, $6.8 million and $22.8 million, respectively.

The following table summarizes information about stock options outstanding as of December 31, 2013:

	Options Outstanding			Options Exercisable	
Range of Exercise Prices	Number Outstanding at December 31, 2013 (000s)	Weighted-Average Remaining Contractual Life (in years)	Weighted-Average Exercise Price	Number Exercisable at December 31, 2013 (000s)	Weighted-Average Exercise Price
$8.82 - 16.37	432	2.4	$ 10.98	432	$ 10.98
17.48 - 26.69	296	2.2	19.85	278	19.55
28.60 - 42.96	1,601	8.2	33.43	674	34.27
44.09 - 51.70	269	7.4	51.02	183	50.96
	2,598	6.5	$ 29.98	1,567	$ 27.19

Shares Reserved for Future Issuance

As of December 31, 2013, we have 5,856,268 shares reserved for future issuance upon exercise of stock options and grants of restricted stock.

Preferred Stock

Our Board of Directors has authority under our Certificate of Incorporation to issue shares of preferred stock with voting and economic rights to be determined by the Board of Directors.

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Treasury Stock

On August 24, 2010, our Board of Directors authorized the repurchase of up to $200 million of our common stock. All funds for this repurchase program were exhausted as of August 19, 2011. Repurchases were made from time to time on the open market in accordance with applicable federal securities laws. During 2011, we purchased 4,160,228 shares for $162 million (including transaction costs) under the program at an average cost of $38.96 per share. During 2010, we purchased 1,118,600 shares for $38 million (including transaction costs) under the program at an average cost of $34.06 per share. This stock repurchase is included as treasury stock in the Consolidated Balance Sheet as of December 31, 2011. During the year ended December 31, 2012, we cancelled and retired the 5,278,828 shares of treasury stock we purchased under this repurchase program. As a result of this transaction, we recorded a reduction in treasury stock of $200.2 million and a corresponding reduction of $200.1 million and $0.1 million in retained earnings and common stock, respectively.

9. Income Taxes

Our income (loss) from continuing operations before income taxes in the accompanying Consolidated Statements of Operations consists of (*in thousands*):

	Year ended December 31,		
	2013	2012	2011
Domestic	$ (84,942)	$ 5,811	$ 230,204
Foreign	13,732	32,375	41,882
	$ (71,210)	$ 38,186	$ 272,086

Significant components of the provision (benefit) for income taxes from continuing operations are presented below (*in thousands*):

	Year ended December 31,		
	2013	2012	2011
Current:			
Federal	$ (21,022)	$ 2,515	$ 59,921
Foreign	3,921	7,576	10,714
State and local	148	(317)	805
Total current provision (benefit) for income taxes	(16,953)	9,774	71,440
Deferred:			
Federal	(11,589)	(482)	10,454
Foreign	(462)	727	(1,073)
State and local	57	1,638	763
Total deferred provision (benefit) for income taxes	(11,994)	1,883	10,144
Total provision (benefit) for income taxes	$ (28,947)	$ 11,657	$ 81,584

The following is a reconciliation of the income tax provision (benefit) computed using the Federal statutory rate to our actual income tax provision (*in thousands*):

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	Year ended December 31,		
	2013	2012	2011
Income tax provision (benefit) at U.S. statutory rates	$ (24,923)	$ 13,366	$ 95,231
State income tax expense (benefit), net of federal impact	(1,554)	(89)	1,616
Nondeductible expenses	195	622	(749)
Domestic production activities deduction	1,554	(489)	(4,581)
Nondeductible compensation	11	205	841
Research and development tax credit	(3,151)	(3,013)	(4,675)
Net change in valuation allowance	2,420	2,943	121
Change in accrual for unrecognized tax benefits	577	533	824
Foreign tax rate differential	(4,275)	(2,387)	(5,225)
Other	199	(34)	(1,819)
Total provision (benefit) for income taxes	$ (28,947)	$ 11,657	$ 81,584

On January 2, 2013, the American Taxpayer Relief Act of 2012 was signed into law, and this legislation retroactively extended the research and development tax credit for 2 years, from January 1, 2012 through December 31, 2013. Income tax benefit for 2013 includes $1.9 million for the entire benefit of the research and development tax credit attributable to 2012.

During the fourth quarter of 2012, we determined that we may not meet the criteria required to receive a certain incentive tax rate pursuant to a negotiated tax holiday in one foreign jurisdiction. Although we are continuing to negotiate the criteria for the incentive, for financial reporting purposes we have recorded additional tax provisions of $0.9 million and $4.0 million in 2013 and 2012, respectively, totaling $4.9 million which represents the cumulative effect of calculating the tax provision using the incentive tax rate as compared to the foreign country's statutory rate. If we successfully renegotiate the incentive criteria, this additional tax provision could be reversed as a future benefit in the period in which the successful negotiations are finalized.

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes.

On October 1, 2013, we acquired 100% of Synos's total outstanding stock. In connection with the acquisition, we recorded a $32.4 million deferred tax liability related to the difference between the financial reporting amount and the tax basis of the assets acquired.

During 2012, we recorded a current tax benefit of $2.1 million related to equity-based compensation which was a credit to additional paid in capital. We did not record any tax benefits related to equity-based compensation during 2013. We will credit $0.5 million to additional paid-in capital when the research and development credits are realized for financial reporting purposes.

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Significant components of our deferred tax assets and liabilities are as follows (*in thousands*):

	December 31, 2013	December 31, 2012
Deferred tax assets:		
Inventory valuation	$ 6,983	$ 6,386
Domestic net operating loss carry forwards	5,585	1,144
Tax credit carry forwards	12,566	4,145
Foreign net operating loss carry forwards	821	—
Warranty and installation accruals	3,002	2,174
Equity compensation	10,638	9,114
Other accruals	2,556	3,270
Other	1,160	760
Total deferred tax assets	43,311	26,993
Valuation allowance	(7,753)	(4,708)
Net deferred tax assets	35,558	22,285
Deferred tax liabilities:		
Purchased intangible assets	45,208	9,973
Undistributed earnings	1,737	1,095
Depreciation	4,711	7,014
Total deferred tax liabilities	51,656	18,082
Net deferred taxes	$ (16,098)	$ 4,203

No provision has been made as of December 31, 2013 for United States or additional foreign withholding taxes on approximately $101.0 million of undistributed earnings of our foreign subsidiaries because it is the present intention of management to permanently reinvest the undistributed earnings of our foreign subsidiaries in China, South Korea, Malaysia, Singapore and Taiwan. As it is our intention to reinvest those earnings permanently, it is not practicable to estimate the amount of tax that might be payable if they were remitted. In the fourth quarter of 2013, we changed our assertion relating to Japan and such earnings will no longer be permanently reinvested based on the future liquidation of our Japanese entity. We have provided deferred income taxes and future withholding taxes on the earnings that we anticipate will be remitted.

As of December 31, 2013, we have credit carry forwards of approximately $12.6 million for financial reporting purposes, consisting primarily of foreign tax credits, which expire between 2022 and 2023, federal research and development credits which expire between 2031 and 2033, and various state tax credits which expire at various dates through 2028.

Our valuation allowance of approximately $7.8 million as of December 31, 2013 increased by approximately $3.0 million during the year then ended. The increase relates primarily to state and local deferred tax assets of $1.6 million and foreign tax attributes of $1.4 million for which we could not conclude were realizable on a more-likely-than-not basis.

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A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows (*in thousands*):

	December 31,	
	2013	2012
Beginning balance as of December 31	$ 5,818	$ 4,748
Additions for tax positions related to current year	324	435
Reductions for tax positions related to current year	—	—
Additions for tax positions related to prior years	477	742
Reductions for tax positions related to prior years	(224)	(59)
Reductions due to the lapse of the applicable statute of limitations	—	(48)
Settlements	(167)	—
Ending balance as of December 31	$ 6,228	$ 5,818

We do not anticipate that our uncertain tax position will change significantly within the next twelve months subject to the completion of our ongoing federal tax audit and any resultant settlement.

Of the amounts reflected in the table above as of December 31, 2013, the entire amount if recognized would reduce our effective tax rate. It is our policy to recognize interest and penalties related to income tax matters in income tax expense. The total accrual for interest and penalties related to unrecognized tax benefits was approximately $0.8 million and $0.5 million as of December 31, 2013 and 2012, respectively.

We or one of our subsidiaries file income tax returns in the United States federal jurisdiction and various state, local and foreign jurisdictions. All material federal income tax matters have been concluded for years through 2006 subject to subsequent utilization of net operating losses generated in such years. Our 2010 federal tax return is currently under examination. All material state and local income tax matters have been reviewed through 2008 with one state jurisdiction currently under examination for open tax years between 2007 and 2011. The majority of our foreign jurisdictions have been reviewed through 2009. Principally all of our foreign jurisdictions remain open with respect to the 2010 through 2013 tax years.

10. Commitments and Contingencies and Other Matters

Restructuring and Other Charges

During 2011 through 2013, in response to challenging business conditions, we initiated activities to reduce and contain spending, including reducing our workforce, consultants and discretionary expenses.

In conjunction with these activities, we recognized restructuring charges of approximately $1.5 million, $3.8 million and $1.3 million during the years ended December 31, 2013, 2012 and 2011, respectively. During the years ended December 31, 2012 and 2011, we also recorded inventory write-offs of $1.0 million related to a discontinued product line in our Data Storage segment and $0.8 million related to a discontinued product line in our LED & Solar segment, respectively. These inventory write-offs are included in cost of sales in the accompanying Consolidated Statements of Operations.

Restructuring expense for the years ended December 31, 2013, 2012 and 2011 are as follows (*in thousands*):

	Year ended December 31,		
	2013	2012	2011
Personnel severance and related costs	$ 1,485	$ 3,040	$ 1,288
Equity compensation and related costs	—	414	—
Lease-related and other	—	359	—
	$ 1,485	$ 3,813	$ 1,288

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Personnel Severance and Related Costs

During 2013, we recorded $1.5 million in personnel severance and related costs resulting from the restructuring of one of our international sales offices and the consolidation of certain sales, business and administrative functions. During 2012, we recorded $3.0 million in personnel severance and related costs resulting from a headcount reduction of 52 employees. During 2011, we recorded $1.3 million in personnel severance and related costs related to a companywide reorganization resulting in a headcount reduction of 65 employees. These reductions in workforce included executives, management, administration, sales and service personnel and manufacturing employees' companywide.

Lease-Related and Other

During 2012, we recorded $0.4 million in other associated costs resulting from a headcount reduction of 52 employees. These charges primarily consist of job placement services, consulting and relocation expenses, as well as duplicate wages incurred during the transition period.

The following is a reconciliation of the liability for the 2013, 2012 and 2011 restructuring charges through December 31, 2013 (*in thousands*):

	LED & Solar	Data Storage	Unallocated	Total
Short-term liability				
Balance as of January 1, 2011	$ —	$ 178	$ 536	$ 714
Personnel severance and related costs 2011	672	51	311	1,034
Personnel severance and related costs 2012	874	1,684	135	2,693
Personnel severance and related costs 2013	1,017	410	58	1,485
Short-term/long-term reclassification 2011	—	58	—	58
Cash payments 2011	(138)	(159)	(553)	(850)
Cash payments 2012	(960)	(504)	(310)	(1,774)
Cash payments 2013	(1,282)	(1,368)	(177)	(2,827)
Balance as of December 31, 2013	$ 183	$ 350	$ —	$ 533
Long-term liability				
Balance as of January 1, 2011	$ —	$ 58	$ —	$ 58
Short-term/long-term reclassification 2011	—	(58)	—	(58)
Balance as of December 31, 2011	$ —	$ —	$ —	$ —

Minimum Lease Commitments

Minimum lease commitments as of December 31, 2013 for property and equipment under operating lease agreements (exclusive of renewal options) are payable as follows (*in thousands*):

2014	$ 3,076
2015	2,091
2016	1,327
2017	1,052
2018	536
	$ 8,082

Rent amounted to $2.9 million, $3.5 million and $2.7 million in 2013, 2012 and 2011, respectively. In addition, we are obligated under such leases for certain other expenses, including real estate taxes and insurance.

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Environmental Remediation

We are aware that petroleum hydrocarbon contamination has been detected in the soil at the site of a facility formerly leased by us in Santa Barbara, California. We have been indemnified for any liabilities we may incur which arise from environmental contamination at the site. Even without consideration of such indemnification, we do not believe that any material loss or expense is probable in connection with any such liabilities. The former owner of the land and building in Santa Barbara, California in which our former Metrology operations were located, which business (sold to Bruker on October 7, 2010), has disclosed that there are hazardous substances present in the ground under the building. Management believes that the comprehensive indemnification clause that was part of the purchase contract relating to the purchase of such land provides adequate protection against any environmental issues that may arise. We have provided Bruker indemnification as part of the sale.

Litigation

Veeco and certain other parties were named as defendants in a lawsuit filed on April 25, 2013 in the Superior Court of California, County of Sonoma. The plaintiff in the lawsuit, Patrick Colbus, seeks unspecified damages and asserts claims that he suffered burns and other injuries while he was cleaning a molecular beam epitaxy system alleged to have been manufactured by Veeco. The lawsuit alleges, among other things, that the molecular beam epitaxy system was defective and that Veeco failed to adequately warn of the potential risks of the system. Veeco believes this lawsuit is without merit and intends to defend vigorously against the claims. Veeco is unable to predict the outcome of this action or to reasonably estimate the possible loss or range of loss, if any, arising from the claims asserted therein. The Company believes that, in the event of any recovery by the plaintiff from Veeco, such recovery would be fully covered by Veeco's insurance.

We are involved in various other legal proceedings arising in the normal course of our business. We do not believe that the ultimate resolution of these matters will have a material adverse effect on our consolidated financial position, results of operations or cash flows.

Concentrations of Credit Risk

Our business depends in large part upon the capital expenditures of our top ten customers, which accounted for 69% and 77% of total accounts receivable as of December 31, 2013 and 2012, respectively. Of such, LED & Solar and Data Storage customers accounted for approximately 30% and 39%, and 56% and 21%, respectively, of total accounts receivable as of December 31, 2013 and 2012.

Customers who accounted for more than 10% of our aggregate accounts receivable or net sales are as follows:

		Accounts Receivable December 31,		Net Sales for the year ended December 31,		
Customer	**Segment**	**2013**	**2012**	**2013**	**2012**	**2011**
Customer A	Data Storage	23%	16%	*	14%	*
Customer B	Data Storage	11%	*	*	*	*
Customer C	LED & Solar	10%	16%	14%	*	*
Customer D	LED & Solar	*	*	*	*	11%
Customer E	LED & Solar	*	*	*	*	12%

* Less than 10% of aggregate accounts receivable or net sales.

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We manufacture and sell our products to companies in different geographic locations. In certain instances, we require deposits for a portion of the sales price in advance of shipment. We perform periodic credit evaluations of our customers' financial condition and, where appropriate, require that letters of credit be provided on certain foreign sales arrangements. Receivables generally are due within 30-90 days, other than receivables generated from customers in Japan where payment terms generally range from 60-150 days. Our net accounts receivable balance is concentrated in the following geographic locations (*in thousands*):

	December 31,	
	2013	2012
China	$ 4,845	$ 28,132
Singapore	3,192	7,266
Taiwan	553	6,390
Other	6,162	3,853
Asia Pacific	14,752	45,641
Americas	7,526	13,917
Europe, Middle East and Africa	1,545	3,611
	$ 23,823	$ 63,169

Suppliers

We currently outsource certain functions to third parties, including the manufacture of all or substantially all of our new MOCVD systems, Data Storage systems and ion sources. We primarily rely on several suppliers for the manufacturing of these systems. We plan to maintain some level of internal manufacturing capability for these systems. The failure of our present suppliers to meet their contractual obligations under our supply arrangements and our inability to make alternative arrangements or resume the manufacture of these systems ourselves could have a material adverse effect on our revenues, profitability, cash flows and relationships with our customers.

In addition, certain of the components and sub-assemblies included in our products are obtained from a single source or a limited group of suppliers. Our inability to develop alternative sources, if necessary, could result in a prolonged interruption in supply or a significant increase in the price of one or more components, which could adversely affect our operating results.

Purchase Commitments

As of December 31, 2013, we had purchase commitments totaling $60.3 million all of which come due within one year. We have $9.4 million of offsetting supplier deposits against these purchase commitments as of December 31, 2013.

Lines of Credit and Guarantees

As of December 31, 2013, we had letter of credit and bank guarantees issued by a bank on our behalf as needed. We had letters of credit outstanding of $0.6 million and bank guarantees outstanding of $5.9 million, of which, $2.7 million is collateralized against cash that is restricted from use. As of December 31, 2013, we had $40.4 million of unused lines of credit available. The line of credit is available to draw upon to cover performance bonds as required by our customers.

11. Foreign Operations, Geographic Area and Product Segment Information

Net sales which are attributed to the geographic location in which the customer facility is located and long-lived tangible assets related to operations in the United States and other foreign countries as of and for the years ended December 31, 2013, 2012 and 2011 are as follows (*in thousands*):

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	Net Sales to Unaffiliated Customers			Long-Lived Tangible Assets		
	2013	**2012**	**2011**	**2013**	**2012**	**2011**
Americas (1)	$ 57,609	$ 83,317	$ 100,635	$ 66,002	$ 74,497	$ 67,788
Europe, Middle East and Africa (1)	21,941	41,708	57,617	95	36	203
Asia Pacific (1)	252,199	390,995	820,883	23,042	23,769	20,417
	$ 331,749	$ 516,020	$ 979,135	$ 89,139	$ 98,302	$ 88,408

(1) For the year ended December 31, 2013, net sales to customers in China were 44.8% of total net sales. For the year ended December 31, 2012, net sales to customers in China and Taiwan were 42.0% and 11.4% of total net sales, respectively. For the year ended December 31, 2011, net sales to customers in China were 66.4% of total net sales. No other country in Europe, Middle East, and Africa ("EMEA") and Asia Pacific ("APAC") accounted for more than 10% of our net sales for the years presented. A minimal amount, less than 1%, of sales included within the Americas caption above have been derived from other regions outside of the United States.

We have five identified reporting units that we aggregate into two reportable segments: the VIBE and Mechanical reporting units which are reported in our Data Storage segment; and the MOCVD, MBE and ALD reporting units are reported in our LED & Solar segment. We manage the business, review operating results and assess performance, as well as allocate resources, based upon our reporting units that reflect the market focus of each business. The LED & Solar segment consists of metal organic chemical vapor deposition ("MOCVD") systems, molecular beam epitaxy ("MBE") systems, thermal deposition sources and other types of deposition systems as well as newly acquired atomic layer deposition ("ALD") technology. These systems are primarily sold to customers in the LED, OLED and solar industries, as well as to scientific research customers. This segment has product development and marketing sites in Somerset, New Jersey, Poughkeepsie, New York, St. Paul, Minnesota, Fremont, California, and Korea. During 2011 we discontinued our CIGS solar systems business, located in Tewksbury, Massachusetts and Clifton Park, New York. The Data Storage segment consists of the ion beam etch, ion beam deposition, diamond-like carbon, physical vapor deposition, and dicing and slicing products sold primarily to customers in the data storage industry. This segment has product development and marketing sites in Plainview, New York, Ft. Collins, Colorado and Camarillo, California.

We evaluate the performance of our reportable segments based on income (loss) from operations before interest, income taxes, amortization and certain items ("segment profit (loss)"), which is the primary indicator used to plan and forecast future periods. The presentation of this financial measure facilitates meaningful comparison with prior periods, as management believes segment profit (loss) reports baseline performance and thus provides useful information. Certain items include restructuring expenses, asset impairment charges, inventory write-offs, equity-based compensation expense and other non-recurring items. The accounting policies of the reportable segments are the same as those described in the summary of critical accounting policies.

The following tables present certain data pertaining to our reportable product segments and a reconciliation of segment profit (loss) to income (loss) from continuing operations, before income taxes for the years ended December 31, 2013, 2012 and 2011, and goodwill and total assets as of December 31, 2013 and 2012 (in thousands):

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	LED & Solar	Data Storage	Unallocated	Total
Year ended December 31, 2013				
Net sales	$ 249,742	$ 82,007	$ —	$ 331,749
Segment loss	$ (26,362)	$ (671)	$ (22,588)	$ (49,621)
Interest income (expense), net	—	—	602	602
Amortization	(4,233)	(1,294)	—	(5,527)
Equity-based compensation	(5,126)	(1,703)	(6,301)	(13,130)
Restructuring	(1,017)	(410)	(58)	(1,485)
Asset impairment charge	(1,174)	(46)	—	(1,220)
Changes in contingent consideration	(829)	—	—	(829)
Income (loss) from continuing operations before income taxes	$ (38,741)	$ (4,124)	$ (28,345)	$ (71,210)
Year ended December 31, 2012				
Net sales	$ 363,181	$ 152,839	$ —	$ 516,020
Segment profit (loss)	$ 41,603	$ 25,414	$ (4,919)	$ 62,098
Interest income (expense), net	—	—	974	974
Amortization	(3,586)	(1,322)	—	(4,908)
Equity-based compensation	(5,400)	(1,920)	(6,534)	(13,854)
Restructuring	(1,233)	(2,521)	(59)	(3,813)
Asset impairment charge	—	(1,335)	—	(1,335)
Other	—	(976)	—	(976)
Income (loss) from continuing operations before income taxes	$ 31,384	$ 17,340	$ (10,538)	$ 38,186
Year ended December 31, 2011				
Net sales	$ 827,797	$ 151,338	$ —	$ 979,135
Segment profit (loss)	$ 267,059	$ 38,358	$ (8,987)	$ 296,430
Interest income (expense), net	—	—	(824)	(824)
Amortization	(3,227)	(1,424)	(83)	(4,734)
Equity-based compensation	(3,473)	(1,458)	(7,876)	(12,807)
Restructuring	(204)	(12)	(1,072)	(1,288)
Asset impairment charge	(584)	—	—	(584)
Other	(758)	—	—	(758)
Loss on extinguishment of debt	—	—	(3,349)	(3,349)
Income (loss) from continuing operations before income taxes	$ 258,813	$ 35,464	$ (22,191)	$ 272,086

Unallocated assets are comprised principally of cash and cash equivalents and short-term investments as of December 31, 2013 and 2012.

Veeco Instruments Inc. and Subsidiaries
Notes to Consolidated Financial Statements (continued)
December 31, 2013

	LED & Solar	Data Storage	Unallocated	Total
As of December 31, 2013				
Goodwill	$ 91,348	$ —	$ —	$ 91,348
Total assets	$ 359,464	$ 37,910	$ 550,595	$ 947,969
As of December 31, 2012				
Goodwill	$ 55,828	$ —	$ —	$ 55,828
Total assets	$ 276,352	$ 38,664	$ 622,288	$ 937,304

Other Segment Data (*in thousands*):

	Year ended December 31,		
	2013	2012	2011
Depreciation and amortization expense:			
LED & Solar	$ 14,365	$ 12,020	$ 8,320
Data Storage	2,907	3,008	3,245
Unallocated	1,153	1,164	1,327
Total depreciation and amortization expense	$ 18,425	$ 16,192	$ 12,892
Expenditures for long-lived assets:			
LED & Solar	$ 6,796	$ 20,279	$ 56,141
Data Storage	1,271	3,341	2,703
Unallocated	1,108	1,374	1,520
Total expenditures for long-lived assets	$ 9,175	$ 24,994	$ 60,364

12. Derivative Financial Instruments

We use derivative financial instruments to minimize the impact of foreign exchange rate changes on earnings and cash flows. In the normal course of business, our operations are exposed to fluctuations in foreign exchange rates. In order to reduce the effect of fluctuating foreign currencies on short-term foreign currency-denominated intercompany transactions and other known foreign currency exposures, we enter into monthly forward contracts. We do not use derivative financial instruments for trading or speculative purposes. Our forward contracts are not expected to subject us to material risks due to exchange rate movements because gains and losses on these contracts are intended to offset exchange gains and losses on the underlying assets and liabilities. The forward contracts are marked-to-market through earnings. We conduct our derivative transactions with highly rated financial institutions in an effort to mitigate any material counterparty risk.

	As of December 31, 2013			
(in thousands)	**Component of**	**Fair Value**	**Maturity Dates**	**Notional Amount**
Not Designated as Hedges under ASC 815				
Foreign currency exchange forwards	Prepaid and other current assets	1	January 2014	4,700
Foreign currency collar	Prepaid and other current assets	906	October 2014	34,069
Total Derivative Instruments		$ 907		$ 38,769

	As of December 31, 2012			
(in thousands)	**Component of**	**Fair Value**	**Maturity Dates**	**Notional Amount**
Not Designated as Hedges under ASC 815				
Foreign currency exchange forwards	Prepaid and other current assets	248	January 2013	9,590
Total Derivative Instruments		$ 248		$ 9,590

Veeco Instruments Inc. and Subsidiaries
Notes to Consolidated Financial Statements (continued)
December 31, 2013

(in thousands)	Location of realized net gain (loss) and changes in the fair value of derivatives	Amount of realized net gain (loss) and changes in the fair value of derivatives for the year ended December 31, 2013	2012	2011
Foreign currency exchange forwards	Other, net	$ 248	$ 333	$ 553
Foreign currency collar	Other, net	$ 906	$ —	$ —

These contracts were valued using market quotes in the secondary market for similar instruments (fair value Level 2, please see our footnote *Fair Value Measurements*).

The weighted average notional amount of derivative contracts outstanding during the year ended December 31, 2013 and 2012 was approximately $5.2 million and $3.5 million, respectively

13. Retirement Plans

We maintain a defined contribution benefit plan under Section 401(k) of the Internal Revenue Code. Almost all of our domestic full-time employees are eligible to participate in this plan. Under the plan during 2011, we provided matching contributions of fifty cents for every dollar employees contribute up to a maximum of $3,000. During 2012, we provided matching contributions of fifty cents for every dollar employees contribute, up to the lesser of 3% of the employee’s eligible compensation or $7,500. During 2013, we provided a matching contributions of fifty cents for every dollar employees contribute, up to the lesser of 3% of the employee’s eligible compensation or $7,650. Generally, the plan calls for vesting of Company contributions over the initial five years of a participant’s employment. We maintain a similar type of contribution plan at one of our foreign subsidiaries. Our contributions to these plans in 2013, 2012 and 2011 were $2.3 million, $2.5 million and $2.1 million, respectively.

We acquired a defined benefit plan on May 5, 2000 that had been frozen as of September 30, 1991. No further benefits since September 30, 1991 accrued to any participant. The benefit that participants are entitled to receive as of their normal retirement date is their accrued benefit as of September 30, 1991. In connection with the freezing of the Plan as of September 30, 1991, all participants became fully vested in their benefit. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 (“ERISA”). This plan has a plan year end of September 30. There are 110 participants in the plan as of September 30, 2013. The plan is funded in accordance with ERISA guidelines and has $1.6 million in contract assets as of September 30, 2013.

14. Selected Quarterly Financial Information (unaudited)

The following table presents selected unaudited financial data for each fiscal quarter of 2013 and 2012. Although unaudited, this information has been prepared on a basis consistent with our audited Consolidated Financial Statements and, in the opinion of our management, reflects all adjustments (consisting only of normal recurring adjustments) that we consider necessary for a fair presentation of this information in accordance with accounting principles generally accepted in the United States. Such quarterly results are not necessarily indicative of future results of operations.

Veeco Instruments Inc. and Subsidiaries
Notes to Consolidated Financial Statements (continued)
December 31, 2013

	Fiscal 2013 (unaudited)				Fiscal 2012 (unaudited)			
(in thousands, except per share data)	**Q1**	**Q2**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**
Net sales	$ 61,781	$ 97,435	$ 99,324	$ 73,209	$ 139,909	$ 136,547	$ 132,715	$ 106,849
Gross profit	22,552	34,640	30,308	15,642	65,268	61,254	49,884	38,727
Income (loss) from continuing operations, net of income taxes	(10,071)	(4,081)	(6,026)	(22,085)	16,462	11,011	7,698	(8,642)
Income (loss) from discontinued operations, net of income taxes	—	—	—	—	(50)	807	4,055	(413)
Net income (loss)	$ (10,071)	$ (4,081)	$ (6,026)	$ (22,085)	$ 16,412	$ 11,818	$ 11,753	$ (9,055)
Income (loss) per common share:								
Basic:								
Continuing operations	$ (0.26)	$ (0.11)	$ (0.16)	$ (0.57)	$ 0.43	$ 0.29	$ 0.20	$ (0.22)
Discontinued operations	—	—	—	—	—	0.02	0.10	(0.01)
Income (loss)	$ (0.26)	$ (0.11)	$ (0.16)	$ (0.57)	$ 0.43	$ 0.31	$ 0.30	$ (0.23)
Diluted :								
Continuing operations	$ (0.26)	$ (0.11)	$ (0.16)	$ (0.57)	$ 0.42	$ 0.28	$ 0.20	$ (0.22)
Discontinued operations	—	—	—	—	—	0.02	0.10	(0.01)
Income (loss)	$ (0.26)	$ (0.11)	$ (0.16)	$ (0.57)	$ 0.42	$ 0.30	$ 0.30	$ (0.23)
Weighted average shares outstanding:								
Basic	38,716	38,764	38,841	38,904	38,261	38,370	38,577	38,698
Diluted	38,716	38,764	38,841	38,904	38,863	38,988	39,169	38,698

A variety of factors influence the level of our net sales in a particular quarter including economic conditions in the LED, solar, data storage and semiconductor industries, the timing of significant orders, shipment delays, specific feature requests by customers, the introduction of new products by us and our competitors, production and quality problems, changes in material costs, disruption in sources of supply, seasonal patterns of capital spending by customers, interpretation and application of accounting principles, and other factors, many of which are beyond our control. In addition, we derive a substantial portion of our revenues from the sale of products with a selling price of up to $8.0 million. As a result, the timing of recognition of revenue from a single transaction could have a significant impact on our net sales and operating results in any given quarter.

Synos Acquisition

On October 1, 2013 (“the Acquisition Date”), Veeco acquired 100% of the outstanding common shares and voting interest of Synos. The results of Synos’ operations have been included in the consolidated financial statements since that date. Synos is an early stage manufacturer of fast array scanning atomic layer deposition (“FAST-ALD”) tools for OLED and other applications. As a result of the acquisition, the Company has entered the FAST-ALD market which is complimentary to the Company’s MOCVD LED offerings.

Metrology Divestiture

On August 15, 2010, we signed a definitive agreement to sell our Metrology business to Bruker comprising our entire Metrology reporting segment for $229.4 million. Accordingly, Metrology’s operating results are accounted for as discontinued operations in determining the consolidated results of operations. The sale transaction closed on October 7, 2010, except for assets located in China due to local restrictions. Total proceeds, which included a working capital adjustment of $1 million, totaled $230.4 million of which $7.2 million relates to the assets in China. As part of our agreement with Bruker,

Veeco Instruments Inc. and Subsidiaries
Notes to Consolidated Financial Statements (continued)
December 31, 2013

$22.9 million of proceeds was held in escrow and was restricted from use for one year following the closing date of the transaction to secure certain specified losses arising out of breaches of representations, warranties and covenants we made in the stock purchase agreement and related documents. The restriction relating to the escrowed proceeds was released on October 6, 2011. As part of the sale we incurred transaction costs, which consisted of investment banking fees and legal fees, totaling $5.2 million. During the fourth quarter of 2010, we recognized a pre-tax gain on disposal of $156.3 million and a pre-tax deferred gain of $5.4 million related to the assets in China. We recognized into income the pre-tax deferred gain of $5.4 million during the third quarter of 2012 related to the completion of the sale of the assets in China to Bruker.

Other Quarterly Items

During the fourth quarter of 2013, we recorded asset impairment charges in LED & Solar of $0.9 million related to certain tools previously used in our laboratories carried in property, plant and equipment which we are holding for sale and $0.3 million related to another asset carried in other assets. During the fourth quarter of 2012, we recorded an asset impairment charge of $1.3 million related to a particular asset in our Data Storage segment.

During 2012, we took measures to improve profitability, including a reduction in discretionary expenses, realignment of our senior management team and consolidation of certain sales, business and administrative functions. As a result of these actions, we recorded a $3.8 million restructuring charge consisting of $3.0 million in personnel severance and related costs, $0.4 million in equity compensation and related costs and $0.4 million in other severance costs resulting from a headcount reduction of 52 employees. We recorded $2.0 million of these charges in the third quarter of 2012 and $1.8 million of these charges in the fourth quarter of 2012 with the balance recorded in the first quarter of 2012.

As a result of the delay in filing our Form 10-Q for September 30, 2012 (“Q3 10-Q”), we were required to evaluate the impact of events and circumstances occurring through the date of the filing of the Q3 10-Q. After considering declines in systems shipments and parts usage occurring though the date of the filing of the Q3 10-Q, we determined that an increase in our reserve for slow moving and obsolete inventory was warranted and resulted in us recording a total charge of $7.2 million to cost of sales in the third quarter of 2012. The evaluation resulted in relatively lower provisions for inventory reserves over the first three quarters of 2013. We recorded a $1.8 million charge to cost of sales for inventory write downs in the fourth quarter of 2012 that related to a terminated program. The effect on the comparative statements above was to reduce gross profit for September 30, 2012 compared to all other periods presented.

Out of Period Adjustment

We identified net cumulative errors which overstated cumulative net income from continuing operations through December 31, 2011 by $0.6 million and net cumulative errors that understated net income from continuing operations in the six month period ended June 30, 2012 by $1.1 million. As a result, in the third quarter of 2012, we recorded adjustments to correct all prior periods resulting in an increase in income from continuing operations of $0.5 million.

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Schedule II—Valuation and Qualifying Accounts (*in thousands*)

COL. A	COL. B	COL. C		COL. D	COL. E
		Additions			
Description	Balance at Beginning of Period	Charged to Costs and Expenses	Charged to Other Accounts	Deductions	Balance at End of Period
Deducted from asset accounts:					
Year ended December 31, 2013					
Allowance for doubtful accounts	$ 492	$ 1,946	$ —	$ —	$ 2,438
Valuation allowance in net deferred tax assets	4,708	2,420	625	—	7,753
	$ 5,200	$ 4,366	$ 625	$ —	$ 10,191
Year ended December 31, 2012					
Allowance for doubtful accounts	$ 468	$ 198	$ —	$ (174)	$ 492
Valuation allowance in net deferred tax assets	1,765	2,943	—	—	4,708
	$ 2,233	$ 3,141	$ —	$ (174)	$ 5,200
Year ended December 31, 2011					
Allowance for doubtful accounts	$ 512	$ —	$ —	$ (44)	$ 468
Valuation allowance in net deferred tax assets	1,644	—	—	121	1,765
	$ 2,156	$ —	$ —	$ 77	$ 2,233

Exhibit 2.1

EXECUTION COPY

Agreement and Plan of Merger

by and among

VEECO INSTRUMENTS INC.

VEECO WYOMING INC.,

SYNOS TECHNOLOGY, INC.,

ILSONG LEE

SANG-IN LEE

DANIEL C. RUBIN

and

SHAREHOLDER REPRESENTATIVE SERVICES,
as Stockholders' Representative

September 18, 2013

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AGREEMENT AND PLAN OF MERGER

THIS AGREEMENT AND PLAN OF MERGER (this " Agreement ") is entered into as of this 18 day of September, 2013, by and among (i) Veeco Instruments Inc., a Delaware corporation (" Parent "), (ii) Veeco Wyoming Inc., a Delaware corporation and a (directly or indirectly) wholly-owned subsidiary of Parent (" Merger Sub "), (iii) Synos Technology, Inc., a Delaware corporation (the " Company "), (iv) Ilsong Lee, Sang-In Lee and Daniel C. Rubin (each a " Significant Stockholder " and collectively the " Significant Stockholders ") and (v) Shareholder Representative Services LLC, a Colorado limited liability company solely in its capacity as Stockholders' Representative (as defined herein). Parent, Merger Sub, the Company, the Significant Stockholders and the Stockholders' Representative are referred to herein individually as a " Party " and collectively as the " Parties ." Capitalized terms used and not otherwise defined herein have the meanings given to such terms as set forth in Appendix A hereto.

WHEREAS , the respective Boards of Directors of Merger Sub and the Company deem it advisable and in the best interests of such corporations and their respective stockholders that Merger Sub be merged with and into the Company with the Company being the surviving corporation (the " Merger "), upon the terms and subject to the conditions set forth in this Agreement;

WHEREAS , such Boards of Directors have approved the Merger, pursuant to which among other things, and subject to the terms and conditions of this Agreement, all of the issued and outstanding capital stock of the Company and all options, warrants and other rights to acquire or receive any shares of capital stock of the Company shall be converted into the right to receive the Merger Consideration set forth herein;

WHEREAS , concurrently with the execution and delivery of this Agreement, and as a material inducement to Parent and Merger Sub to enter into this Agreement, (i) each of the employees identified on Appendix B-1 (the " Key Signing Employees ") shall have entered into an employment arrangement with Parent or a subsidiary thereof to be effective as of the Closing Date (as defined below) pursuant to his or her execution of an offer letter, a non-disclosure agreement and a non-competition and non-solicitation agreement in forms provided to the Company by Parent (such offer letters and agreements, the " Key Employee Agreements "), (ii) each of the stakeholders of the Company identified on Appendix B-2 shall have entered into a non-competition and non-solicitation agreement in forms provided to the Company by Parent (such agreements, the " Key Stakeholder Agreements "), and (iii) each Person who may receive any payments and/or benefits referred to in Section 6.12(e) hereof has executed and delivered to the Company a 280G Waiver, substantially in the form attached hereto as Exhibit A (a " 280G Waiver ");

WHEREAS , approval of the principal terms of the Merger requires the Requisite Vote, and immediately after the execution and delivery hereof, the Company shall submit this Agreement and the Merger to the Stockholders for approval by written consent in lieu of a special meeting of the Stockholders pursuant to the applicable provisions of the DGCL; and

WHEREAS , the Company, on the one hand, and Parent and Merger Sub, on the other hand, desire to make certain representations, warranties, covenants and other agreements in connection with the Merger and also to prescribe various conditions to the Merger.

NOW, THEREFORE , in consideration of the premises and the mutual promises herein made, and in consideration of the representations, warranties, and covenants herein contained, the Parties agree as follows:

ARTICLE I
THE MERGER

1.1 The Merger . At the Effective Time (as defined in Section 1.2) and subject to and upon the terms and conditions of this Agreement and the DGCL, (i) Merger Sub shall merge with and into the Company, and the separate corporate existence of Merger Sub shall thereupon cease, (ii) the Company shall be the surviving corporation in the Merger (sometimes hereinafter referred to as the " Surviving Corporation ") and shall continue to be governed by the DGCL as a (directly or indirectly) wholly owned subsidiary of Parent, and (iii) the separate existence of the Company with all of its assets, property rights, privileges, immunities, powers and franchises shall continue unaffected by the Merger.

1.2 Effective Time . As promptly as practicable after the satisfaction or waiver of the conditions set forth in Articles VII and VIII (other than those conditions that by their nature are to be satisfied at the Closing, but subject to the satisfaction or waiver of such conditions), but no earlier than October 1, 2013, the Parties hereto shall cause the Merger to be consummated by (i) filing a certificate of merger (the " Certificate of Merger ") in such form as is required by, and executed in accordance with, the relevant provisions of the DGCL, which Certificate of Merger shall be substantially in the form attached hereto as Exhibit B , and (ii) making such other filings and taking such other actions as may be required by Law to make the Merger effective hereinafter. The Merger shall become effective at such date and time as the Certificate of Merger is accepted for filing by with the Secretary of State of the State of Delaware or at such later date and time as may be permitted or required by the DGCL and specified in the Certificate of Merger by mutual agreement of Parent, Merger Sub and the Company (the date and time the Merger becomes effective being the " Effective Time ").

1.3 Effect of the Merger . At the Effective Time, the effect of the Merger shall be as provided in this Agreement, in the Certificate of Merger and in the applicable provisions of the DGCL. Without limiting the generality of the foregoing, and subject thereto, at the Effective Time all the assets, property, rights, privileges, immunities, powers and franchises of each of the Company and Merger Sub shall vest in the Surviving Corporation, and all debts, liabilities and duties of each of the Company and Merger Sub shall become the debts, liabilities and duties of the Surviving Corporation.

1.4 Certificate of Incorporation; Bylaws . At the Effective Time and without any further action on the part of the Parties, (i) the certificate of incorporation of the Merger Sub shall be amended so as to be in the form attached hereto as Exhibit C and (ii) the bylaws of the Merger Sub in effect immediately prior to the Effective Time shall be the bylaws of the Surviving Corporation, until thereafter amended or repealed in accordance with their terms, as provided, in the Surviving Corporation's certificate of incorporation and as provided by Law.

1.5 Directors and Officers . The directors of Merger Sub immediately prior to the Effective Time shall be the initial directors of the Surviving Corporation, each to hold office in accordance with the Articles of Incorporation and the Bylaws of the Surviving Corporation until their respective successors are duly elected or appointed and qualified or until their earlier death, resignation or removal in accordance with the certificate of incorporation and bylaws of the Surviving Corporation. The officers of Merger Sub immediately prior to the Effective Time shall be the initial officers of the Surviving Corporation.

1.6 Effect of Merger on Capital Stock .

(a) The aggregate maximum consideration (the " Merger Consideration ") to be paid in exchange for the acquisition by Parent and Merger Sub of all outstanding Company Stock and all outstanding unexpired and unexercised options that have vested prior to Closing or that will vest in connection with Closing, warrants or other rights to acquire or receive any vested Company Stock, if any, and for the other covenants of the Company provided in this Agreement shall be, subject to adjustment as provided herein, an amount equal to (i) the Closing Amount, plus (ii) the Initial Order Cash Consideration (if any), plus (iii) the Performance Amount (if any), plus (iv) such portion of the Escrow Amount (if any) actually distributed to the Participating Holders pursuant to the terms herein, plus (v) the Post-Closing Adjustment (if any) payable to the Participating Holders pursuant to the terms herein. For the avoidance of doubt and notwithstanding anything herein to the contrary, the Payments Administrator shall not be responsible for processing any payments to be made at Closing, including without limitation the Closing Amount, but shall only be responsible for processing the post-closing payments expressly ascribed to it hereunder (which in no event shall include any amounts subject to wage or payroll tax withholding).

(b) Subject to the terms and conditions of this Agreement, at the Effective Time, by virtue of the Merger and without any action on the part of Parent, Merger Sub, the holder of any shares of Company Stock or Merger Sub Common Stock, each share of Company Stock (excluding any Restricted Shares to be exchanged pursuant to Section 1.9(c)) issued and outstanding immediately prior to the Effective Time shall automatically cease to be outstanding and shall be canceled and retired and shall cease to exist and will be converted automatically following the surrender of the certificate representing such shares of Company Stock in the manner provided in Section 1.14, into the right to receive, that portion, if any, of the Merger Consideration, without interest, as set forth below:

(i) each share of Series A Preferred Stock issued and outstanding immediately prior to the Effective Time (excluding any shares of Series A Preferred Stock to be canceled pursuant to Section 1.6(b)(iii) and any Dissenting Shares as defined in and to the extent provided in Section 1.15) shall be canceled and converted automatically into the right to receive (A) an amount in cash, without interest, equal to the Series A Per Share Closing Amount, plus (B) the contingent right to receive, in accordance with Section 1.7 hereof, an amount equal to the Pro Rata Initial Order Cash Consideration (if any), plus (C) the contingent right to receive, in accordance with Section 1.8 hereof, an amount equal to the Pro Rata Performance Amount (if any), plus (D) an amount in cash, without interest, equal to the product of (x) the Pro Rata Share multiplied by (y) any proceeds or distributions of the Escrow Amount (if, when and to the extent distributed to the Participating Holders pursuant to the terms herein), plus (E) an amount in cash, without interest, equal to the product of (x) the Pro Rata Share multiplied by (y) the Post-Closing Adjustment (if, when and to the extent distributed to the Participating Holders pursuant to the terms herein); provided , however , that, notwithstanding anything in this Agreement to the contrary, upon allocation of Merger Consideration (including, for the avoidance of doubt, the Pro Rata Share of the Escrow Amount and Post-Closing Adjustment, as applicable, initially allocable to each share of Series A Preferred Stock, whether or not actually distributed to the Participating Holders) in the aggregate equal to $21.00 per share of Series A Preferred Stock, no holder of shares of Series A Preferred Stock may receive any further distributions of Merger Consideration in respect of such shares; provided , further , that any funds that remain undistributed following application of the immediately preceding proviso (the " Series A Overflow Funds " and together with the Warrant Overflow Funds, the " Overflow Funds ") shall be distributed in accordance with Section 1.6(b)(ii) below.

(ii) each share of Company Common Stock issued and outstanding immediately prior to the Effective Time (excluding any shares of Company Common Stock to be canceled pursuant to Section 1.6(b)(iii) and any Dissenting Shares as defined in and to the extent provided in Section 1.16) shall be canceled and converted automatically into the right to receive: (A) an amount in cash, without interest, equal to the Common Per Share Closing Amount, plus (B) the contingent right to receive, in accordance with Section 1.7 hereof, an amount equal to the Pro Rata Initial Order Cash Consideration (if any), plus (C) the contingent right to receive, in accordance with Section 1.8 hereof, an amount equal to the Pro Rata Performance Amount (if any), plus (D) an amount in cash, without interest, equal to the product of (x) the Pro Rata Share multiplied by (y) any proceeds or distributions of the

Escrow Amount (if, when and to the extent distributed to the Stockholders pursuant to the terms herein), plus (E) an amount in cash, without interest, equal to the product of (x) the Pro Rata Share multiplied by (y) the Post-Closing Adjustment (if, when and to the extent distributed to the Participating Holders pursuant to the terms herein), plus (F) an amount in cash, without interest, equal to the product of (x) the Capped Pro Rata Share multiplied by (y) the amount of the Overflow Funds;

(iii) each share of Company Stock, if any, held by the Company as treasury stock immediately prior to the Effective Time, shall be canceled and extinguished without any conversion thereof, and no payment or distribution shall be made with respect thereto;

(iv) each share of Merger Sub Common Stock issued and outstanding immediately prior to the Effective Time shall be automatically converted into one (1) validly issued, fully paid and nonassessable share of common stock, $0.01 par value per share, of the Surviving Corporation, and all of such shares, as converted, shall thereafter constitute all of the issued and outstanding capital stock of the Surviving Corporation; and

(v) each share certificate of Merger Sub evidencing ownership of any shares of Merger Sub Common Stock shall continue to evidence ownership of such shares of capital stock of the Surviving Corporation; and

(vi) each share of Company Stock converted pursuant to clauses (i) and (ii) of this Section 1.6(b) shall automatically cease to be outstanding and shall be canceled and retired and shall cease to exist and each holder of a certificate representing any such share of Company Stock shall cease to have any rights with respect thereto, except the right to receive such holder's respective portion of the Merger Consideration and all payments pursuant to this Section 1.6 shall be made in accordance with the Certificate of Incorporation.

1.7 Initial Order Cash Consideration.

(a) Subject to the terms and conditions of this Agreement, each Participating Holder shall be eligible to receive Initial Order Cash Consideration (as defined below), if and only to the extent earned, as set out in this Section 1.7.

(b) Subject to Section 1.7(c), the amount of the Initial Order Cash Consideration that may become payable shall be equal to (i) Five Million Dollars ($5,000,000), upon receipt by the Company, Parent or any of their respective Affiliates of the first Purchase Order on or before December 31, 2013 for a single-chamber pilot 6G/H tool; provided that such portion of Initial Order Cash Consideration shall be payable on the Closing Date if such Purchase Order is received by the Company prior to the Closing Date, (ii) Seventeen Million Five Hundred Thousand Dollars ($17,500,000), upon receipt by the Company, Parent or any of their respective Affiliates of one or more Purchase Orders (for the avoidance of doubt, not to include the single-chamber pilot 6G/H tool that would qualify for payment under Section 1.7(b)(i) hereof) on or before March 31, 2014 for an aggregate of five (5) production chambers, and (iii) Seventeen Million Five Hundred Thousand Dollars ($17,500,000), upon receipt of one or more Purchase Orders on or before March 31, 2014 for an aggregate of five (5) production chambers in addition to those production chambers described in Section 1.7(b)(ii) (each such amounts, if any, the "Initial Order Cash Consideration"). Notwithstanding the foregoing, each payment of Initial Order Cash Consideration shall be reduced by an amount equal to the aggregate Purchase Order Bonus Amount (as defined in the Retention Plan) payable in connection with such payment to all Participants pursuant to the Retention Plan.

(c) If any Purchase Order referenced in Section 1.7(b):

(i) provides for a prepayment or a deposit by the Person submitting such Purchase Order of an amount greater than or equal to thirty percent (30%) of the aggregate amount payable to the Company, Parent or any of their respective Affiliates in respect of the chambers specified in such Purchase Order, Parent shall distribute to the Payments Administrator for further distribution to the Participating Holders the applicable Initial Order Cash Consideration payable by Parent in respect of such Purchase Order in accordance with Section 1.7(d) no later than five (5) business days after receipt by the Company, Parent or any of their respective Affiliates of such Purchase Order; or

(ii) provides for no prepayment or deposit or a prepayment or deposit by the Person submitting such Purchase Order of an amount less than thirty percent (30%) of the aggregate amount payable to the Company, Parent or any of their respective Affiliates in respect of the chambers specified in such Purchase Order, Parent shall distribute to the Payments Administrator for further distribution to the Participating Holders the applicable Initial Order Cash Consideration payable by Parent in respect of such Purchase Order in accordance with Section 1.7(d) no later than five (5) business days after the Company, Parent or any of their respective Affiliates is permitted under the terms of such Purchase Order to submit an invoice with respect to the shipment in full to the customer of the chambers specified in such Purchase Order.

(d) Within five (5) business days after receipt of such Purchase Order or ability to submit an invoice with respect to such Purchase Order, as applicable, in each case, subject to the payment provisions in Section 1.9, Parent shall deposit, in each case in accordance with an Allocation Certificate received by Parent with respect to such payment, (i) with the Payments Administrator an amount of cash equal to the portion of the Initial Order Cash Consideration payable to Participating Holders for whom the payment of such Initial Order Cash Consideration is not subject to wage or payroll tax withholding; and (ii) with the Surviving Corporation’s (or other Affiliate’s) payroll agent an amount of cash equal to the Initial Order Cash Consideration payable to the Participants and to Participating Holders for whom the payment of Initial Order Cash Consideration is subject to wage or payroll tax withholding; provided, that to the extent any such payment of Initial Order Cash Consideration is payable on the Closing Date pursuant to Section 1.7(b), Parent shall make such payments directly to the Participating Holders in accordance with an Allocation Certificate to be provided by the Company to Parent (with a copy to the Stockholders’ Representative).

1.8 Performance Payment.

(a) Subject to the terms and conditions of this Agreement, each Participating Holder shall be eligible to receive Performance Payment (as defined below), if and only to the extent earned, as set out in this Section 1.8.

(b) The amount of the Performance Payment that may become payable shall be equal to the sum of (i) “Earn-Out Cash Consideration” calculated as follows: (A) the amount, if any, by which the Company Revenue for the twelve month period beginning January 1, 2014 and ending December 31, 2014 (the “Performance Period”) exceeds Seventy Five Million Dollars ($75,000,000) multiplied by (B) the Applicable Percentage, provided, however, that in no event shall the Earn-Out Cash Consideration be greater than Sixty Five Million Dollars ($65,000,000), plus (ii) “Bonus Earn-Out Cash Consideration” in the amount of an additional Ten Million Dollars ($10,000,000), only if Company Revenue during the Performance Period exceeds Two Hundred Million ($200,000,000) (any amount of Bonus Earn-Out Cash Consideration and Earn-Out Cash Consideration, together, the “Performance Payment”). Notwithstanding the foregoing, the Performance Payment shall be reduced by an amount equal to the aggregate Earn-Out Bonus Amount (as defined in the Retention Plan) payable to all Participants pursuant to the Retention Plan.

(c) Definitions:

(i) The " Applicable Percentage " shall be equal to (A) 0% if the Company Gross Margin for the Performance Period is less than or equal to 31.0%, (B) 100% if the Company Gross Margin for the Performance Period is greater than or equal to 36.0%, and (C) for all values of the Company Gross Margin for the Performance Period greater than 31.0% and less than 36.0%, the quotient obtained by dividing (1) the difference between the Company Gross Margin for the Performance Period and 31.0% by (2) 5%.

(ii) " Company Gross Margin " shall mean Company Revenue less cost of goods sold (defined as materials, warranty expense, test, installation and direct manufacturing costs (excluding non-direct allocated charges)). For the avoidance of doubt, cost of goods sold for purposes of determining Company Gross Margin shall include the allocation of Parent-supplied resources working directly with the divisional management.

(iii) " Company Revenue " shall mean revenue calculated in accordance with Parent's revenue recognition policy (as reported in Parent's 10K filed with the Securities and Exchange Commission on February 22, 2012), plus any deferred revenue as of December 31, 2014 for shipments that were made and invoiced in calendar year 2014 in accordance with the terms of the purchase orders evidencing such shipments.

(d) Beginning with the calendar quarter ending March 31, 2014 through the calendar quarter ending September 30, 2014, within thirty (30) days following the end of each quarter Parent shall provide to the Stockholders' Representative quarterly written reports indicating the Company Gross Margin and the Company Revenue for such quarter (the " Quarterly Reports "). Within thirty (30) days after receipt of a Quarterly Report, if the Stockholders' Representative requests a meeting with representatives of Parent to discuss such report, Parent shall make available for such a meeting those of its executive officers who are responsible for the applicable activities set forth in such Quarterly Report. On or before February 15, 2015, the Parent shall cause to be prepared a statement (the " Performance Statement ") that shall set forth the amount of the Performance Payment, if any, and the calculation thereof, including the Company Gross Margin and the Company Revenue, in each case for the Performance Period, and shall deliver such Performance Statement to the Stockholders' Representative.

(e) If the Stockholders' Representative disputes any amount set forth in the Performance Statement, the Stockholders' Representative will notify Parent in writing of any disagreement the Stockholders' Representative has with the Performance Statement within thirty (30) days of receipt of the Performance Statement. Any such notification shall specify in reasonable detail those items, components, amounts or calculations as to which the Stockholders' Representative disagrees. In the event that the Stockholders' Representative does not notify Parent of such disagreement during such thirty (30) day period or if Parent receives a written notice from the Stockholders' Representative irrevocably accepting the calculation of the Performance Payment set forth in the Performance Statement, the Performance Statement shall be deemed accepted by the Stockholders' Representative and shall be final and binding on all Parties and the Participating Holders shall have no further rights to disagree therewith, and within five (5) business days after such acceptance, subject to the payment provisions in Section 1.9 in the case of payments to holders of Company Options, Parent shall deposit by wire transfer in immediately available funds, pursuant to an Allocation Certificate received by Parent with respect to such payment: (i) with the Payments Administrator an amount of cash equal to the portion of the Performance Payment payable to Participating Holders for whom the payment of the Performance Payment is not subject to wage or payroll tax withholding; and (ii) with the Surviving Corporation's (or other Affiliate's) payroll agent an amount of cash equal to the portion of the Performance Payment payable to the Participants and to Participating Holders for whom the payment of the Performance Payment is subject to wage or payroll tax withholding.

(f) In the event that the Stockholders' Representative shall notify Parent of any disagreement the Stockholders' Representative has with the Performance Statement pursuant to Section 1.8(e), then within a further period of ten (10) days from the date Parent receives such dispute notice from the Stockholders' Representative, the Parties will attempt to resolve in good faith any disputed items and such resolution and any required adjustments resulting therefrom shall be final and binding on the Parties. In the event that Parent and the Stockholders' Representative shall be unable to agree upon a joint determination of the Performance Statement within ten (10) days from the date Parent receives such dispute notice from the Stockholders' Representative, then within five (5) days after the expiration of such ten (10) day period, Parent and the Stockholders' Representative shall submit the dispute to the Accounting Firm. Parent and the Stockholders' Representative shall request that the Accounting Firm render its determination prior to the expiration of thirty (30) days after the dispute is submitted to it, and such determination and any required adjustments resulting therefrom shall be final and binding on all the Parties hereto. The Accounting Firm shall be acting as an arbitrator and not as an auditor and shall decide only those issues as to which the Parties are not in agreement. The fees and expenses of the Accounting Firm shall be allocated to be paid by Parent and/or the Stockholders' Representative (on behalf of the Participating Holders), respectively, based upon the percentage which the portion of the total amount contested and not awarded to such party bears to the total amount contested, as determined by the Accounting Firm.

(g) Parent shall maintain a system of accounting records which allows Parent to calculate Company Gross Margin and Company Revenue and notwithstanding any integration of the Company's operations with and into Parent, its current and/or future Affiliates and their respective operations or any reorganization or other transaction or series of transactions effected by Parent after the Closing. Nothing in this Agreement creates a fiduciary duty on the part of Parent or any of Parent's Affiliates to any Stockholder in respect of the Performance Payment.

(h) From the Closing Date until December 31, 2014, Parent shall, and shall cause the Surviving Corporation and their respective Affiliates (i) not to remove Key Employees from the Surviving Corporation (except in the case of a termination for Cause), (ii) not to impose allocated corporate spend (provided however, this shall not prohibit charges for the actual expenses of Parent-supplied resources working directly with the divisional management) and (iii) operate the Surviving Corporation in a commercially reasonable manner and shall not take any action to intentionally reduce or hinder the achievement of any Initial Order Cash Consideration or Performance Payment.

(i) Notwithstanding anything to the contrary in this Agreement, in the event that on or prior to December 31, 2014, (i) a Change of Control of Parent or the Surviving Corporation occurs; (ii) Parent or the Surviving Corporation commences any proceeding in bankruptcy or for dissolution, liquidation, winding-up, or other relief under state or federal bankruptcy laws (a "Bankruptcy Proceeding"); (iii) a Bankruptcy Proceeding is commenced against Parent or the Surviving Corporation, or a receiver or trustee is appointed for Parent or the Surviving Corporation or a substantial part of their respective property, and such proceeding or appointment is not dismissed or discharged within sixty (60) days after its commencement; (iv) Parent or the Surviving Corporation is unable to, or admits in writing its inability to, pay its debts when they become due; (v) Parent or the Surviving Corporation makes an assignment for the benefit of creditors, or petitions or applies to any tribunal for the appointment of a custodian, receiver or trustee for it or a substantial portion of its assets or has a receiver, custodian or trustee appointed for all or a substantial portion of its assets, or (vi) Parent or the Surviving Corporation takes any action effectuating, approving or consenting to any of the foregoing, then in each case, 100% of the unpaid Initial Order Cash Consideration and Performance Payments shall become due and payable immediately upon the occurrence of any such event, to the extent not previously paid. "Change of Control" shall mean (i) a merger or consolidation of Parent or the Surviving Corporation into or with any Person in a transaction or series of related transactions that results in more than 50% of the voting securities of Parent, the Surviving Corporation or the surviving, resulting or parent entity in such transaction or series of related transactions that are outstanding immediately after the consummation thereof being beneficially owned by Persons other than those Persons that (individually or collectively) beneficially owned such voting securities of Parent or the Surviving Corporation, as applicable, immediately prior to the consummation thereof; or (ii) a sale or other disposition of a material amount of the assets or voting securities of Parent or the Surviving Corporation.

1.9 Stock Options and Restricted Shares .

(a) The Company shall take all actions necessary to provide that at the Effective Time each Company Option that has vested prior to Closing or that will vest in connection with Closing and that is outstanding, unexercised and unexpired immediately prior to the Effective Time shall be cancelled and converted into and represent the right to receive: (A) an amount in cash, without interest, equal to the Common Per Share Closing Amount, minus the exercise price per share attributable to such Company Option, plus (B) the contingent right to receive, in accordance with Section 1.7 hereof, an amount equal to the Pro Rata Initial Order Cash Consideration (if any), plus (C) the contingent right to receive, in accordance with Section 1.8 hereof, an amount equal to the Pro Rata Performance Amount (if any) plus (D) an amount in cash, without interest, equal to the product of (x) the Pro Rata Share multiplied by (y) any proceeds or distributions of the Escrow Amount (if, when and to the extent distributed to the Participating Holders pursuant to the terms herein), plus (E) an amount in cash, without interest, equal to the product of (x) the Pro Rata Share multiplied by (y) the Post-Closing Adjustment (if, when and to the extent distributed to the Participating Holders pursuant to the terms herein), plus (F) an amount in cash, without interest, equal to the product of (x) the Capped Pro Rata Share multiplied by (y) the amount of the Overflow Funds; provided , that , if the exercise price per share attributable to such Company Option is equal to or greater than the maximum amount that could be paid pursuant to (A), (B), (C) and (D) above with respect to such Company Option, such Company Option shall be canceled without any cash payment being made in respect thereof and without any right to receive any payment pursuant to clauses (B), (C) or (D) above. All payments made pursuant to clauses (B), (C), (D), (E) or (F) above will be made in compliance with Section 409A of the Code.

(b) At the Effective Time, all restrictions with respect to Company Common Stock granted under a Company Stock Plan that is outstanding immediately prior to the Effective Time (the " Restricted Shares ") shall lapse and the Restricted Shares shall be fully vested automatically and without any action on the part of the holder thereof, and the holder thereof shall be treated as a holder of Company Common Stock for purposes of this Agreement, including Section 1.6.

(c) At the Effective Time, all Company Options and Restricted Shares, whether or not vested or exercisable, shall no longer be outstanding and shall automatically cease to exist, and each holder of a Company Option and Restricted Share shall cease to have any rights with respect thereto, except the right to receive the consideration specified in this Section 1.9.

(d) Prior to the Effective Time, the Company will take all action necessary to effect the provisions of this Section 1.9, including, but not limited to, adopting all resolutions, giving all notices, obtaining consents from each holder of Company Options and Restricted Shares and taking any other actions which are necessary or appropriate to effectuate the transactions contemplated by this Section 1.9. Any notices, consents or other communications to holders of Company Options and Restricted Shares will be subject to the review and approval of Parent. Any amount paid pursuant to this Section 1.9 shall be subject to any applicable Taxes required to be withheld with respect to such payment, and any such payments to employees or former employees of the Company or any of the Company's Subsidiaries that constitute "wages" or other compensation for services for which any Tax withholding is required shall be processed through the Company's or such Subsidiary's payroll processing service or system.

1.10 Warrants. The Company shall take all actions necessary to provide that at the Effective Time each Series A Warrant that is outstanding, unexercised and unexpired immediately prior to the Effective Time, shall be accelerated in full, cancelled and converted into and represent the right to receive (A) an amount in cash, without interest, equal to the Series A Per Share Closing Amount, minus the exercise price per share attributable to such Series A Warrant, plus (B) the contingent right to receive, in accordance with Section 1.7 hereof, an amount equal to the Pro Rata Initial Order Cash Consideration (if any), plus (C) the contingent right to receive, in accordance with Section 1.8 hereof, an amount equal to the Pro Rata Performance Amount (if any), plus (D) an amount in cash, without interest, equal to the product of (x) the Pro Rata Share multiplied by (y) any proceeds or distributions of the Escrow Amount (if, when and to the extent distributed to the Participating Holders pursuant to the terms herein), plus (E) an amount in cash, without interest, equal to the product of (x) the Pro Rata Share multiplied by (y) the Post-Closing Adjustment (if, when and to the extent distributed to the Participating Holders pursuant to the terms herein); provided, however, that, notwithstanding anything in this Agreement to the contrary, upon allocation of Merger Consideration (including, for the avoidance of doubt, the Pro Rata Share of the Escrow Amount and the Post-Closing Adjustment, as applicable, initially allocable to each share of Series A Preferred Stock for which such Series A Warrant shall be deemed to be exercised, whether or not actually distributed to the Participating Holders) in the aggregate equal to $21.00 per share of Series A Preferred Stock for which such Series A Warrant shall be deemed to be exercised, no holder of shares of Series A Preferred Stock may receive any further distributions in respect of such shares (the "Warrant Overflow Funds"); provided, further, that any Warrant Overflow Funds resulting from the application of the immediately preceding proviso shall be distributed in accordance with Section 1.6(b)(ii) above. Any amount paid pursuant to this Section 1.10 in respect of Series A Warrants shall be subject to any applicable Taxes required to be withheld with respect to such payment.

1.11 Escrow.

(a) On or prior to the Closing Date, the Stockholders' Representative, the Parent and Branch Banking and Trust Company (the "Escrow Agent") shall enter into an escrow agreement in substantially the form attached hereto as Exhibit D (the "Escrow Agreement").

(b) Parent shall withhold Seven Million Dollars ($7,000,000) (the "Initial Escrow Amount") from the Merger Consideration to be paid at Closing and deposit such amount into escrow pursuant to the terms of the Escrow Agreement.

(c) Parent shall withhold an amount up to ten percent (10%) of any Initial Order Cash Consideration or Performance Payment that may become payable (the "Additional Escrowed Funds") and deposit such amounts in to escrow pursuant to the terms of the Escrow Agreement such that, when added to the Initial Escrow Amount, such amounts bring the total funds deposited into escrow to a total of Nine Million Two Hundred Fifty Thousand Dollars ($9,250,000) (the "Escrow Amount").

(d) The Escrow Amount shall be deposited in an interest-bearing escrow account, pursuant to the terms of the Escrow Agreement. Pursuant to and subject to the terms and conditions of the Escrow Agreement, the Escrow Amount shall be held in escrow until receipt by the Escrow Agent of joint written instructions from the Parent and the Stockholders' Representative (directing the Escrow Agent to release funds either to Parent or to the Payments Administrator for further distribution to the Participating Holders) or as otherwise provided in the Escrow Agreement. Pursuant to and subject to the terms and conditions of the Escrow Agreement, the Escrow Amount shall be held in escrow until the date that is twelve (12) months after the Closing Date.

(e) Notwithstanding any provisions of this Agreement to the contrary, (i) the Parent shall be treated for income Tax purposes as the beneficial owner of the Escrow Amount and all earnings thereon until such time as any such funds are distributed pursuant to the Escrow Agreement, and (ii) until distributed, such funds shall secure the payment of (a) the purchase price adjustments, if any, pursuant to Section 1.12 and (b) the indemnity obligations of the Participating Holders pursuant to ARTICLE IX.

1.12 Adjustments to Merger Consideration .

(a) At least three (3) business days prior to the Closing, the Company shall deliver to Parent: (i) the Estimated Balance Sheet; and (ii) the Statement of Estimated Closing Liabilities.

(b) No later than three (3) days prior to the Closing Date, the Company shall provide to Parent (with a copy to the Stockholders' Representative) the following information as of immediately prior to the Effective Time: (i) the names, addresses of each holder (each a " Holder ") of Company Stock, Company Options or Series A Warrants, (ii) the type and number of shares of Company Stock held by each such Holder, (iii) the number of Company Options held by each such Holder, (iv) the number of Company Stock subject to each Series A Warrant held by each such Holder and (v) such other information Parent may reasonably request. No later than two (2) business days prior to the Closing, Parent and the Company shall agree upon a flow of funds memorandum (and provide a copy thereof to the Stockholders' Representative) which shall set forth all payments required to be made by or on behalf of all Parties at the Closing (which shall include, without limitation, provision for the payment of any Indebtedness and any Non-Ordinary Course Liabilities), including for each such payment an identification of the payor, the payee, the amount and the wire transfer information.

1.13 Post-Closing Adjustment .

(a) Within thirty (30) days following the Closing Date, Parent shall furnish the Stockholders' Representative with the Final Balance Sheet and the Statement of Closing Liabilities.

(b) The Stockholders' Representative shall have a period of twenty (20) days after receipt of the Final Balance Sheet to notify Parent of its election to review, at the expense of the Participating Holders, the computations set forth in the Final Balance Sheet and the Statement of Closing Liabilities. Prior to the end of such twenty (20) day period, the Stockholders' Representative shall notify Parent in writing of any disagreement the Stockholders' Representative has with the Final Balance Sheet or the Statement of Closing Liabilities (a " Notice "). Any such Notice shall specify in reasonable detail those items, components, amounts or calculations as to which the Stockholders' Representative disagrees, the Stockholders' Representative's alternative items, components, amounts or calculations and the basis therefor, and attach any relevant supporting documentation. In the event a Notice is not provided to Parent by the Stockholders' Representative during such twenty (20) day period, the Final Balance Sheet and the Statement of Closing Liabilities, and the Post-Closing Adjustment resulting therefrom, shall be deemed accepted by the Stockholders' Representative and final and binding on the Parties hereto and the Participating Holders shall have no further right to disagree therewith. In the event that the Stockholders' Representative shall provide a timely and valid Notice to Parent during such twenty (20) day period, Parent and the Stockholders' Representative shall promptly (and in any event within thirty (30) days following the date upon which the Stockholders' Representative delivers such Notice), attempt to make a joint determination of the Post-Closing Adjustments and such determination and any required adjustments resulting therefrom shall be final and binding on the Parties hereto.

(c) In the event the Stockholders' Representative and Parent shall be unable to agree upon a joint determination of the Post-Closing Adjustments within thirty (30) days after delivery by the Stockholders' Representative of the Notice (or any mutually agreed upon extension of such period), then Parent and the Stockholders' Representative shall promptly submit the dispute to the Accounting Firm to make a final and binding determination of only those items, components, amounts or calculations of Merger Consideration, Final Net Working Capital and Final Closing Liabilities as to which the Stockholders' Representative has disagreed in the Notice validly and timely delivered and continues to disagree. The Accounting Firm shall not assign a value to any item greater than the greatest value for such item claimed by Parent on the Final Balance Sheet or the Stockholders' Representative on the Notice, or less than the smallest value for such item claimed by Parent on the Final Balance Sheet or the Stockholders' Representative on the Notice. The Accounting Firm shall be acting as an arbitrator and not as an auditor and shall decide only those issues as to which the Parties are not in agreement. Parent and the Stockholders' Representative shall request that the Accounting Firm render its determination prior to the expiration of thirty (30) days after the dispute is submitted and such determination and any required adjustments resulting therefrom shall be final and binding on all the Parties hereto. The fees and expenses of the Accounting Firm shall be allocated to be paid by Parent and/or the Stockholders' Representative (on behalf of the Participating Holders), respectively, based upon the percentage which the portion of the total amount contested and not awarded to such party bears to the total amount contested, as determined by the Accounting Firm.

(d) If the Final Net Working Capital as finally determined in accordance with the provisions of this Section 1.13 is less than the Estimated Net Working Capital, then Parent shall have the right to offset the amount thereof against any portion of the Merger Consideration owed to the Participating Holders (as an adjustment to the Merger Consideration), including, without limitation, the Escrow Amount, and any interest accrued thereon. If the Final Net Working Capital as finally determined in accordance with the provisions of this Section 1.13 is greater than the Estimated Net Working Capital, within five (5) business days after such determination, subject to the payment provisions in Section 1.9 in the case of payments to holders of Company Options, Parent shall deposit by wire transfer in immediately available funds, pursuant to an Allocation Certificate received by Parent with respect to such payment: (i) with the Payments Administrator an amount of cash equal to the portion of the amount thereof payable to Participating Holders for whom the payment of such amount is not subject to wage or payroll tax withholding; and (ii) with the Surviving Corporation's (or other Affiliate's) payroll agent an amount of cash equal to the portion of the amount thereof payable to the Participating Holders for whom such payment is subject to wage or payroll tax withholding.

(e) If the Indebtedness and/or the Non-Ordinary Course Liabilities determined pursuant to this Section 1.13 exceed the Indebtedness and/or the Non-Ordinary Course Liabilities, respectively, set forth on the Estimated Closing Balance Sheet, then Parent shall have the right to offset the amount thereof against any portion of the Merger Consideration owed to the Participating Holders (as an adjustment to the Merger Consideration), including, without limitation, the Escrow Amount, and any interest accrued thereon. If the Indebtedness and/or the Non-Ordinary Course Liabilities determined pursuant to this Section 1.13 are less than the Indebtedness and/or the Non-Ordinary Course Liabilities, respectively, set forth on the Estimated Closing Balance Sheet, within five (5) business days after such determination, subject to the payment provisions in Section 1.9 in the case of payments to holders of Company Options, Parent shall deposit by wire transfer in immediately available funds, pursuant to an Allocation Certificate received by Parent with respect to such payment: (i) with the Payments Administrator an amount of cash equal to the portion of the amount of such surplus payable to Participating Holders for whom the payment of such amount is not subject to wage or payroll tax withholding; and (ii) with the Surviving Corporation's (or other Affiliate's) payroll agent an amount of cash equal to the portion of such surplus payable to the Participating Holders for whom such payment is subject to wage or payroll tax withholding.

(f) Parent and the Stockholders' Representative shall effect the *net* result of the adjustments described in Sections 1.13 (d) and (e), which shall be referred to collectively as the " Post-Closing Adjustment ."

1.14 Surrender of Certificates .

(a) Exchange Procedures . If (i) at least three (3) business days prior to the Closing Date Parent has received the following from any Participating Holder: (x) a photocopy or facsimile of each certificate or certificates that immediately prior to the Effective Time represented outstanding shares of Company Stock to be exchanged pursuant to Section 1.6 (the " Certificates ") held by such Participating Holder, if any, (y) a photocopy or facsimile of a letter of transmittal in the form attached hereto as Exhibit E (the " Letter of Transmittal "), duly completed and validly executed in accordance with the instructions thereto, and (z) a photocopy or facsimile of such other documents as may be reasonably required pursuant to the instructions set forth in the Letter of Transmittal, and (ii) in connection with the Closing, Parent receives an original Certificate or Certificates held by such Participating Holder, if any, a duly executed Letter of Transmittal, and such other documents as may be reasonably required pursuant to the instructions in the Letter of Transmittal, then on the Closing Date in accordance with such Letter of Transmittal, Parent shall deliver: (x) to any such Participating Holder for whom the payment of Merger Consideration is not subject to wage or payroll tax withholding in exchange therefor the applicable the Merger Consideration payable at Closing in accordance with the terms hereof; and (y) to the Surviving Corporation's (or other Affiliate's) payroll agent an amount of cash equal to the portion of applicable Merger Consideration payable at the Closing to the Participating Holders for whom such payment is subject to wage or payroll tax withholding, and any Certificate so surrendered shall forthwith be canceled. If Parent has received such materials from any such Participating Holder later than three (3) business days prior to the Closing Date, then Parent shall deliver to such Participating Holder in exchange therefor the applicable Merger Consideration no later than three (3) business days after such receipt or three (3) business days after the date on which such Merger Consideration is otherwise due hereunder in accordance with the terms hereof, whichever is later. No interest shall be paid or accrued on any Merger Consideration. Until so surrendered, each Certificate shall, after the Effective Time, represent for all purposes only the right to receive the applicable Merger Consideration in respect of the shares of Company Stock represented by such Certificate. Any Participating Holder who has not complied with this Agreement shall be entitled to look only to Parent (subject to abandoned property, escheat or other similar Laws) only as a general creditor thereof with respect to the applicable Merger Consideration payable in respect of such shares of Company Stock, without any interest thereon. Parent shall provide the Stockholders' Representative and the Payments Administrator upon reasonable request with (i) a list (updated prior to each post-closing payment) of all Participating Holders that have properly presented all of the above-required transmittal information and documents and are eligible to receive Merger Consideration and (ii) copies of all such transmittal documents (including payment information) and tax documents in Parent's possession.

(b) No Liability . Notwithstanding anything to the contrary in this Agreement, none of Parent, Merger Sub or the Surviving Corporation shall be liable to a holder of a Certificate for any applicable Merger Consideration or any other amount due that was properly delivered to a public official pursuant to any applicable abandoned property, escheat or similar Law.

(c) Withholding of Tax . Parent, the Company, the Payments Administrator and the Escrow Agent will be entitled to deduct and withhold from the consideration otherwise payable pursuant to this Agreement to any Participating Holder such amounts as are reasonably determined by Parent, the Company or the Payments Administrator to be required to be deducted and withheld with respect to the making of such payment under the Code or any provision of U.S. federal, state, local or non-U.S. Tax Law. To the extent that amounts are so withheld and remitted to the appropriate Taxing Authority, such withheld amounts will be treated for all purposes of this Agreement as having been paid to the Participating Holder in respect of whom such deduction, withholding and remittance were made. Parent and the Escrow Agent will use commercially reasonable efforts to reduce or eliminate any required backup withholding under Section 3406 of the Code by requesting Form W-9 or the appropriate series of Form W-8, as applicable from the Participating Holders, and shall provide copies of such documents to the Payments Administrator upon reasonable request.

(d) Lost, Stolen or Destroyed Certificates. In the event any Certificates shall have been lost, stolen or destroyed, Parent shall issue in exchange for such lost, stolen or destroyed Certificates, upon the making of an affidavit of that fact by the holder thereof, the applicable Merger Consideration; provided, however, that Parent may, in its discretion and as a condition precedent to the issuance thereof, require the holder of such lost, stolen or destroyed Certificates to indemnify and hold harmless Parent from and against any losses in connection therewith (but, for the avoidance of doubt, may not require a bond).

1.15 No Further Ownership Rights in Company Stock. The applicable portion of Merger Consideration issued upon the surrender for exchange of Company Stock in accordance with the terms of this Article I shall be deemed to have been issued in full satisfaction of all rights pertaining to such Company Stock. At the Effective Time, the share transfer books of the Company shall be closed, and thereafter there shall be no further registration or transfers of shares of Company Stock on the records of the Surviving Corporation.

1.16 Dissenting Shares. Any holder of shares of Company Stock issued and outstanding immediately prior to the Effective Time with respect to which dissenters' rights, if any, are available by reason of the Merger pursuant to the applicable provisions of the DGCL who has not voted in favor of the Merger or consented thereto in writing and who complies with the applicable provisions of the DGCL (" Dissenting Shares ") shall not be entitled to receive any portion of the Merger Consideration pursuant to this Article I, unless such holder fails to perfect, effectively withdraws or loses its dissenters' rights under the DGCL. Such holder shall be entitled to receive only such rights as are granted under the applicable provisions of the DGCL. If any such holder fails to perfect, effectively withdraws or loses such dissenters' rights under the DGCL, such Dissenting Shares shall thereupon be deemed to have been converted as of the Effective Time into the right to receive the Merger Consideration to which such shares of Company Stock are entitled pursuant to this Article I, without interest. The Company shall give Parent prompt notice of any demands for appraisal pursuant to the applicable provisions of the DGCL received by the Company, withdrawals of any such demands and any other documents or instruments received by the Company in connection therewith. Parent shall have the right to participate in and direct all negotiations and proceedings with respect to any such demands. The Company shall not, except with the prior written consent of Parent, make any payment with respect to, or settle or offer to settle, any such demands, or agree to do any of the foregoing. Any payments made with respect to Dissenting Shares shall be made solely by the Surviving Corporation, and no funds or other property have been or shall be provided by Parent, Merger Sub or any of Parent's Affiliates for such payment.

1.17 Further Action. If at any time after the Effective Time the Surviving Corporation shall consider or be advised that any deeds, bills of sale, assignments or assurances or any other acts or things are necessary, desirable or proper (i) to vest, perfect or confirm, of record or otherwise, in the Surviving Corporation its right, title or interest in, to or under any of the rights, privileges, powers, franchises, properties or assets of either the Company or Merger Sub, or (ii) otherwise to carry out the purposes of this Agreement, the Surviving Corporation and its proper officers and directors or their designees shall be authorized to execute and deliver, in the name and on behalf of either the Company or Merger Sub, all such deeds, bills of sale, assignments and assurances and do, in the name and on behalf of the Company or Merger Sub, all such other acts and things necessary, desirable or proper to vest, perfect or confirm its rights, title or interest in, to or under any of the rights, privileges, powers, franchises, properties or assets of the Company or Merger Sub, as applicable, and otherwise to carry out the purposes of this Agreement.

ARTICLE II
CLOSING

2.1 Time and Place of the Closing . The Closing shall take place by remote exchange of documents, unless another method or place is agreed to in writing by the Parties, as soon as practicable following the satisfaction or waiver of the conditions set forth in Articles VII and VIII hereof and in any event within three (3) business days thereafter (but no earlier than October 1, 2013), or on such other date as Parent, Merger Sub and the Company may mutually determine.

2.2 Deliveries . At the time of the Closing, (i) the Company will deliver to Parent the various certificates, instruments, and documents referred to in Section 6.11 below, and (ii) Parent and the Merger Sub will deliver to the Company the certificates, instruments and documents referred to in Section 7.4 below.

2.3 Stockholders’ Representative .

(a) Each Participating Holder, by virtue of the adoption of this Agreement and approval of the Merger by the Participating Holders (regardless of whether or not all Participating Holders vote in favor of or consent to the adoption of this Agreement and the approval of the Merger and the transactions contemplated hereby, and regardless of whether at a meeting or in an action by written consent in lieu thereof), designates Shareholder Representative Services LLC (the “ Stockholders’ Representative ”) as his, her or its representative for purposes of this Agreement. The Participating Holders and their respective successors shall be deemed to have approved, and shall be bound by, any and all actions taken by the Stockholders’ Representative on their behalf under or otherwise relating to this Agreement and the other documents contemplated hereby and the transactions contemplated hereunder and thereunder as if such actions were expressly ratified and confirmed by each of them in writing. In the event any Stockholders’ Representative is unable or unwilling to serve or shall resign, a successor Stockholders’ Representative shall be selected by the holders of a majority of the shares of Company Common Stock outstanding immediately prior to the Closing. A Stockholders’ Representative may not resign, except upon 30 days prior written notice to Parent and Merger Sub. In the event of a notice of proposed resignation, or any death, disability or other replacement of a Stockholders’ Representative, a successor shall be appointed effective immediately thereafter (and, in the case of a death of a Stockholders’ Representative, the successor shall be deemed to be the executor or other representative of such Stockholders’ Representative’s estate) and Parent and Merger Sub shall be notified promptly of such appointment by the successor Stockholders’ Representative. No replacement of any Stockholders’ Representative shall be effective against Parent or Merger Sub until (i) the proposed successor Stockholders’ Representative assumes in writing all obligations of the original Stockholders’ Representative under this Agreement and (ii) Parent and Merger Sub have consented to the proposed successor Stockholders’ Representative (such consent not to be unreasonably withheld or delayed). Each successor Stockholders’ Representative shall have all the power, rights, authority and privileges hereby conferred upon the original Stockholders’ Representative.

(b) Parent and Merger Sub shall be entitled to rely upon any actions, communication or writings taken, given or executed by the Stockholders’ Representative on behalf of the Participating Holders. After the Closing, all communications or writings to be sent to the Participating Holders pursuant to this Agreement may be addressed to the Stockholders’ Representative and any communication or writing so sent shall be deemed notice to all of the Stockholders hereunder. The adoption and approval of this Agreement by the holders of the Company Stock shall constitute the consent and agreement of each of the Stockholders that the Stockholders' Representative is authorized to accept deliveries, including any notice, on behalf of each holder of Company Stock pursuant hereto.

(c) The Stockholders' Representative is hereby appointed and constituted the true and lawful attorney-in-fact of each Participating Holder, with full power of substitution in such holder's name and on such holder's behalf to act according to the terms of this Agreement and the other documents contemplated hereby in the absolute discretion of the Stockholders' Representative; and in general to do all things and to perform all acts including, without limitation, executing and delivering all agreements, certificates, receipts, instructions, notices and other instruments contemplated by or deemed advisable in connection with this Agreement and the other documents contemplated hereby, including without limitation Article IX hereof. This power of attorney and all authority hereby conferred is granted in consideration of the mutual covenants and agreements made herein, and shall be irrevocable and shall not be terminated by any act of any Participating Holder or operation of law, whether by such holder's death or disability or by any other event.

(d) The Stockholders' Representative hereby agrees to serve as the Stockholders' Representative in accordance with the applicable terms hereof and to be bound by such terms.

(e) The Stockholders' Representative will incur no liability of any kind with respect to any action or omission by the Stockholders' Representative in connection with the Stockholders' Representative's services pursuant to this Agreement, the Escrow Agreement and that certain Acquiom M&A Payments Agreement (the " Acquiom Payments Agreement ") to be entered into at or prior to Closing by and among Acquiom Administration LLC (the " Payments Administrator "), the Stockholders' Representative and the Company, except in the event of liability directly resulting from the Stockholders' Representative's gross negligence or willful misconduct. The Participating Holders will severally (based on each Participating Holder's Pro Rata Proportion but not jointly indemnify, defend and hold harmless the Stockholders' Representative from and against any and all losses, liabilities, damages, claims, penalties, fines, forfeitures, actions, fees, costs and expenses (including the fees and expenses of counsel and experts and their staffs and all expense of document location, duplication and shipment) (collectively, " Representative Losses ") arising out of or in connection with the Stockholders' Representative's execution and performance of this Agreement, the Escrow Agreement and the Acquiom Payments Agreement, in each case as such Representative Loss is suffered or incurred; provided, that in the event that any such Representative Loss is finally adjudicated to have been directly caused by the gross negligence or willful misconduct of the Stockholders' Representative, the Stockholders' Representative will reimburse the Participating Holders the amount of such indemnified Representative Loss to the extent attributable to such gross negligence or willful misconduct. If not paid directly to the Stockholders' Representative by the Participating Holders, any such Representative Losses may be recovered by the Stockholders' Representative (i) first, from the funds in the Expense Fund, (ii) second, solely to the extent the remaining funds available to the Stockholders' Representative in the Expense Fund are insufficient, from either (A) the amounts in the Escrow Fund at such time as remaining amounts would otherwise be distributable to the Participating Holders or (B) any future contingent consideration at such time as any such amounts would otherwise be distributable to the Participating Holders, and (iii) third, solely to the extent the remaining funds in the Expense Fund are insufficient and there are insufficient funds immediately available to the Stockholders' Representative from the Escrow Fund and/or contingent consideration, from the Participating Holders directly; provided, that while this section allows the Stockholders' Representative to be paid from the Expense Fund, the Escrow Fund and any other future contingent consideration, this does not (i) require the Stockholders' Representative to wait for future releases of funds from the Escrow Fund or future payments of contingent consideration before recovering directly from the Participating Holders, (ii) relieve the Participating Holders from their obligation to promptly pay such Representative Losses as they are suffered or incurred, or (iii) prevent the

Stockholders' Representative from seeking any remedies available to it at law or otherwise. In no event will the Stockholders' Representative be required to advance its own funds on behalf of the Participating Holders or otherwise. The Participating Holders acknowledge and agree that the limitations set forth in Section 9.5 are not applicable to the indemnification provided in this Section 2.3(e), and that the foregoing indemnities will survive the resignation or removal of the Stockholders' Representative or the termination of this Agreement.

(f) Upon the Closing, the Company will wire to the Stockholders' Representative an aggregate amount of US$250,000 (the " Expense Fund "). The Participating Holders will not receive any interest or earnings on the Expense Fund and irrevocably transfer and assign to the Stockholders' Representative any ownership right that they may otherwise have had in any such interest or earnings. Within five (5) business days after the completion of the Stockholders' Representative's responsibilities under this Agreement subject to the payment provisions in Section 1.9 in the case of payments to holders of Company Options, the Stockholders' Representative shall deposit by wire transfer in immediately available funds, pursuant to an Allocation Certificate: (i) with the Payments Administrator an amount of cash equal to the portion of the then balance of the Expense Fund payable to Participating Holders for whom the payment of the balance of the Expense Fund is not subject to wage or payroll tax withholding; and (ii) with the Surviving Corporation's (or other Affiliate's (at the direction of Parent)) payroll agent an amount of cash equal to the portion of the then remaining balance of the Expense Fund payable to Participating Holders for whom the payment of the balance of the Expense Fund is subject to wage or payroll tax withholding. For tax purposes, the Expense Fund will be treated as having been received and voluntarily set aside by the Participating Holders at the time of Closing and shall be subject to wage withholding as if paid to such Participating Holders on the Closing Date to the extent wage withholding is required by law; provided, that notwithstanding anything herein to the contrary, neither the Stockholders' Representative nor the Payments Administrator shall be responsible for any wage withholding or related calculations or determinations.

ARTICLE III
REPRESENTATIONS AND WARRANTIES RELATING TO THE COMPANY

As a material inducement to Parent and Merger Sub to enter into this Agreement and to consummate the transactions contemplated hereby, the Company represents and warrants to Parent and to Merger Sub, as of the date hereof and as of the Closing, except as set forth on the Disclosure Schedule, as follows:

3.1 Organization, Corporate Power and Records .

(a) The Company and each of its Subsidiaries is duly organized, validly existing and in good standing under the laws of the jurisdiction of its organization. The Company and each of its Subsidiaries is qualified or registered to do business and in good standing in each of the states and jurisdictions set forth on Schedule 3.1 and each other jurisdiction where the character or location of its assets or its properties owned, leased or operated by it, or the nature of its activities makes such qualification or registration necessary. Each of the Company and its Subsidiaries has full corporate power and authority and all licenses, permits and authorizations necessary to own and operate its properties, to conduct its business as now conducted and as presently proposed to be conducted, and to perform its obligations under any Significant Contracts.

(b) The Company has provided Parent with true, correct and complete copies of the share records and minute books of the Company and each of its Subsidiaries. The minute books of the

Company contain a complete and accurate summary of all meetings of directors or stockholders or actions by written consent since the time of incorporation of the Company. Neither the Company nor any of its Subsidiaries has taken any corporate action without the approval or ratification of the board of directors or stockholders where such action required the approval of the board of directors or stockholders under the DGCL or other applicable Law. The share ledger or share records of the Company accurately reflects all transactions involving the capital stock of the Company and each of its Subsidiaries. Neither the Company nor any of its Subsidiaries is in default under or in violation of any provision of its certificate of incorporation or bylaws, or other applicable organizational document, or any resolution adopted by the Company's stockholders or board of directors. Neither the Company nor any of its Subsidiaries has conducted any business under or otherwise used, for any purpose or in any jurisdiction, any fictitious name, assumed name, trade name or other name.

3.2 Authority for Agreement . The Company has full power, authority and legal right to enter into and, upon receipt of the Requisite Vote, perform its obligations under this Agreement and the other documents contemplated hereby to which the Company is or will be a party and to consummate the transactions contemplated hereby and thereby. As of the date of this Agreement, the board of directors of the Company has (i) unanimously approved the Merger, this Agreement and the other documents contemplated hereby and the transactions contemplated hereby and thereby and authorized the execution, delivery and performance of this Agreement and the other documents contemplated hereby and the consummation of the transactions contemplated hereby and thereby, (ii) resolved to recommend approval and adoption by the Stockholders of the Merger, this Agreement and the other documents contemplated hereby and the transactions contemplated hereby and thereby and (iii) not withdrawn or modified such approval or resolution to recommend. Upon receipt of the Requisite Vote, no other corporate proceedings on the part of the Company or, immediately following the execution and delivery of this Agreement, any Stockholder are, or will be, necessary to approve and authorize the execution, delivery and performance of this Agreement and the other documents contemplated hereby and the consummation of the transactions contemplated hereby and thereby. This Agreement and the other documents contemplated hereby have been duly executed and delivered by the Company and are legal, valid and binding obligations of the Company, enforceable against the Company in accordance with their respective terms, except as enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting the enforcement of creditors' rights in general. The Requisite Vote is the only vote of Stockholders necessary to approve and authorize the Merger, this Agreement and the other documents contemplated hereby and the other transactions contemplated hereby and thereby.

3.3 No Violation to Result . Except as set forth on Schedule 3.3 , the execution, delivery and performance by the Company of this Agreement and the other documents contemplated hereby and the consummation by the Company of the transactions contemplated hereby and thereby and the fulfillment by the Company of the terms hereof and thereof, do not and will not, directly or indirectly (with or without notice or lapse of time): (i) violate, breach, conflict with, constitute a default under, accelerate or permit the acceleration of the performance required by (x) any of the terms of the Certificate of Incorporation or Bylaws of the Company or any resolution adopted by the board of directors of the Company or the Stockholders, or (y) any Significant Contract, or (z) any law, judgment, decree, order, rule, regulation, permit, license or other legal requirement of any Government Authority applicable to the Company or any of its Subsidiaries; (ii) give any Person the right to declare a default, exercise any remedy or accelerate the performance or maturity under any such Significant Contract or cancel, terminate or modify any such Significant Contract; (iii) give any Government Authority or other Person the right to challenge any of the transactions contemplated by this Agreement; (iv) give any Government Authority the right to revoke, withdraw, suspend, cancel, terminate or modify, any permit or license that is held by the Company or any of its Subsidiaries; or (v) result in the creation or imposition of any Encumbrance upon the Company Stock or any of the properties or assets of the Company. Other than as set forth on Schedule 3.3 , no notice to, filing with, or consent of, any Person is necessary in connection with, and no "change of control" provision is triggered by, the approval, adoption, execution, delivery or performance by the Company of this Agreement and the other documents contemplated hereby or the consummation by the Company of the transactions contemplated hereby or thereby.

3.4 Capitalization .

(a) The authorized capital stock of the Company consists solely of: (i) 8,000,000 shares of Company Common Stock, of which 5,127,484 shares have been issued and are outstanding (44,528 shares of which are subject to a right of repurchase in favor of the Company), (ii) 2,164,286 shares of Preferred Stock, of which 2,164,286 shares have been designated Series A Preferred Stock, 2,142,857 shares of which are issued and outstanding as of the date of this Agreement. Except for the foregoing, no other shares of capital stock of the Company have been issued or are outstanding as of the date of this Agreement. There are no shares of the Company's capital stock held in the Company's treasury. Schedule 3.4(a) sets forth the names of the Stockholders, the addresses of the Stockholders and the number of shares of Company Stock owned of record and beneficially by each Stockholder, in each case, as of the date of this Agreement. All of the issued and outstanding shares of capital stock of the Company and all of the issued and outstanding ownership interests of the Company's Subsidiaries have been duly authorized and validly issued, and are fully paid and non-assessable. Except as set forth on Schedule 3.4(a), no restrictions on transfer, repurchase option, preemptive rights or rights of first refusal exist with respect to any shares of capital stock of the Company or any of its Subsidiaries, and no such rights arise by virtue of or in connection with the transactions contemplated hereby.

(b) Schedule 3.4(b) sets forth a true, accurate and complete list as of the date of this Agreement setting forth the name of each holder of outstanding Company Options and Restricted Shares, the date of grant of each grant of Company Options or Restricted Shares to such holder, the number of shares of Company Common Stock covered by such grant, the exercise price for each such grant of Company Options Except as set forth on Schedule 3.4(b) , there are no issued or outstanding shares of capital stock of the Company that are restricted or subject to repurchase or substantial risk of forfeiture. Except as set forth on Schedule 3.4(b) , there is no: (i) outstanding subscription, option, call, warrant or right (whether or not currently exercisable) issued by the Company to acquire or sell or issue, or otherwise relating to, any shares of the capital stock or other securities of the Company; (ii) outstanding security, instrument or obligation that is or may become convertible into or exchangeable for any shares of the capital stock or other securities of the Company (including, without limitation, any convertible debt); or (iii) Contract under which the Company is or would reasonably be expected to become obligated to sell or otherwise issue any shares of its capital stock or any other securities. There are no outstanding share appreciation, phantom shares, profit participation or other similar rights with respect to the Company. The Company Stock Plan is the only option, equity incentive or similar plan involving the purchase of Company securities that is (or has ever been) in effect.

(c) Except as set forth on Schedule 3.4(c) , there are no proxies, voting rights, stockholders agreements or other agreements or understandings of which the Company is a party with respect to the voting or transfer of the capital stock of the Company. All shares of Company Stock, all Company Options, all Series A Warrants and all other securities of the Company and each of its Subsidiaries have been issued in compliance with (i) all applicable federal and state securities laws and other applicable legal requirements, and (ii) any pre-emptive rights, rights of first refusal or other requirements set forth in applicable Contracts. Any shares of capital stock or other securities repurchased, redeemed or otherwise reacquired by the Company were validly reacquired in compliance with (A) the applicable provisions of the DGCL, if applicable, and all other applicable Laws, and (B) any requirements set forth in applicable Contracts. The Company is not obligated to redeem or otherwise acquire any of its outstanding shares of capital stock.

(d) Schedule 3.4(d) sets forth a list of the Company's Subsidiaries. For each of the Company's Subsidiaries, Schedule 3.4(d) sets forth: (i) the authorized capital stock, (ii) the number of shares of each class of capital stock that have been issued and are outstanding, (iii) the number of shares of capital stock held in such Subsidiary's treasury; (iv) the names of the stockholders of such Subsidiary; and (v) the addresses of such stockholders in their respective states of legal residence and the number of shares of each class of capital stock of such Subsidiary owned of record and beneficially by each such stockholder. Except as set forth on Schedule 3.4(d), all of the Company's Subsidiaries are wholly owned by the Company. Except as set forth on Schedule 3.4(d), neither the Company nor or any of its Subsidiaries has any direct or indirect debt, equity or other investment or interest in any Person or any joint venture. Neither the Company nor or any of its Subsidiaries has any commitments to contribute to the capital of, make loans to or share losses of, any Person (either pursuant to a written Contract or a Contract in the process of being negotiated).

3.5 Financial Statements.

(a) Schedule 3.5(a) includes true, complete and correct copies of (i) the Year-End Financials and (ii) the Interim Financials. Each of the Financial Statements (including in all cases the notes thereto, if any) is consistent with the Company's books and records, free from material misstatement, whether due to fraud or error, presents fairly the Company's and each of its Subsidiary' financial condition and results of operations as of the times and for the periods referred to therein, and has been prepared in accordance with GAAP. During the periods covered by the Financial Statements and since the Balance Sheet Date, there has been no material change in the Company's or any of its Subsidiaries' accounting policies. Except as disclosed therein or in Schedule 3.5(a) hereto, there are no material, special or non-recurring items of income or expense during the periods covered by the Financial Statements and the balance sheets included in the Financial Statements do not reflect any write-up or revaluation increasing the book value of any assets. All revenues recognized by the Company have been recognized in accordance with GAAP. There have been no transactions involving the business of the Company which properly should have been set forth in the Financial Statements and which have not been accurately so set forth. Schedule 3.5(a) sets forth a list of any off-balance sheet financing arrangements of the Company and any non-operating assets, prepaid items and deposits. The Company's accounting firm has not informed the Company that it has any material questions, challenges or disagreements regarding or pertaining to the Company's accounting policies or practices. The Company has made available to Parent copies of each management letter or other letter delivered to the Company by its accounting firm in connection with the Financial Statements or relating to any review by such accounting firm of the internal controls of the Company.

(b) Schedule 3.5(b) provides an accurate and complete breakdown and aging of all accounts receivable, notes receivable and other receivables of the Company and each of its Subsidiaries as of the Balance Sheet Date. Except as set forth in Schedule 3.5(b), all existing accounts receivable of the Company and each of its Subsidiaries (including those accounts receivable reflected on the Balance Sheet or arising since the Balance Sheet Date that have not yet been collected) (i) represent valid obligations of customers of the Company or its Subsidiary, as the case may be, arising from bona fide transactions entered into in the ordinary course of business, and (ii) are current and, to the knowledge of, the Company, there is no reason to expect that such accounts receivable will not be collected in full, without any counterclaim or set off, when due (and in no event later than nine (9) months after the Closing Date).

(c) The accounts, books and records of the Company and its Subsidiaries: (i) have recorded therein the results of operations and the assets and liabilities of the Company, required to be reflected under GAAP and (ii) are free from material misstatement, whether due to fraud or error, and have been maintained in accordance with prudent business practices and all applicable Laws. The Company and each of its Subsidiaries maintain a system of accounting and internal controls and procedures as are necessary to ensure that (i) transactions are executed with management's authorization; (ii) transactions are recorded as necessary to permit preparation of the applicable financial statements and to maintain accountability for assets; (iii) access to assets is permitted only in accordance with management's authorization; and (iv) material information regarding the Company, its Subsidiaries, and its and their financial condition is accumulated and communicated to management, including the appropriate principal executive and financial officers. There are no deficiencies or weaknesses in the design or operation of internal controls over financial reporting that would reasonably be expected to adversely affect the Company's or its Subsidiaries' ability to record, process, summarize and report financial information, and there is no fraud, whether or not material, that involves management or, to the knowledge of the Company, other employees who have a significant role in the Company's or its Subsidiaries' internal controls and the Company has provided to Parent copies of any written materials relating to the foregoing.

3.6 Liabilities . There are no Liabilities of the Company or any of its Subsidiaries that would be required by GAAP to be reflected or reserved on a balance sheet other than (i) liabilities reflected on the Balance Sheet and not previously paid or discharged and (ii) Liabilities and performance obligations under Contracts. Neither the Company nor any of its Subsidiaries is a guarantor or otherwise liable for any Liabilities of any other Person other than endorsements for collection in the ordinary course of business consistent with past practice. Schedule 3.6 provides an accurate and complete breakdown and aging as of the Balance Sheet Date of all accounts payable of the Company and its Subsidiaries.

3.7 Adverse Changes . Except as set forth on Schedule 3.7 , from December 31, 2012 until the Date of this Agreement, each of the Company and its Subsidiaries have operated their respective businesses in the ordinary course and consistent with past practice and neither the Company nor any of its Subsidiaries has: (i) suffered a Material Adverse Effect or any effect, event or change which individually or in the aggregate would reasonably be expected to have a Material Adverse Effect on the Company or any of its Subsidiaries; (ii) suffered any theft, damage, destruction, or casualty loss in excess of $25,000, or suffered any interruption in the use of the Company's or its Subsidiaries' assets or business (whether or not covered by insurance) or suffered any destruction of its books and records; (iii) declared, set aside or paid any dividend (whether in cash, shares or property) with respect to any capital stock of the Company or its Subsidiaries or repurchased or redeemed any capital stock of the Company or its Subsidiaries; (iv) granted any current or former director, officer, employee or consultant of the Company or its Subsidiaries any bonus opportunity or increase in compensation or benefits; (v) made any capital expenditures that aggregate in excess of $100,000; or (vi) committed or agreed to any of the foregoing set forth in (i) through (v) above.

3.8 Company Plans .

(a) Schedule 3.8(a)(i) contains a true, correct and complete list of each pension, profit-sharing, savings, retirement, employment, collective bargaining, consulting, severance pay, termination, executive compensation, incentive compensation, deferred compensation, bonus, share purchase, stock option, phantom shares or other equity-based compensation, change-in-control, retention, salary continuation, vacation, sick leave, disability, death benefit, group insurance, hospitalization, medical (including policies for chiropractic and non-traditional health and welfare), dental, vision, life (including all individual life insurance policies as to which the Company is the owner, the beneficiary or both), Code Section 125 "cafeteria" or "flexible" benefit, employee loan, educational assistance or fringe plan, relocation, program, policy, practice, agreement or arrangement, whether written or oral, formal or informal, including each such "employee benefit plan" within the meaning of Section 3(3) of ERISA, and other such employee benefit plan, program, policy, practice, agreement, or arrangement, whether or not subject to ERISA (including any funding mechanism therefor now in effect or required in the future as a result of the transaction contemplated by this Agreement or otherwise) (i) under which any current or former employee, director, consultant or independent contractor of the Company or and ERISA Affiliate has any present or future right to benefits and (ii) that is maintained, sponsored or contributed to by the Company or any ERISA Affiliate, or which the Company or any ERISA Affiliate has any obligation to maintain, sponsor or contribute, or (iii) with respect to which the Company or any ERISA Affiliate has any direct or indirect liability, whether contingent or otherwise (each, a " Company Plan ").

(b) The Company has provided to Parent with respect to each applicable Company Plan correct and complete copies of: (i) a copy of the annual report (if required under ERISA) with respect to each such Company Plan for the last three (3) years (including all schedules and attachments); (ii) a copy of the summary plan description, together with each summary of material modification required under ERISA with respect to such Company Plan; (iii) a true and complete copy of each written Company Plan (including all amendments not incorporated into the documentation for each such plan); (iv) all trust agreements, insurance contracts, and similar instruments with respect to each funded or insured Company Plan; (v) copies of all nondiscrimination and top-heavy testing reports for the last three (3) plan years with respect to each Company Plan that is subject to nondiscrimination and/or top-heavy testing; (vi) any investment management agreements, administrative services contracts or similar agreements that are in effect as of the date hereof relating to the ongoing administration and investment of any Company Plan; (vii) all non-routine correspondence to or from any governmental agency or any participant or beneficiary relating to any Company Plan; and (viii) the most recent determination letter, if any, from the IRS for any Company Plan that is intended to qualify under Section 401(a) of the Code; and (x) an accounting documenting in reasonable detail the elections, balances and activity in each Company Employee's flexible spending account from the inception of the current plan year through August 31, 2013.

(c) No Company Plan is, and neither the Company nor any ERISA Affiliate thereof currently maintains, contributes to or participates in, nor does the Company or any ERISA Affiliate have any obligation to maintain, contribute to or otherwise participate in, or have any liability or other obligation (whether accrued, absolute, contingent or otherwise) under, any (i) "multiemployer plan" (within the meaning of Section 3(37) of ERISA), (ii) "multiple employer plan" (within the meaning of Section 413(c) of the Code), (iii) "multiple employer welfare arrangement" (within the meaning of Section 3(40) of ERISA), (iv) plan that is subject to the provisions of Title IV of ERISA or Section 412 of the Code; or (v) a "funded welfare plan" within the meaning of Section 419 of the Code. No Company Plan is maintained through a human resources and benefits outsourcing entity, professional employer organization, or other similar vendor or provider.

(d) The Company has never sponsored, maintained, administered, contributed to, had any obligation to contribute to, or incurred any other liability under or with respect to any Company Plan or otherwise which provides, or may provide in the future, health, life, welfare or other coverage or benefits for or to former directors, officers or employees (or any spouse or former spouse or other dependent thereof), other than benefits required by Section 4980B of the Code, Part 6 of Title I of ERISA, or similar provisions of state law.

(e) Each Company Plan (and each related trust, insurance contract or fund) has been maintained, funded and administered in all material respects in accordance with its governing instruments and all applicable laws including ERISA and the Code. All payments by the Company or any ERISA Affiliate thereof required by any Company Plan, by any collective bargaining agreement or by applicable law (including all employee and employer contributions, insurance premiums, or intercompany charges) have been timely made. All unpaid amounts attributable to any such Company Plan for any period prior to the Closing Date have been or will be accrued on the Company's consolidated Financial Statements in accordance with GAAP and, except to the extent of such accruals, the Company has no Liability arising out of or in connection with the form or operation of the Company Plans or benefits accrued thereunder on or prior to the Closing Date.

(f) Each Company Plan intended to qualify under Section 401(a) of the Code and each trust intended to qualify under Section 501(a) of the Code is so qualified and has either received and is entitled to rely upon a favorable determination letter or opinion letter from the IRS with respect to such Company Plan as to its qualified status under the Code, and, to the knowledge of the Company, nothing has occurred that could reasonably be expected to adversely affect such determination or opinion. All amendments required to maintain each such Company Plan's compliance with applicable law, including the Economic Growth and Tax Relief Reconciliation Act of 2001 and subsequent legislation or administrative requirements which have subsequently become effective through the date hereof, have been timely adopted and implemented. No Company Plan currently holds or within the past five years has held securities of the Company or any ERISA Affiliate. No Company Plan has ever been merged with or accepted Code Section 414(l) transfers from another employee pension benefit plan (within the meaning of Section 3(2) of ERISA).

(g) All reports, forms and other documents required to be filed with any Government Authority or furnished to employees with respect to any Company Plan (including summary plan descriptions, Forms 5500 and summary annual reports) have been timely filed or furnished and are accurate in all material respects.

(h) With respect to each applicable Company Plan, (i) no non-exempt "prohibited transaction," within the meaning of Section 4975 of the Code or Section 406 of ERISA, has occurred; (ii) there are no actions, suits or claims pending, or, to the knowledge of the Company, threatened or reasonably anticipated (other than routine claims for benefits) against any such Company Plan or fiduciary thereto or against the assets of any such Company Plan; (iii) there are no audits, inquiries or proceedings pending or, to the knowledge of the Company, threatened by any governmental authority with respect to any Company Plan; (iv) no matters are currently pending with respect to any Company Plan under the Employee Plans Compliance Resolution System maintained by the IRS or any similar program maintained by any other Government Authority; and (v) there has been no breach of fiduciary duty (including violations under Part 4 of Title I of ERISA) which has resulted or could reasonably be expected to result in Liability to the Company or its employees.

(i) Benefits under each Company Plan that is an "employee welfare benefit plan" (within the meaning of Section 3(1) of ERISA, with the exception of any medical expense reimbursement arrangements subject to Sections 105 and 125 of the Code) are provided exclusively through insurance contracts or policies issued by an insurance company, health maintenance organization, or similar organization unrelated to the Company or any of its ERISA Affiliates, the premiums for which are paid directly by the Company or its ERISA Affiliates from its general assets or partly from its general assets and partly from contributions by its employees. No insurance policy or contract relating to any such Company Plan requires or permits retroactive increase in premiums or payments due thereunder.

(j) The consummation of the transactions contemplated by this Agreement will not, either alone or in combination with another event (where such event would not alone have an effect described in this sentence), conflict with or result in any violation of or default under (with or without notice or lapse of time, or both), or give rise to a right of termination, cancellation, modification or acceleration of any obligation of the Company or any of its Subsidiaries or loss of any benefit under any Company Plan, trust or loan that will or may result in any payment by the Company or any of its Subsidiaries (whether of severance pay or otherwise), require funding, acceleration, forgiveness of indebtedness, vesting, distribution, increase in benefits or obligation of the Company or any of its Subsidiaries to fund benefits with respect to any employee, officer, director, stockholder or other service provider of the Company (whether current, former or retired) or their beneficiaries, or any other material liability for the Company or Parent.

(k) Each Company Plan can be amended, terminated or otherwise discontinued after the Effective Time in accordance with its terms, with no more than thirty (30) days advance notice without liability to Company or Parent (except for benefits protected under Section 411(d) of the Code or Section 204(g) of ERISA and other than ordinary administration expenses typically incurred in a termination event). None of the Company Plans will be subject to any surrender fees, market value adjustment, deferred sales charges, commissions, or other fees or charges upon termination other than the normal and reasonable administrative fees associated with their amendment, transfer or termination. The Company may, without cost, withdraw their employees, directors, officers and consultants from any employee benefit plan in which the Company is a participating employer or which the Company does not sponsor.

(l) Each Company Plan, employment agreement, or other contract, plan, program, agreement, or arrangement that is a "nonqualified deferred compensation plan" (within the meaning of Section 409A(d)(1) of the Code) has been operated in good faith compliance with Section 409A of the Code, its Treasury regulations, and any administrative guidance relating thereto; and no additional Tax under Section 409A(a)(1)(B) of the Code has been or is reasonably expected to be incurred by a participant in any such Company Plan, employment agreement, or other contract, plan, program, agreement, or arrangement. The Company is not a party to, or otherwise obligated under, any contract, agreement, plan or arrangement that provides for the gross-up of Taxes imposed by Section 409A(a)(1)(B) of the Code. No Company Option or other right to acquire Company Common Shares or other equity of the Company (i) has an exercise price that was less than the fair market value of the underlying equity securities as of the date such Company Option or other right was granted, (ii) has any feature for the deferral of compensation other than the deferral of recognition of income until the later of exercise of disposition of such Company Option or right, or (iii) has been granted after December 31, 2007, with respect to any class of capital stock of the Company that is not "service recipient stock" (within the meaning of applicable regulations under Section 409A of the Code).

(m) Neither the Company nor any ERISA Affiliate sponsors, maintains or contributes to, or is obligated to contribute to, any material employment, severance or similar contract or arrangement (whether or not written) or any material plan, policy, fund, program or arrangement or contract, including multiemployer plan, retirement savings, superannuation, pension, severance, employment, change-in-control, fringe benefit, bonus, incentive, deferred compensation and any other employee benefit plan, agreement, program, policy or other arrangement that is maintained outside the United States primarily for the benefit of Persons substantially all of whom are "nonresident aliens" within the meaning of Section 4(b)(4) of ERISA.

(n) Neither the Company nor any ERISA Affiliate has any plan or commitment to adopt, establish or enter into any new Company Plan, to modify any Company Plan (except to the extent required by law or to conform any such Company Plan to the requirements of any Applicable Law, in each case as previously disclosed to Parent in writing, or as required by this Agreement).

3.9 Employee Matters .

(a) Schedule 3.9(a)(i) contains a complete and correct list of all employees of the Company and each of its Subsidiaries, their respective titles as of the date hereof (the " Company Employees "), the calendar year 2012 and 2013 compensation paid or payable to each such employee, the date of employment of each such employee and the accrued vacation time and sick leave or other paid time off of each such employee. Except as set forth on Schedule 3.9(a)(ii) , (i) the terms of employment or engagement of all directors, officers, Company Employees, agents, consultants and professional advisers of the Company and each of its Subsidiaries are such that their employment or engagement may be terminated at will with notice given at any time and without Liability for payment of compensation or damages (other than individuals working outside of the United States, where "at will" employment is not recognized), (ii) there are no severance payments which are or could become payable by the Company or any of its Subsidiaries to any such person under the terms of any oral or written agreement or commitment, (iii) there are no other agreements, contracts or commitments, oral or written, including with respect to hiring bonuses, relocation payments, immigration assistance, retention arrangements or commitments, or transaction bonus or incentive agreements, between the Company or any of its Subsidiaries and any such person, (iv) except as set forth on Schedule 3.9(a)(iii) and except for employees Parent has notified the Company that it does not intend to retain, no executive officer or material number of management level or senior technical employees of the Company or any of its Subsidiaries has notified the Company or any of its Subsidiaries has notified the Company of any plans to terminate his, her or their employment or relationship with the Company and (v) there are no agreements between any Company Employee and any other Person which would restrict, in any manner, such Person's ability to perform services for the Company, any of its Subsidiaries or Parent or the right of any of them to compete with any Person or the right of any of them to sell to or purchase from any other Person. Schedule 3.9(a)(iv) contains a complete and correct list of (A) any employees who were hired with the assistance of an agency, search or recruiting firm for which any fee is owed, (B) the agencies who have made placements of employees with the Company since January 1, 2012, and (C) any agencies that may currently be working on behalf of the Company. Copies of any agreements with agencies relating to placements of employees with the Company made since January 1, 2012 and current employee searches have been made available to Parent.

(b) Neither the Company nor any of its Subsidiaries is, or has ever been, bound by or subject to (and none of its assets or properties are bound by or subject to) any arrangement with any labor union or other collective bargaining representative. To the Knowledge of the Company, no employee of the Company or any of its Subsidiaries is or has ever been represented by any labor union or covered by any collective bargaining agreement while employed by the Company and, to the knowledge of the Company, no campaign to establish such representation is in progress. With respect to the Company, there is no pending or threatened (i) strike, slowdown, picketing, work stoppage or employee grievance process, (ii) material charge, grievance proceeding or other claim against or affecting the Company relating to the alleged violation of any law pertaining to labor relations or employment matters, including any charge or complaint filed by an employee or union with the National Labor Relations Board, the Equal Employment Opportunity Commission or any comparable Government Authority, (iii) union organizational activity or other labor or employment dispute against or affecting the Company, or (iv) application for certification of a collective bargaining agent.

(c) Except as set forth on Schedule 3.9(c)(i), each of the Company and its Subsidiaries is and has been in compliance in all material respects with all applicable Laws respecting employment and employment practices, terms and conditions of employment, and wages and hours, including, without limitation, any such laws regarding employment documentation, equal employment opportunities, fair employment practices, plant closings and mass layoffs, sexual harassment, retaliation, discrimination based on sex, race, disability, health status, pregnancy, religion, national origin, age, genetic information, family medical history, whistleblowing or other tortious conduct, workers' compensation, family and medical leave, the Immigration Reform and Control Act, and occupational safety and health requirements, and neither the Company nor any of its Subsidiaries has engaged in any unfair labor practice. Neither the Company nor any of its Subsidiaries is, or has ever been, liable for the payment of any compensation, damages, Taxes, fines, penalties or other amounts, however designated, for failure to comply with any of the foregoing. All Persons classified by the Company or any of its Subsidiaries as independent contractors or consultants do satisfy and have satisfied the requirements of

Law to be so classified. Schedule 3.9(c)(ii) sets forth a list of all contractors and consultants and opposite their names lists the time periods each contractor or consultant has been providing services. No individual who has performed services for or on behalf of the Company or any of its Subsidiaries and who has been treated by the Company or any of its Subsidiaries as an independent contractor, is classifiable as a "leased employee" within the meaning of Section 414(n)(2) of the Code with respect to the Company or such of its Subsidiaries.

(d) No third party has asserted a claim against the Company, or, to the knowledge of the Company, has reason to claim that any person employed by the Company or any of its Subsidiaries has (i) violated any of the terms or conditions of his employment, non-competition, non-solicitation or non-disclosure agreement with such third party, (ii) disclosed or utilized any trade secret or proprietary information or documentation of such third party, or (iii) interfered in the employment relationship between such third party and any of its present or former employees. No person employed by the Company or any of its Subsidiaries, to the knowledge of the Company, has disclosed or used or has proposed to disclose or use any trade secret or any information or documentation proprietary to any former employer or violated any confidential relationship which such person may have had with any third party, in connection with the development, manufacture or sale of any Product or proposed Product or the development or sale of any service or proposed service of the Company or any of its Subsidiaries.

(e) Schedule 3.9(e) lists all the Company Employees who are currently on leave relating to work-related injuries and/or receiving disability benefits under any Company Plan.

3.10 Taxes.

(a) The Company and each of its Subsidiaries has filed (or has had filed on its behalf) on a timely basis all material, and, to the knowledge of the Company, all other Tax Returns that it is required to have filed. Neither the Company nor any of its Subsidiaries has requested or obtained any extension of time within which to file any Tax Return, which Tax Return has not since been filed. All Tax Returns filed by the Company and each of its Subsidiaries are true, correct and complete in all material respects and, to the knowledge of the Company, there are no other inaccuracies that would be reasonably expected to have a material negative effect on either future Tax obligations of the Company or its Subsidiaries or Tax compliance by the Company and its Subsidiaries after the Closing Date. Neither the Company nor any of its Subsidiaries has ever participated in a "Tax amnesty" or similar program offered by any Taxing Authority to avoid the assessment of any Tax.

(b) All Taxes required to have been paid by the Company or any of its Subsidiaries (whether or not shown on any Tax Return) have been paid on a timely basis. Neither the Company nor any of its Subsidiaries has any Liability for Taxes not yet required to have been paid, other than Liabilities for Taxes reflected on the Balance Sheet or incurred in the ordinary course of business since the Balance Sheet Date. There are no Encumbrances on any of the assets of the Company or any of its Subsidiaries that arose in connection with any failure (or alleged failure) timely to pay any Tax.

(c) Each of the Company and its Subsidiaries has complied in all respects with all applicable Laws relating to withholding and collection of Taxes and information reporting with respect to such Taxes, and has, within the time and manner prescribed by Law, withheld or collected from employee wages and other payments and paid over to the proper Taxing Authority all such withheld or collected amounts required to have been paid. To the knowledge of the Company, the records of the Company and its Subsidiaries contain all information and documents reasonably expected to be necessary to comply in all material respects with applicable Tax information reporting and Tax withholding requirements under applicable Laws and such records reasonably required to identify with specificity all accounts subject to backup withholding under Section 3406 of the Code. Each of the Company and its Subsidiaries has complied in all material respects with all sales Tax resale certificate exemption requirements for which the Company or any of its Subsidiaries has either claimed such an exemption or not collected sales Tax from another Person in reliance on a purchase for resale exemption.

(d) No written claim has ever been received by the Company or any of its Subsidiaries from a Taxing Authority for a jurisdiction where neither the Company nor any of its Subsidiaries files Tax Returns that the Company or any of its Subsidiaries is or may be subject to taxation by that jurisdiction or has an obligation to file Tax Returns, in each case with respect to any Tax of a type for which such entity did not file a Tax Return with, or pay Tax imposed by, such jurisdiction of such type for the most recently ended taxable period for which such a Tax payment or Tax Return was due. Neither the Company nor any of its Subsidiaries has conducted activities in any jurisdiction which will require the Company or any of its Subsidiaries to pay Tax or file any Tax Return in such jurisdiction of a type that was not required to have been paid or filed by it in the most recently ended previous taxable period for which such type of Tax or Tax Return would be due (as reflected in Schedule 3.10(e)).

(e) Schedule 3.10(e) identifies all types of Tax Returns relating to income, franchise, property, sales and use and value added Tax (by type of Tax and jurisdiction) that the Company or any of its Subsidiaries has filed and the taxable period covered by each such Tax Return, and identifies those Tax Returns or periods that have been audited or are currently the subject of an audit by a Taxing Authority, and all such income Tax Returns of the Company and its Subsidiaries as to which the statute of limitations for assessments against the Company or any of its Subsidiaries of additional Tax for the taxable period covered thereby has not yet expired. The Company and its Subsidiaries have provided or made available to Parent complete and accurate copies of all of the following materials: (i) all income Tax Returns and other material tax Returns filed by the Company or any of its Subsidiaries; (ii) all examination reports relating to Taxes or Tax Returns of the Company and its Subsidiaries; (iii) all statements of Taxes assessed against or agreed to by the Company or any of its Subsidiaries that were not shown on Tax Returns filed by the Company or any of its Subsidiaries before such assessment or agreement and all related correspondence; (iv) all written rulings from, and written agreements with, any Taxing Authority relating to Taxes of the Company or any of its Subsidiaries; (v) all elections relating to Taxes of the Company or any of its Subsidiaries which would have continuing effect in the determination of Tax or preparation of any Tax Return of the Company or any of its Subsidiaries for any taxable period for which a Tax Return has not yet been filed or Tax paid (other than elections that are included in or apparent from Tax Returns referred to in clause (i) above); (vi) any request for issuance of any ruling from a Tax Authority on behalf of the Company or any Subsidiary since formation (regardless of whether the requested ruling was issued) and (vii) to the extent reasonably requested in writing by Parent, any other document relating to Taxes or Tax Returns of the Company or any of its Subsidiaries (other than documents that the Company has advised Parent in writing that it is unable to provide or for which less than three (3) business days have elapsed since the date of such request).

(f) Neither the Company nor any of its Subsidiaries has a "permanent establishment" in any country other than the country under the Laws of which it is organized (as such term is defined in any applicable Tax treaty or convention between the relevant country of organization and such other country) and has not otherwise engaged in activity that is reasonably likely to have exposed it to the taxing jurisdiction of any such other country with respect to a material Tax Liability. The Company and each Subsidiary is in material compliance with the terms and conditions of any existing Tax exemptions granted by, Tax agreements with or Tax orders of any Taxing Authority to which it may be subject, and, to the knowledge of the Company, the consummation of the Merger is not expected to be inconsistent with continued compliance with the terms and conditions of any such exemptions, agreements or orders.

(g) Any and all transactions between or among the Company or any of its Subsidiaries on the one hand and any other controlled Persons (within the meaning of Section 482 of the

Code) have at all times occurred on arm's-length terms, as if between and among unrelated parties. The Company and each of its Subsidiaries has properly and in a timely manner documented in all material respects its transfer pricing methodology in compliance with Section 6662 (e) (and any related sections) of the Code, the Treasury regulations promulgated thereunder and any comparable provisions of U.S. state, local, or non-U.S. Tax law.

(h) Neither the Company nor any of its Subsidiaries nor any Person on behalf of the Company or any its Subsidiaries has waived any statute of limitations or agreed to any extension of time that has continuing effect with respect to assessment or collection of any Tax for which the Company or any of its Subsidiaries may be held liable. There is not currently in effect any power of attorney authorizing any Person to act on behalf of the Company or any of its Subsidiaries or receive information relating to the Company or any of its Subsidiaries, with respect to any Tax matter (other than authorizations to contact Tax Return preparers included in Tax Returns previously filed by the Company or any of its Subsidiaries). There is no audit or other Proceeding presently pending or threatened in writing (or to the Company's knowledge, otherwise) with regard to any Tax Liability or Tax Return of the Company or any of its Subsidiaries. To the knowledge of the Company, there are no existing circumstances that reasonably may be expected to result in the assertion of a material claim for unsatisfied Tax obligations against the Company or its Subsidiaries by any Taxing Authority with respect to any taxable period or portion thereof ending on or before the Closing Date for which Tax Returns are required to have been filed or Tax is required to have been paid or withheld or collected by the Company or any of its Subsidiaries.

(i) Except as disclosed on Schedule 3.10(i) , and except for payments of benefits that are payable to an individual that has signed a 280G Waiver, neither the Company nor any of its Subsidiaries has or have made or become obligated to make, or will as a result of any event connected directly or indirectly with any transaction contemplated herein become obligated to make, any "excess parachute payment" as defined in Section 280G of the Code (without regard to Subsection (b)(4) thereof) and no amount that could be received (whether in cash or property or the vesting of property), as a result of the consummation of the transactions contemplated herein or any other event, by any employee, officer, director, stockholder or other service provider of the Company or any of its Subsidiaries under any Company Plan or otherwise would not be deductible by reason of Section 280G of the Code or would be subject to an excise tax under Section 4999 of the Code. There is no written or unwritten agreement, plan, arrangement or other contract by which the Company or any of its Subsidiaries is bound to compensate or provide a Tax gross-up payment for any individual for excise taxes paid pursuant to Section 4999 of the Code. Schedule 3.10(i) identifies each "disqualified individual" as defined in Section 280G of the Code (each a " Potential Parachute Recipient ") to whom the Company or any of its Subsidiaries has made any payments or provided any benefit, or who is a party to an agreement that could obligate the Company or any of its Subsidiaries to make any payment or provide any benefit, that alone or together could constitute a "parachute payment" within the meaning of Section 280G of the Code.

(j) Neither the Company nor any of its Subsidiaries has made or agreed to make, has requested permission to make, or is required to make, any change in method of accounting previously used by it in any Tax Return filed by it which change in method would require the Company or any of its Subsidiaries to make an adjustment to its income pursuant to Section 481(a) of the Code (or any similar provision) on any Tax Return for any taxable period ending on or after the Closing Date for which the Company or any of its Subsidiaries has not yet filed a Tax Return; nor has the Company or any of its Subsidiaries received any written notice (or to the knowledge of the Company, any other notice) that a Taxing Authority proposes to require a change in method of accounting used in any Tax Return which has been filed by the Company or any of its Subsidiaries.

(k) Neither the Company nor any of its Subsidiaries has taken any action not in accordance with past practice that would have the effect of deferring a material measure of Tax from a period (or portion thereof) ending on or before the Closing Date to a taxable period (or portion thereof) beginning after the Closing Date. Neither the Company nor any of its Subsidiaries has material deferred income or Tax Liability arising out of any transaction, except to the extent adequately reserved for on its Balance Sheet, including without limitation, (i) the disposition of any property in a transaction accounted for under the installment method pursuant to Section 453 of the Code, (ii) the use of the long-term contract method of accounting or (iii) the receipt of any prepaid amount on or before the Closing Date (other than receipts after the Balance Sheet Date in the ordinary course of business consistent with prior practice as reflected by reserves on the Balance Sheet for Taxes related to prepayments of a similar type).

(l) Neither the Company nor any of its Subsidiaries has been a United States real property holding corporation within the meaning of Section 897(c)(2) of the Code at any time during the preceding five (5) years.

(m) Neither the Company nor any of its Subsidiaries is a party to any safe harbor lease within the meaning of Section 168 (f)(8) of the Internal Revenue Code of 1954, as in effect before amendment by the Tax Equity and Fiscal Responsibility Act of 1982. No property owned by the Company or any of its Subsidiaries is (i) "tax-exempt use property" within the meaning of Section 168(h)(1) of the Code, (ii) "tax-exempt bond financed property" within the meaning of Section 168(g) of the Code, (iii) or, as to the Company, used predominately outside the United States within the meaning of Section 168(g)(1)(A) of the Code, or as to any Subsidiary, used outside the country under the Laws of which it was organized. None of the Company or any of its Subsidiaries is a party to any agreement under which it is treated as a lessor or lessee of "limited use property" within the meaning of Rev. Proc. 2001-28. None of the outstanding indebtedness of the Company or its Subsidiaries constitutes indebtedness with respect to which any interest deductions may be disallowed under Sections 163(i), 163(j), 163(l) or 279 of the Code or under any other applicable Laws.

(n) Neither the Company nor any of its Subsidiaries has been either a "distributing corporation" or a "controlled corporation" within the meaning of Section 355(a)(1)(A) of the Code in a distribution qualifying (or intended to qualify) under Section 355 of the Code (or so much of Section 356 as relates to Section 355).

(o) Neither the Company nor any of its Subsidiaries has ever been subject to (i) the dual consolidated loss provisions of the Section 1503(d) of the Code, (ii) the overall foreign loss provisions of Section 904(f) of the Code or (iii) the recharacterization provisions of Section 952(c)(2) of the Code.

(p) Notwithstanding any other provision of this Section 3.10 to the contrary, no representation is being made by the Company with respect to the amount of or the availability to use any net operating losses, any Tax credit carryovers (including any VAT credits), any income Tax basis or other Tax attributes of the Company or any of its Subsidiaries other than representations being made as to the knowledge of the Company. For the avoidance of doubt, no representation is being made as to whether any net operating losses of the Company or any of its Subsidiaries are subject to limitation under Sections 269, 382, 383, 384 or 1502 of the Code, or comparable provisions of state, local or non-U.S. Tax Law.

(q) Neither the Company nor any of its Subsidiaries has participated in, or cooperated with, an international boycott within the meaning of Section 999 of the Code.

(r) Neither the Company nor any of its Subsidiaries has, in the past ten (10) years, acquired assets from another Person (or was treated or required to be treated for Tax purposes as acquiring assets of a Person by reason of change in Tax status of such Person) in a transaction in which the federal income Tax basis for the acquired assets (other than cash) is required to have been determined, in whole or in part, by reference to the Tax basis of the acquired assets in the hands of such transferring Person.

(s) Neither the Company nor any of its Subsidiaries has ever been a party to any Tax allocation, Tax sharing, indemnity or similar agreement or arrangement, other than any such agreements or arrangements to which only the Company and any of its Subsidiaries are parties, under which the Company or any of its Subsidiaries may be held liable to another Person in respect of Taxes payable by such Person (including any agreement by which the Company or any of its Subsidiaries has agreed to allocate Tax liabilities computed on a consolidated, combined, unitary or similar basis among entities, or agreed to indemnify any other Person against Tax Liabilities). For the purposes of this Section 3.10(s), commercially reasonable agreements providing for the allocation or payment of real property Taxes attributable to real property leased or occupied by the Company or any of its Subsidiaries and commercially reasonable agreements for the allocation of payment of personal property Taxes, sales or use Taxes or value added Taxes with respect to personal property leased, used, owned or sold by the Company or any of its Subsidiaries in the ordinary course of business ("Excluded Tax Sharing Agreements") shall be disregarded.

(t) Neither the Company nor any of its Subsidiaries (i) has ever been a member of an "affiliated group" (within the meaning of Section 1504(a) of the Code) or similar group of entities, other than the affiliated group of which the Company is the common parent, with which the Company or any of its Subsidiaries joined, or was or may be required to join, for any taxable period in making a consolidated federal income Tax Return or other Tax Return in which Tax Liability was or would be computed on a consolidated, combined, unitary or similar basis, and (ii) has ever had a relationship to any other Person (other than a relationship between the Company and its Subsidiaries) that would cause it to be liable for Taxes owed by any other Person (other than as a payor required to effect Tax withholding from payments to another Person), including, without limitation, Tax payable by reason of transferee liability, operation of Law or Treasury Regulation Section 1.1502-6(a) (or any predecessor or successor thereof or any analogous or similar provision under Law).

(u) Neither the Company nor any of its Subsidiaries (i) is a party to any joint venture, partnership or other agreement or arrangement that is treated or required to be treated as a partnership for federal income Tax purposes and (ii) owns any interest in an entity that either is treated as an entity disregarded as separate from its owner for U.S. federal Tax purposes or is an entity as to which an election pursuant to Treasury Regulation Section 301.7701-3 has been made.

(v) Neither the Company nor any of its Subsidiaries has been a beneficiary or has otherwise participated in any "reportable transaction" within the meaning of Treasury Regulation Section 1.6011-4(b)(1) that will be required to be disclosed under Treasury Regulation Section 1.6011-4 on a Tax Return not yet filed by the Company. No Tax Return filed by or on behalf of the Company has contained a disclosure statement under Section 6662 of the Code (or any similar provision of Law) (other than statements included in or apparent from Tax Returns provided or made available to Parent pursuant to Section 3.10(e)).

(w) To the extent that the Company or and of its Subsidiaries has applied for, received and used aid granted by a Government Authority, in whatever form, in the nature of Tax incentives or benefits that are not generally available to all similarly situated taxpayers without specific application, such aid was availed of only in accordance with applicable Laws and in compliance with all regulatory orders, conditions and impositions. To the knowledge of the Company, no such aid will be required to be unwound, repaid or discontinued as a result of the consummation of the Merger or any other existing circumstance.

3.11 Property .

(a) Except as set forth on Schedule 3.11(a) , neither the Company nor any of its Subsidiaries owns, or has ever owned, any real property. Schedule 3.11(a) sets forth an accurate and complete list of all real property leased by the Company or any of its Subsidiaries or to which the Company or any of its Subsidiaries may have any leasehold rights (collectively, the " Facilities "). True, complete and correct copies of all leases of real property listed on Schedule 3.11(a) have been made available to Parent. Neither the Company nor any of its Subsidiaries have subleased any portion of the Facilities. All leases set forth on Schedule 3.11(a) are in full force and effect and constitute valid and binding agreements of the Company and the other party or parties thereto in accordance with their respective terms, except as enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting the enforcement of creditors' rights in general and general principles of equity.

(b) Schedule 3.11(b) sets forth an accurate list of all owned and leased personal property included on the Balance Sheet (i) as of the Balance Sheet Date, or (ii) acquired since the Balance Sheet Date, in the case of (i) and (ii) valued in excess of $20,000. True, complete and correct copies of all leases of personal property and equipment listed on Schedule 3.11(b) have been delivered to Parent. All of the personal property listed on Schedule 3.11(b) is in good working order and condition, ordinary wear and tear excepted. All personal property necessary for the conduct of the business by the Company or any of its Subsidiaries is either owned by the Company, its Subsidiary, or leased under an agreement listed on Schedule 3.11(b) .

(c) Each of the Company and its Subsidiaries has good and marketable title to its owned tangible assets, free and clear of any and all Encumbrances, and such assets, taken together, are adequate and sufficient for the operation of their respective businesses as currently conducted.

3.12 Contracts .

(a) Schedule 3.12(a) sets forth an accurate and complete list of each Significant Contract. No Significant Contract has been breached or canceled by the other party, and the Company has no knowledge of any anticipated breach by any other party to any Significant Contract (with or without notice or lapse of time). The Company or its Subsidiary has performed all the obligations required to be performed by it in all material respects in connection with the Significant Contracts and is not in material default under or in material breach of any Significant Contract, and no event has occurred which with the passage of time or the giving of notice or both would (i) result in a material default or material breach thereunder; (ii) give any Person the right to declare a default under any Significant Contract, (iii) give any Person the right to accelerate the maturity or performance of any Significant Contract, or (iv) give any Person the right to cancel, terminate or materially modify any Significant Contract. The Company does not have a present expectation or intention of not fully performing any obligation pursuant to any Significant Contract. Each Significant Contract is legal, valid, binding, enforceable and in full force and effect, except as enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting the enforcement of creditors' rights in general and general principles of equity.

(b) The Company has provided Parent with a true and correct copy of all written Significant Contracts which are required to be disclosed on Schedule 3.12(a) , in each case together with all written amendments (all of which are disclosed on Schedule 3.12 (a)). Schedule 3.12(b) contains an accurate and complete description of all material terms of all oral Significant Contracts. The Company does not have any Government Contracts or Government Bids.

3.13 Claims and Litigation . Schedule 3.13 describes all of the claims, demands and Proceedings that have been commenced by or against the Company or any of its Subsidiaries and the status thereof. Except as set forth on Schedule 3.13 , there is no claim, demand or Proceeding pending, threatened in writing, or, to the knowledge of the Company, threatened orally against or affecting the Company or its assets before any court, agency, authority or arbitration tribunal. Except as set forth on Schedule 3.13 , neither the Company nor any of its Subsidiaries has received any opinion or legal advice in writing to the effect that it is exposed from a legal standpoint to any Liability or disadvantage which may be material to the business of the Company or any of its Subsidiaries as previously or presently conducted or as presently proposed to be conducted. None of the Company or any of its officers or other employees is subject to or in default with respect to any notice, order, writ, injunction or decree of any Government Authority or arbitration tribunal, which may be material to the business of the Company or any of its Subsidiaries.

3.14 Compliance with Laws .

(a) Each of the Company and its Subsidiaries has complied at all times, and is currently in compliance, in all material respects, with all Laws, regulations, rules, orders, permits, judgments, decrees and other requirements and policies imposed by any Government Authority, including but not limited to the False Claims Act, the anti-fraud provisions of the Contract Disputes Act, the Anti-Kickback Act, the Federal Election Campaign Act, the Sherman Act, the Clayton Act, the Truth in Negotiations Act, the Services Contract Act, the Procurement Integrity Act, the Byrd Amendment (31 U.S.C. § 1352), the Export Administration Act of 1979, as amended, and each act's respective regulations. Each of the Company and its Subsidiaries has all material licenses, permits, approvals, qualifications or the like, from any Government, Government Authority or Person necessary for the conduct of its business as conducted or as presently proposed to be conducted, all such items are in full force and effect and each of the Company and its Subsidiaries is and has at all times been in material compliance with the terms thereof. Schedule 3.14 sets forth all licenses and permits held by the Company and each of its Subsidiaries which terminate or become renewable at any time prior to the first anniversary of the date of this Agreement. To the knowledge of the Company, there are no facts or circumstances in existence which are reasonably likely to prevent the Company or any of its Subsidiaries from renewing each such license and permit. The Company has not received any written notice or citation for any actual noncompliance with any of the foregoing in this Section 3.14.

(b) Neither the Company nor any of its Subsidiaries has (nor, to the knowledge of the Company, has any director, officer, principal, assignee, partner, agent, or employee of the Company or any of its Subsidiaries nor any other person, acting on behalf of the Company or any of its Subsidiaries) directly or indirectly: used any of the Company's or any of its Subsidiaries' funds for unlawful contributions, gifts, entertainment or other unlawful expenses relating to political activity; made any unlawful payment to foreign or domestic government officials or employees or to foreign or domestic political parties or campaigns from the Company's or any of its Subsidiaries' funds; violated any provision of the Foreign Corrupt Practices Act, 15 U.S.C. sections 78dd-1, -2, or any equivalent foreign law; established or maintained any unlawful or unrecorded fund of the Company's or any of its Subsidiaries' monies or other assets; made any false or fictitious entry on the books or records of the Company or any of its Subsidiaries; or made any bribe, rebate, payoff, influence payment, kickback, or other unlawful payment, to any person or entity, private or public, regardless of form, whether in money, property, or services, to obtain favorable treatment in securing business or to obtain special concessions for the Company or any of its Subsidiaries, or to pay for favorable treatment for business secured or for special concessions already obtained for the Company or any of its Subsidiaries. Neither the Company nor any or any of its Subsidiaries' has conducted or initiated any internal investigation or made a voluntary or involuntary disclosure to any Government Authority with respect to any alleged act or omission arising under or relating to any noncompliance with the Foreign Corrupt Practices Act, 15 U.S.C. sections 78dd-1, -2, or any equivalent foreign law.

(c) Each of the Company and its Subsidiaries is in compliance in all material respects with all United States import and export Laws (including without limitation those laws under the authority of U.S. Departments of Commerce (Bureau of Industry and Security) codified at 15 CFR, Parts 700-799; Homeland Security (Customs and Border Protection) codified at 19 CFR, Parts 1-199; State (Directorate of Defense Trade Controls) codified at 22 CFR, Parts 103, 120-130; and Treasury (Office of Foreign Assets Control) codified at 31 CFR, Parts 500-599). Each of the Company and its Subsidiaries has conducted its export transactions in accordance in all material respects with applicable provisions of U.S. export laws and regulations, and other export laws of the countries where it conducts business. Without limiting the foregoing: (i) each of the Company and its Subsidiaries has obtained all export licenses and other approvals required for its exports of products, software and technologies from the U.S., (ii) each of the Company and its Subsidiaries is in compliance in all material respects with the terms of such applicable export licenses or other approvals, (iii) there are no pending or overtly threatened claims against the Company or any of its Subsidiaries with respect to such export licenses or other approvals and (iv) there are no actions, conditions or circumstances pertaining to the Company's or any of its Subsidiaries' export transactions that would reasonably be expected to give rise to any material future claims.

3.15 Environmental and Safety Matters. Each of the Company and its Subsidiaries has conducted its business at all times in compliance, in all material respects, with all applicable Environmental Laws. To the knowledge of the Company, none of the properties currently or formerly owned or operated by the Company or any of its Subsidiaries contain any Hazardous Substance in amounts exceeding the levels permitted by applicable Environmental Laws. Neither the Company nor any of its Subsidiaries has not received any notices, demand letters or requests for information from any Government Authority or other Person, which has not heretofore been resolved with such Government Authority or other Person, indicating that the Company or any of its Subsidiaries may be in violation of, or liable under, any Environmental Law. There are no civil, criminal or administrative Proceedings pending or, to the knowledge of the Company, overtly threatened against the Company or any of its Subsidiaries relating to any violation, or alleged violation, of any Environmental Law. No reports have been filed, or are required to be filed, by the Company or any of its Subsidiaries concerning the Release of any Hazardous Substance or the threatened or actual violation of any Environmental Law which have not heretofore been resolved. No Hazardous Substance has been disposed of, Released or transported by the Company in violation of any applicable Environmental Law from any properties owned by the Company. To the knowledge of the Company, no remediation or investigation of Hazardous Substances is occurring at any property operated, or formerly operated, by the Company, in each case, with respect to any action taken by the Company.

3.16 Insurance. Schedule 3.16 lists each insurance policy maintained by, on behalf of, for the benefit of or at the expense of the Company and each of its Subsidiaries and any claims made by the Company or its Subsidiaries thereunder. The Company has provided copies to Parent of all such insurance policies. All of such insurance policies are in full force and effect, and neither the Company nor any of its Subsidiaries is, nor ever been, in default with respect to its obligations under any such insurance policies and neither the Company nor any of its Subsidiaries has never been denied insurance coverage. The Company is current in all of its premiums for its insurance policies. The Company does not know of any threatened termination of, or material premium increase with respect to, any such policies. The Company has never received any notice or other communication regarding any actual or possible (i) cancellation or invalidation of any insurance policy, (ii) refusal of any coverage or rejection of any claim under any insurance policy, or (iii) material adjustment in the amount of the premiums payable with respect to any insurance policy. Neither the Company nor any of its Subsidiaries has any self-insurance or co-insurance programs.

3.17 Intellectual Property.

(a) Company Owned Intellectual Property. Schedule 3.17(a) sets forth a complete and accurate list of all United States and foreign Company Registered Intellectual Property. The foregoing, along with all other Intellectual Property owned by the Company or the Subsidiaries, are the "Company Owned Intellectual Property". Except as set forth on Schedule 3.17(a), the Company and the Subsidiaries are the sole and exclusive owners of all right, title and interest in and to the Company Owned Intellectual Property, free and clear of all Encumbrances. Neither the Company nor any Subsidiary has permitted their rights in the Company Registered Intellectual Property to lapse or, in the case of registered copyrights, enter the public domain. Schedule 3.17(a) identifies each written agreement, contract, assignment or other instrument pursuant to which the Company or any Subsidiary has obtained any joint or sole ownership interest in or to any intellectual property rights in each material item of Company Owned Intellectual Property and copies of such agreements, contracts, assignments and other instruments have been made available to Parent.

(b) Company Licensed Intellectual Property. Schedule 3.17(b) identifies (i) each item of Company Licensed Intellectual Property and the license or agreement pursuant to which the Company or any Subsidiary has received rights to Exploit such Company Licensed Intellectual Property (but excluding all Excluded Contracts); and (ii) all licenses, sublicenses and other agreements that require the Company or any Subsidiary to license, assign or otherwise grant rights to any additions, derivatives, modifications or improvements to Company Licensed Intellectual Property made by or for the Company or any Subsidiary to any third party. The Company and each Subsidiary are in material compliance with the terms and conditions of all licenses. Neither the Company nor any Subsidiary is a party to any oral license, sublicense or other contract or understanding for any Company Licensed Intellectual Property. To the knowledge of the Company, there are currently no claims, actions or proceedings pending or threatened against Company or any Subsidiary alleging that the Company or any Subsidiary has breached any terms or conditions of such licenses. None of the products or services developed, manufactured, distributed, provided, licensed or sold by the Company or any Subsidiary includes Open Source Materials.

(c) All Necessary Rights. To the knowledge of the Company, the intellectual property rights in Company Intellectual Property constitutes all intellectual property rights necessary to enable the Company to conduct the business of the Company and the Subsidiaries in all material respects in the manner it is currently conducted (and contemplated to be conducted, based on the product roadmap furnished to Parent by the Company) by the Company and the Subsidiaries.

(d) Registrations and Applications. Schedule 3.17(a) lists, for each item of Company Registered Intellectual Property, the applicable filing or registration number, title, jurisdiction in which filing was made or from which registration issued, date of filing or issuance, names of all current applicant(s), inventor(s), and registered owner(s), the current status of the application or registration and the next steps required to be taken in connection with such application or registration, and all deadlines therefor, as applicable. All necessary registration, maintenance and renewal fees currently required to be filed or paid, as applicable, in connection with each item of Company Registered Intellectual Property have been paid and all necessary documents and certificates currently required to be filed in connection with such Company Registered Intellectual Property have been filed with the relevant patent, copyright, trademark, domain registrars and other authorities in the United States and foreign jurisdictions, as the case may be, for the purposes of maintaining such Company Registered Intellectual Property. Except as set forth on Schedule 3.17(a), there are no actions that must be taken by the Company or any Subsidiary within ninety (90) days following the Closing Date, including the payment of any registration, maintenance or renewal fees or the filing of any responses to office actions, documents, applications or certificates for the purposes of obtaining, maintaining, perfecting, preserving or renewing any Company Registered Intellectual Property. In accordance with applicable laws and regulations, the Company and each Subsidiary have recorded each assignment of Company Registered Intellectual Property by a third party to the Company and any Subsidiary with the relevant governmental authorities, registrars and patent, trademark, and copyright offices, including the United States Patent and Trademark Office, the U.S. Copyright Office, Verisign, Inc. (with respect to .com and other domains) and other domain name registrars throughout the world, and their respective successors and counterparts in other jurisdictions, as the case may be.

(e) No Claims. Except as set forth on Schedule 3.17(e), neither the Company nor any Subsidiary is currently or has been a party to any claim, suit, action or proceeding, nor is any claim, suit, action or proceeding, to the knowledge of the Company, threatened against the Company or any Subsidiary, in each case which alleges that the Company or any Subsidiary has engaged in any infringement, unauthorized use or violation of any Company Licensed Intellectual Property, or challenging the Company's or any Subsidiaries' ownership of, right to use, make, have made, sell, offer to sell, distribute, license or sublicense any Company Owned Intellectual Property or challenging the validity or enforceability of any Company Owned Intellectual Property. To the knowledge of the Company, the operation of the business of the Company, as it is currently conducted (or contemplated to be conducted, based on the product roadmap furnished to Parent by the Company) by the Company and the Subsidiaries, does not currently, and will not, infringe or misappropriate any Intellectual Property of any Person, or constitute unfair competition or trade practices under the laws of any jurisdiction, and neither the Company nor any Subsidiary has received notice from any Person claiming that such operation infringes or misappropriates any Intellectual Property of any Person, or constitutes unfair competition or trade practices under the laws of any jurisdiction. To the knowledge of the Company, no third party is infringing upon or misappropriating, or has infringed upon or misappropriated, any Company Owned Intellectual Property.

(f) Outbound Licenses and Agreements. Schedule 3.17(f) identifies each license, sublicense, covenant or other agreement pursuant to which the Company or any Subsidiary has licensed, distributed or otherwise granted any right to any Person, or covenanted not to assert any right, with respect to any Company Owned Intellectual Property. The Company and each Subsidiary are in material compliance with all material terms and conditions of such licenses, sublicenses, covenants and other agreements. Except as described on Schedule 3.17(f), neither the Company nor any Subsidiary has agreed to indemnify any Person against any infringement, violation or misappropriation of any Intellectual Property with respect to any Company Product. Except as set forth on Schedule 3.17(f), neither the Company nor any Subsidiary is a member of or party to any patent pool, industry standards body, trade association or other organization pursuant to the rules of which it is obligated to license to any Person any existing or future Company Owned Intellectual Property.

(g) Trade Secrets and Confidentiality. The Company and each Subsidiary have taken reasonable security measures necessary to protect their confidential information and enforce their rights in such information. Neither the Company nor any Subsidiary is currently a party to any claim, suit, action or proceeding, nor to the knowledge of the Company is any claim, suit, action or proceeding threatened against the Company or any Subsidiary, in each case which alleges that the Company or any Subsidiary has materially breached any term of any nondisclosure agreement to which the Company or any Subsidiary is a party. The Company and each Subsidiary have made available to Parent copies of all nondisclosure agreements between the Company and each Subsidiary, on the one hand, and all third parties, on the other hand. Schedule 3.17(g) identifies each third party with which the Company and each Subsidiary has entered into a nondisclosure agreement, the effective date thereof, the termination date thereof, and the term limit for maintaining the confidentiality of any information disclosed therein. The Company and each Subsidiary have materially complied with all applicable contractual and legal requirements pertaining to the handling or use of third party confidential information, Intellectual Property, and/or trade secrets that it has received from a third party under any nondisclosure agreement. No complaint alleging an improper use or disclosure of, or a breach in the security of, any such information has been made or, to the knowledge of the Company, threatened in writing against the Company or any Subsidiary. To the knowledge of the Company, there has been no (i) unauthorized disclosure of any third party proprietary or confidential information in the possession, custody or control of the Company or any Subsidiary or (ii) breach of the Company's or any Subsidiary's security procedures wherein confidential information has been disclosed to a third party Person.

(h) Nondisclosure and Assignment of Invention Agreements . Except as set forth on Schedule 3.17(h), all officers, employees, consultants and independent contractors of the Company and each Subsidiary have executed and delivered to the Company written agreements (i) requiring each such officer, employee, consultant or independent contractor to protect and preserve the confidentiality of the Company's confidential information and (ii) expressly assigning to the Company or a Subsidiary all Intellectual Property arising from the services performed for the Company or a Subsidiary by such Persons. To the knowledge of the Company, none of the Company's employees have violated the Company's or any Subsidiary's policies or practices related to protection of trade secrets or confidential information.

(i) Development of Intellectual Property By Employees and Contractors . Except as set forth on Schedule 3.17(i) , all Company Owned Intellectual Property has been created by employees of the Company or a Subsidiary or by independent contractors or consultants of the Company or a Subsidiary who have executed valid and binding agreements expressly assigning all right, title and interest in such Intellectual Property to the Company or a Subsidiary and waiving their non-assignable rights (including moral rights) in such developed Intellectual Property in favor of the Company or a Subsidiary and their permitted assigns and licensees, and who have no residual claim to such materials. Except as set forth on Schedule 3.17(i) , to the extent that any Intellectual Property has been developed or created independently or jointly by an independent contractor or other third party for the Company or a Subsidiary, the Company or such Subsidiary has a written agreement with such independent contractor or third party and has thereby obtained ownership of, and is the exclusive owner of all such independent contractor's or third party's Intellectual Property in such work, material or invention by operation of law or valid assignment. To the knowledge of the Company, none of the activities of the employees of the Company or any Subsidiary violates any contract, obligation or other arrangement which any such employee has with a former employer.

(j) Noncontravention . Except as set forth on Schedule 3.17(j) , the consummation and performance of the Merger and the other transactions contemplated by this Agreement will not (i) cause a breach of or default by the Company under, or create on behalf of any third party a right to terminate or modify, any license or other agreement relating to Company Intellectual Property; (ii) restrict the continued use by the Company or any Subsidiary of the Company Intellectual Property to any greater or different extent than the restrictions to which the Company or any Subsidiary is currently subject, or cause any loss of, the diminishment in value of, or the loss of rights to Exploit, any Company Intellectual Property; (iii) cause the grant to any third party of any new, additional or expanded right to receive or Exploit any Company Owned Intellectual Property; (iv) cause the Company or any Subsidiary to be bound by, or subject to, any non-compete or other material restriction in the operation or scope of its business; or (v) cause the Company or any Subsidiary to be obligated to pay any royalties or other material amounts, or offer any incremental discounts, to any third party in excess of those currently payable by the Company or any Subsidiary; *provided, however* , that no representation and warranty is made with respect to any obligations of Parent or Merger Sub prior to the Effective Time, or to any acts or omissions undertaken by Parent or Merger Sub after the Effective Time.

(k) Educational Institutions; Governmental Authorities . No Company Owned Intellectual Property was developed by, or directly as the result of the use of any facilities or resources of educational institutions or any Governmental Authority in a manner that would cause such educational institutions or Governmental Authority to receive any right in such Company Owned Intellectual Property.

(l) Company Source Code . Neither the Company nor any Subsidiary has licensed, distributed or disclosed, and the Company does not have any knowledge of any license, distribution or disclosure by others (including the Company's and its Subsidiaries' employees and contractors) of, the Company Source Code to any Person that was not an employee, consultant, independent contractor, or escrow agent of the Company or any Subsidiary at the time of disclosure, except pursuant to the agreements listed on Schedule 3.17(l) , and the Company and each Subsidiary have taken all reasonable physical and electronic security measures to prevent unauthorized disclosure of such Company Source Code. No event has occurred, and no circumstance or condition exists, that (with or without notice or lapse of time, or both) will, or would reasonably be expected to, nor will the Merger or the other transactions contemplated by this Agreement, cause the disclosure or release of such Company Source Code by the Company or any Subsidiary, escrow agent(s), or any other Person to any third party.

(m) Open Source Materials . Schedule 3.17(m) lists all Open Source Materials that the Company or any Subsidiary has incorporated into any Company Products and describes the manner in which such Open Source Materials have been utilized, including, without limitation, whether and how the Open Source Materials have been modified, licensed and/or distributed by the Company and each Subsidiary. Except as specifically disclosed in Schedule 3.17(m) , neither the Company nor any Subsidiary has (i) incorporated Open Source Materials into, or combined Open Source Materials with, any Company Product; (ii) used Open Source Materials in Company Products in a manner that creates obligations for the Company or any Subsidiary, as a condition of Exploitation of such Open Source Materials, to cause any Company Owned Intellectual Property to be (x) disclosed, distributed or otherwise made available in source code form, (y) licensed for the purpose of making derivative works or (z) redistributable at no charge or minimal charge.

(n) No Defects; No Malicious Code . Schedule 3.17(n) lists all currently open and unresolved warranty claims for the Company Products that were received by the Company during the current calendar year. To the Company's knowledge, the Company Products did not contain (at the time of delivery thereof by the Company to a distributor, reseller, end-user customer, or other third party) any disabling device, virus, worm, back door, Trojan horse or other disruptive or malicious code that in each case is capable of disrupting, disabling, or otherwise impeding the operation of, or providing unauthorized access to, a computer system or network or other device on which such code is stored or installed or damaging or destroying any data or file without the user's consent.

(o) Personal Information . The Company's and the Subsidiaries' collection, retention and Exploitation of data that enables the identification of the identity of an individual natural person and that has been collected by the Company or any Subsidiary from any such person is has been and is currently materially in compliance with the Company's or the applicable Subsidiary's current published privacy policy.

3.18 Related Party Transactions. The Company has not, since December 31, 2012, extended or maintained credit, arranged for the extension of credit, or renewed an extension of credit, in the form of a personal loan to or for any director or officer (or equivalent thereof) of the Company. No officer or director of the Company has received since December 31, 2012, nor is entitled to receive, any material compensation from any Person that has engaged in or is engaging in any material transaction with the Company. The Company is not a party to or bound by any Contract with any Related Party.

3.19 Customers and Suppliers. Schedule 3.19 identifies the top ten (10) customers (based on current fiscal year revenues) of the Company (" Significant Customers ") and the top ten (10) suppliers (based on current fiscal year revenues) of the Company (" Significant Suppliers "). No Significant Customer or Significant Supplier has terminated or threatened in writing to terminate its relationship with the Company or has during the last twelve (12) months materially decreased, limited or otherwise changed the terms and conditions for the purchase or sale, as applicable, of goods or services to or from the Company, or threatened in writing to do so, and the Company does not know of any written or oral communication, fact, event or action which exists or has occurred which would indicate that any Significant Customer or Significant Supplier would do so, whether as a result of the transaction contemplated hereby or otherwise.

3.20 Brokers. Except as set forth on Schedule 3.20, no Person has, as a result of the transactions contemplated by this Agreement, any right, interest or claim against or upon the Surviving Corporation or the Company for any commission, fee or other compensation payable as a finder or broker because of any act or omission by the Company.

3.21 Bank Accounts; Powers of Attorney. Schedule 3.21 sets forth a true, correct and complete list of the names and locations of all banks and other financial institutions at which the Company and each of its Subsidiaries maintain an account or safe deposit box, the names of all Persons authorized to withdraw therefrom or have access thereto and the names of all Persons holding powers of attorney from the Company or any of its Subsidiaries as of the date of this Agreement.

ARTICLE IV
REPRESENTATIONS AND WARRANTIES OF THE SIGNIFICANT STOCKHOLDERS

As a material inducement to the Parent and Merger Sub to enter into this Agreement, and to consummate the transactions contemplated hereby, each Significant Stockholder, severally but not jointly, represent and warrant to the Parent as of the date hereof and as of the Closing, as follows:

4.1 Authority for Agreement. Such Significant Stockholder has full power, authority and legal right to enter into and perform its obligations under this Agreement and each other document contemplated hereby to which the Significant Stockholder is or will be a party and to consummate the transactions contemplated hereby and thereby. This Agreement and the other documents contemplated hereby to which the Significant Stockholder is a party have been or will be duly executed and delivered by the Significant Stockholders, as applicable, and are legal, valid and binding obligations of the Significant Stockholders, enforceable against the Significant Stockholders in accordance with their respective terms, except as enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting the enforcement of creditors' rights in general and general principles of equity.

4.2 No Violation to Result. Except as set forth on Schedule 4.2, the execution, delivery and performance by the Significant Stockholders of this Agreement and the other documents contemplated hereby and the consummation by the Significant Stockholders of the transactions contemplated hereby and thereby, do not and will not, directly or indirectly (with or without notice or lapse of time or both):

(a) (i) violate, breach, conflict with, constitute a default under, accelerate or permit the acceleration of the performance required by, any Contract to which any of the Significant Stockholders is a party or by which any of the Significant Stockholders or the Significant Stockholders' assets are bound or (ii) violate any Law or other legal requirement of any Government Authority applicable to any Significant Stockholder; (b) give any Government Authority or other Person the right to challenge any of the transactions contemplated by this Agreement; or (c) result in the creation or imposition of any Encumbrance, possibility of Encumbrance, or restriction in favor of any Person upon any of the Company Stock or any of the properties or assets of the Company. Other than as set forth on Schedule 4.2 , no notice to, filing with, or consent of, any Person is necessary in connection with, and no "change of control" provision is, or will be, triggered by, the authorization, approval, execution, delivery or performance by the Significant Stockholders of this Agreement and the other documents contemplated hereby nor the consummation by the Significant Stockholders of the transactions contemplated hereby or thereby. The Significant Stockholders have given all notices, made all filings and obtained all consents set forth on Schedule 4.2 or will have done so prior to Closing.

4.3 Title . Schedule 4.3 sets forth such Significant Stockholders' record and beneficial ownership of Company Stock, Company Options or Series A Warrants, as the case may be, as of the date hereof. Such Significant Stockholder has good and valid title to all such Company Stock, Company Options or Series A Warrants, as the case may be, free and clear of all Encumbrances. Such Significant Stockholder has, as of the date hereof, no other equity interests or rights to acquire equity interests in the Company or any of its Subsidiaries.

4.4 Litigation . There is no Proceeding pending or threatened against or affecting any of the Significant Stockholders or their assets before any court, agency, authority or arbitration tribunal that will adversely affect consummation of the Merger or any of the transactions contemplated by this Agreement.

4.5 Brokers . Except as set forth on Schedule 3.23 , no Person has or will have, as a result of the transactions contemplated by this Agreement, any right, interest or claim against or upon the Parent, the Company or the Significant Stockholders or any of their respective Affiliates for any commission, fee or other compensation payable as a finder or broker because of any act or omission by the Significant Stockholders.

ARTICLE V
REPRESENTATIONS AND WARRANTIES OF PARENT AND MERGER SUB

Each of Parent and Merger Sub represents and warrants to the Company, as of the date hereof and as of the Closing, as follows:

5.1 Organization . Parent is a corporation, duly organized, validly existing and in good standing under the laws of the State of Delaware and is qualified to do business and in good standing in each jurisdiction where the character or location of its assets or properties owned, leased or operated by it or the nature of its activities makes such qualification necessary. Merger Sub is a corporation, duly organized, validly existing and in good standing under the laws of the State of Delaware and is qualified to do business and in good standing in each jurisdiction where the character or location of its assets or properties owned, leased or operated by it or the nature of its activities makes such qualification necessary. Each of Parent and Merger Sub has full corporate power and authority and all licenses, permits and authorizations necessary to own and operate its properties and to conduct its business as conducted.

5.2 Authority for Agreement. Each of Parent and Merger Sub has full power, authority and legal right to enter into and perform its obligations under this Agreement and the other documents contemplated hereby to which Parent or Merger Sub, as applicable, is or will be a party and to consummate the transactions contemplated hereby and thereby. The execution, delivery and performance of this Agreement and the other documents contemplated hereby and the consummation of the transactions contemplated hereby and thereby have been duly authorized. No other corporate proceedings on the part of Parent or Merger Sub are necessary to approve and authorize the execution, delivery and performance of this Agreement and the other documents contemplated hereby and the consummation of the transactions contemplated hereby and thereby. This Agreement and the other documents contemplated hereby to which Parent or Merger Sub, as applicable, is a party is the legal, valid and binding obligations of Parent or Merger Sub, as applicable, enforceable against Parent in accordance with their respective terms, except as enforceability may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting the enforcement of creditors' rights in general.

5.3 No Violation to Result. Except as set forth on Schedule 5.3, the execution, delivery and performance by each of Parent and Merger Sub of this Agreement and the other documents contemplated hereby and the consummation by each of Parent and Merger Sub of the transactions contemplated hereby and thereby, do not and will not, directly or indirectly (with or without notice or lapse of time): (i) violate, breach, conflict with, constitute a default under, accelerate or permit the acceleration of the performance required by, (x) any of the terms of the certificate of incorporation or bylaws of either Parent or Merger Sub or any resolution adopted by the board of directors of Parent or Merger Sub or stockholders of Parent or Merger Sub, or (y) any Contract or encumbrance to which Parent or Merger Sub is a party or by which it is bound; or (z) any law, judgment, decree, order, rule, regulation, permit, license or other legal requirement of any Government Authority applicable to Parent or Merger Sub; (ii) give any Person the right to declare a default, exercise any remedy or accelerate the performance or maturity under any such Contract to which Parent or any of its Affiliates is a party, or cancel, terminate or modify any such Contract; or (iii) result in the creation or imposition of any Encumbrance, possibility of Encumbrance, or restriction in favor of any Person, upon any of the properties or assets of Parent or Merger Sub. Other than as set forth on Schedule 5.3 or as otherwise expressly set forth herein, no notice to, filing with, or consent of, any Person is necessary in connection with the execution, delivery or performance by Parent or Merger Sub of this Agreement and the other documents contemplated hereby nor the consummation by Parent or Merger Sub of the transactions contemplated hereby or thereby.

5.4 Interim Operations of Merger Sub. Merger Sub is wholly-owned (directly or indirectly) by Parent, was formed solely for the purpose of engaging in the transactions contemplated by this Agreement, has engaged in no other business activities and has conducted its operations only as contemplated by this Agreement.

5.5 Brokers. Except as set forth on Schedule 5.5, no Person has or will have, as a result of the transactions contemplated by this Agreement, any right, interest or claim against or upon the Company for any commission, fee or other compensation payable as a finder or broker because of any act or omission by Parent or Merger Sub.

ARTICLE VI
ADDITIONAL AGREEMENTS

6.1 Access to Properties and Records. From the date of this Agreement until the earlier of the Closing Date or the termination of this Agreement (the "Pre-Closing Period"), the Company shall, and shall cause its Representatives to, afford to Parent's Representatives reasonable access during the Company's normal business hours and in a manner not unreasonably disruptive under the circumstances, to all of the Company's, and each of its Subsidiaries', assets, properties, books and records and Representatives in order to afford Parent as full an opportunity of review, examination and investigation as it shall reasonably request of the affairs of the Company and its Subsidiaries, and Parent and its representatives shall be permitted to make extracts from, or take copies of, such books, records (including the share record and minute books) or other documentation as may be reasonably requested. During the Pre-Closing Period, the Company shall furnish or cause to be furnished to Parent such reasonable financial and operating data and other information about the Company, its business as presently conducted, as conducted in the past and as presently proposed to be conducted in the future, and properties and assets which any of the Representatives of Parent may reasonably request. No information or knowledge obtained by Parent, its Representatives or any Indemnified Parties in any investigation pursuant to this Section 6.1 shall affect or be deemed to modify any representation or warranty of the Company or the Significant Stockholders contained herein or the conditions to the obligations of the parties to consummate the transactions contemplated by this Agreement or any provision hereof.

6.2 Interim Covenants of the Company. During the Pre-Closing Period, except to the extent expressly permitted by this Agreement or otherwise consented to by an instrument in writing signed by Parent(which consent will not be unreasonably withheld or delayed) or as otherwise set forth in Schedule 6.2, the Company shall (i) use commercially reasonable efforts to keep intact the Company and its business, as presently conducted and as conducted in the past; (ii) not take any action or omit to take any action other than in the ordinary course of its business as the same is presently being conducted; (iii) use commercially reasonable efforts to keep available the services of the directors, officers, employees, independent contractors and agents of the Company and retain and maintain good relationships with its clients and maintain the Company's assets and the Facilities in good condition; (iv) perform their obligations under the Significant Contracts; (v) maintain the goodwill and reputation associated with the Company and (vi) to the extent requested by Parent, take such actions as may be required to terminate any or all of the Company Plans prior to the Closing Date. Without limiting the generality of the foregoing, except to the extent expressly permitted by this Agreement or otherwise consented to by an instrument in writing signed by Parent (which consent will not be unreasonably withheld or delayed), the Company shall not:

(a) adopt or propose any change to the Certificate of Incorporation, Bylaws or other organizational documents of the Company;

(b) merge or consolidate with any other Person or acquire a material amount of shares or assets of any other Person or effect any business combination, recapitalization or similar transaction;

(c) purchase, sell, lease or dispose of or make any contract for the purchase, sale, lease or disposition of or make subject to a security interest or any other Encumbrance, any of the Company's properties or assets, other than in the ordinary and usual course of its business, for a consideration at least equal to the fair value of such property or asset;

(d) (i) increase or promise to increase the compensation payable or to become payable (including, without limitation, bonus grants, incentive payments and retention payments), other than annual adjustments to base salary made in the ordinary course of business consistent with past practice, or increase or accelerate or promise to increase or accelerate the vesting of any benefits provided, or pay or award any payment or benefit not required as of the date hereof by a Company Plan as existing on the date hereof and disclosed in Schedule 3.8(a), to the directors, officers, employees, consultants or other service providers of the Company or any Subsidiary; (ii) grant or promise to grant any severance or termination pay or retention payments or benefits to, or enter into or amend any employment, severance, retention, change in control, consulting or termination Contract with, any director, officer, employee, consultant or other service provider of the Company or any Subsidiary; (iii) establish, adopt, enter into or amend any collective bargaining, bonus, profit-sharing, thrift, compensation, stock option, restricted stock, pension, retirement, deferred compensation, employment, termination, severance or other plan, Significant Contract, Company Plan, trust, fund, policy or arrangement for the benefit of any director, officer, employee, consultant or other service provider of the Company or any Subsidiary; (iv) pay or make, or agree or promise to pay or make, any accrual or other arrangement for, or take, or agree to take, any action to fund or secure payment of, any severance pension, indemnification, retirement allowance, or other benefit; (v) hire (or agree or commit to hire, employ or engage), elect or appoint any officer, director, employee. consultant or other service provider of the Company or any Subsidiary other than in the ordinary course of business consistent with past practice or in accordance with the Company's 2013 budget; or (vi) terminate the employment, change the title, office or position, or materially reduce the responsibilities of any Key Employee or any management, supervisory or other key personnel of the Company or any Subsidiary;

(e) incur any indebtedness or borrowings, whether or not in the ordinary course of its business, or issue any notes or commercial paper;

(f) enter into any Contract (i) which would be required to be listed on Schedule 3.12 had it been entered into prior to the date hereof or (ii) in which any Affiliate of the Company or any Stockholder has any direct or beneficial interest;

(g) amend or prematurely terminate, or waive any material right or remedy under, any Significant Contract;

(h) write-off as uncollectible, discount, or establish any extraordinary reserve with respect to, or accelerate the collection of, any account receivable or other receivable or defer or postpone the payment in full or any accounts payable;

(i) authorize for issuance, issue, sell, deliver or agree or commit to issue, sell or deliver (whether through the issuance or granting of options, warrants, convertible or exchangeable securities, phantom rights, commitments, subscriptions, rights to purchase or otherwise) any shares of the Company's capital stock or any other securities, *provided* , *however* that (i) the Company may issue shares of Company Stock in connection with the exercise of Company Options or Series A Warrants; and (ii) the Company may issue shares of Company Common Stock in connection with the conversion of Company Preferred Stock;

(j) redeem, purchase or otherwise acquire, directly or indirectly, any shares of the Company's capital stock or debt securities or any option, warrant or other right to purchase or acquire any such shares, or declare, accrue, set aside or pay any dividend or other distribution (whether in cash, shares or other property) with respect to such capital stock (except in connection with the termination of a Person's service or employment with the Company);

(k) create, incur or assume any liability or indebtedness, except in the ordinary course of business consistent with past practices, or postpone or defer the creation, incurrence, or assumption of any liability or indebtedness that would otherwise be created, incurred or assumed in the ordinary course of business absent the execution of this Agreement;

(n) pay or apply any of the Company's assets to the direct or indirect payment, discharge, satisfaction or reduction of any Indebtedness or Non-Ordinary Course Liabilities;

(l) change any of its methods of accounting or accounting practices in any respect;

(m) commence or settle any legal proceeding, action, demand, or claim;

(n) make, amend or revoke any election with respect to Taxes, amend any Tax Return, change any method of accounting, or settle or compromise any Tax Liability, or consent to any extension or waiver of the limitation period applicable to any claim or assessment in respect of Taxes, in each case, that would have any material effect on the Company's Tax Liabilities for any taxable period; or

(o) agree or commit to do any of the foregoing.

6.3 Publicity and Disclosure. Parent shall determine the form and substance of any press release, publicity or other communication related to this Agreement or the transactions contemplated hereby; provided, however, that Parent and the Company shall mutually agree on the form and substance of the initial press release announcing this Agreement and the transactions contemplated hereby. No Party shall make any disclosure of this Agreement or the existence, terms and conditions hereof (whether or not in response to an inquiry about the existence or subject matter of this Agreement) to any Person unless previously approved by Parent in writing. Notwithstanding the foregoing, nothing contained herein shall prohibit Parent from making any disclosure which Parent in good faith believes is required by, or advisable according to, applicable Laws, regulations or stock market rules. Notwithstanding anything in this Agreement to the contrary, following Closing, the Stockholders' Representative shall be permitted to: (i) after the public announcement of the Merger, publicly announce that it has been engaged to serve as the Stockholders' Representative in connection with the Merger as long as such announcement does not disclose any of the other terms of the Merger or the other transactions contemplated herein; and (ii) disclose information as required by law or to employees, advisors or consultants of the Stockholders' Representative and to the Participating Holders, in each case who have a need to know such information, provided that such persons either (A) agree to observe the terms of this Section 6.3 or (B) are bound by obligations of confidentiality to the Stockholders' Representative of at least as high a standard as those imposed on the Stockholders' Representative under this Section 6.3.

6.4 No Solicitation .

(a) During the Pre-Closing Period, the Company shall not (and the Company shall cause the Company's Representatives not to) solicit or encourage the initiation or submission of interest, offers, inquiries or proposals (or consider or entertain any of the foregoing) from any Person (including, without limitation, by way of providing any non-public information concerning the Company, its business or assets to any Person or otherwise), initiate or participate in any negotiations or discussions, or enter into, accept or authorize any agreement or agreement in principle, or announce any intention to do any of the foregoing, with respect to any expression of interest, offer, proposal to acquire, purchase, license, or lease (i) all or a substantial portion of the Company's business or assets (including, without limitation the Company Intellectual Property), or (ii) the Company's capital stock or other securities, in each case whether by stock purchase, merger, consolidation, combination, reorganization, recapitalization, purchase of assets, tender offer, lease, license or otherwise (any of the foregoing, a " Competing Transaction "). The Company shall, and the Company shall cause its Representatives to, immediately discontinue any ongoing discussions or negotiations (other than any ongoing discussions with Parent) relating to a possible Competing Transaction, and shall promptly provide Parent with an oral and a written notice of any expression of interest, proposal or offer relating to a possible Competing Transaction that is received by the Company or by any of the Company's Representatives from any person, which notice shall contain the nature of the proposal proposed and the material terms of the proposal and include copies of any such notice, inquiry or proposal.

(b) Neither the board of directors of the Company nor any committee thereof shall withdraw, amend or modify, or propose or resolve to withdraw, amend or modify the Recommendation;

provided , however , that prior to the receipt of the Requisite Vote the board of directors of the Company may withdraw, amend or modify the Recommendation, and may make any statement required by applicable laws, if (x) the Company receives an unsolicited, written proposal for a Competing Transaction that the board of directors of the Company determines in good faith, after having taken into account the advice of the Company's outside legal counsel and its independent financial advisors, is reasonably likely to result in a Superior Proposal that is reasonably likely to be consummated by the Company, (y) the board of directors of the Company determines in good faith, upon written advice of outside legal counsel, that a change in the Recommendation is necessary in order to comply with its fiduciary duties under the DGCL, and (z) the Company shall have complied with the notice requirement set forth in Section 6.4(a) and provided Parent with no less than five (5) business days' notice of any contemplated withdrawal, amendment or modification to the Recommendation, during which time the Company and Parent shall negotiate in good faith regarding any changes to the terms of the Transaction contemplated hereby that may be proposed by Parent such that the Competing Transaction would no longer be reasonably likely to result in a Superior Proposal. For purposes of this Agreement, a "Superior Proposal" shall mean any bona fide proposal for a Competing Transaction that is on terms that the board of directors of the Company has determined in good faith, upon written advice of its financial advisor and outside legal counsel and after taking into account all legal, financial, regulatory and other aspects of the proposal, including the financing terms thereof is superior from a financial point of view to the transactions contemplated by this Agreement.

6.5 Notification of Certain Matters . During the Pre-Closing Period, each of the Company and Parent shall give prompt notice to the other of (a) the occurrence or non-occurrence of any event the occurrence or non-occurrence of which would be likely to cause any representation or warranty contained herein to be untrue or inaccurate in any respect at or prior to the Closing such that any of the conditions set forth in Article 7 or Article 8, as applicable, hereof would not be satisfied; and (b) any failure of such party to comply with or satisfy any covenant, condition or agreement to be complied with or satisfied by such hereunder, in each case such that any of the conditions set forth in Article 7 or Article 8, as applicable, hereof would not be satisfied.

6.6 Tax Matters .

(a) Preparation of Tax Returns after Closing .

(i) Parent shall prepare and file (or cause to be prepared and filed) with the appropriate Taxing Authorities all Tax Returns required to be filed by the Company or any of its Subsidiaries with respect to any taxable period beginning before the Closing Date that become due after the Closing Date (each a " Parent Required Prepared Return "), and any Tax Returns required to have been filed by the Company that have not been filed on or before the Closing Date (each a " Parent Permitted Return " and with Parent Required Prepared Returns, " Parent Prepared Returns "). Each Parent Prepared Return shall be prepared in a manner consistent with prior practice of the Company and its Subsidiaries unless otherwise required by applicable Tax Law or consented to by the Stockholders' Representative (which consent may not be unreasonably delayed or withheld).

(ii) If the Tax shown as due on any Parent Prepared Return would be subject to indemnification by the Participating Holders pursuant to Section 9.1, Parent shall provide the Stockholders' Representative with a copy of such Parent Prepared Return for review and comment at least thirty (30) days prior to the filing of such Tax Return (or, if required to be filed within thirty (30) days after the Closing or the end of the taxable period to which such return relates, as soon as reasonably possible following the Closing or the end of such taxable period, as the case may be), accompanied (if relevant) by a statement setting forth and calculating in reasonable detail the Taxes that are shown as due on such Tax Return and claimed to be indemnifiable pursuant to Section 9.1. Parent shall cause such Tax

Return to be revised as reasonably requested in writing by the Stockholders' Representative at least five (5) days prior to the required filing date of such Tax Return. For purposes of the foregoing, a revision to a Parent Prepared Return shall not be considered to have been reasonably requested if (w) there is not substantial authority for the requested change in reporting within the meaning of Section 6662 of the Code, (x) a reserve for Tax liability would be required to be established in the financial statements of Parent or the Company for potential Tax liability that is not shown as due on such Tax Return or (y) Parent reasonably determines that the position is not more likely than not to be sustained and either the Damages that foreseeably could result from the failure to sustain the requested Tax reporting position would not be indemnifiable to Parent under this Agreement or there is not adequate security for the potential indemnification obligations of the Participating Holders under Section 9.1 for such Damages.

(iii) Parent shall, subject to any indemnification pursuant to Section 9.1, pay or cause to be paid the Tax shown as due on each Parent Prepared Return.

(b) Allocation of Taxes. The Stockholders, Parent and the Company and its Subsidiaries shall, to the extent permitted by applicable Tax Law, cause the taxable period of the Company and each of its Subsidiaries to end as of the close of the Closing Date. For purposes of this Agreement, Taxes incurred by the Company or its Subsidiaries with respect to a taxable period that includes but does not end on the Closing Date, shall be allocated to the portion of the period ending on the Closing Date as follows: (i) except as provided in (ii) and (iii) below, to the extent feasible, on a specific identification basis, according to the date of the event or transaction giving rise to the Tax, (ii) except as provided in (iii) below, with respect to periodically assessed ad valorem Taxes and Taxes not otherwise feasibly allocable to specific transactions or events, in proportion to the number of days in such period occurring through and including the Closing Date compared to the total number of days in such taxable period, and (iii) in the case of any Tax based upon or related to income or receipts, in an amount equal to the Tax which would be payable if the relevant taxable period ended on the Closing Date. It is acknowledged for avoidance of doubt that the Participating Holders shall have no indemnity obligation under Section 9.1(a) with respect to any Specified Taxes without regard to whether such Taxes would be allocable to a taxable period ending on or before the Closing Date under the above principles. Any Tax credits relating to a taxable period that begins before and ends after the Closing Date shall be taken into account as though the relevant taxable period ended on the Closing Date.

(c) Tax Proceedings. Any Party who receives any notice of a pending or threatened Tax audit, assessment, or adjustment against or with respect to the Company or its Subsidiaries that may give rise to Liability of another Party hereto or the Participating Holders (including pursuant to the indemnification provisions of this Agreement), shall promptly notify such other Party within ten (10) business days of the receipt of such notice. The Parties each agree to consult with and to keep the other Parties hereto informed on a regular basis regarding the status of any Tax Proceeding to the extent that such Proceeding could affect a Liability which could reasonably be a basis for a claim pursuant to the indemnity obligations hereunder. Parent will have the right to control the conduct of and the resolution of any Proceeding which could reasonably be a basis for a claim pursuant to the indemnity obligations hereunder; provided, however, (i) the Stockholders' Representative shall have the right (but not the duty) to participate in the defense of any such Proceeding and to employ counsel, at the expense of the Participating Holders, separate from the counsel employed by Parent, and (ii) Parent may not settle any such Proceeding in any manner which would adversely affect the Participating Holders without the written consent of the Stockholders' Representative (which consent will not be unreasonably withheld or delayed).

(d) Cooperation, Access to Information, and Record Retention. The Stockholders, Parent and the Company and its Subsidiaries shall cooperate, and shall cause their representatives to cooperate, as and to the extent reasonably requested by any other Party hereto in connection with the preparation and filing of Tax Returns as provided herein, any Proceeding with respect to Taxes, and any determination regarding reflection of Tax liabilities of the Company or its Subsidiaries in financial statements of Parent. Such cooperation shall include the provision of records and information which are reasonably relevant to any such Tax Return, Proceeding relating to Taxes or any preparation of financial statements, and making employees available on a mutually convenient basis to provide additional information and explanation of any material provided hereunder. The Stockholders, Parent and the Company and its Subsidiaries shall (i) retain all books and records with respect to Taxes of the Company and its Subsidiaries (including Tax Returns) relating to any taxable period beginning before the Closing Date until the expiration of the statute of limitations for assessment of Taxes for such respective taxable period and (ii) give the other Parties hereto reasonable written notice prior to transferring, destroying or discarding any such books and records and, if another Party so requests, allow the other Party to either copy or take possession of such books and records.

(e) Tax Certificates. The Parties further agree, upon request, to use reasonable efforts to obtain any certificate or other document from any Government Authority or any other Person as may be necessary to mitigate, reduce or eliminate any Tax that could be imposed.

(f) Termination of Tax Sharing Agreements. All Tax sharing agreements or similar agreements between the Company or any of its Subsidiaries and any other Person (other than any such agreement created by the execution of this Agreement and any Excluded Tax Sharing Agreements) shall be terminated on or before the Closing Date and, after the Closing Date, the Company and its Subsidiaries shall not be bound thereby or have any Liability thereunder.

(g) Transfer Taxes and Tax Indemnity.

(i) Notwithstanding any provision to the contrary in this Agreement, all Korea Transfer Taxes incurred by any Stockholder in connection with the transactions contemplated by this Agreement shall be paid by such Stockholder when due. Such Stockholder shall, at such Stockholder's expense, prepare and file all necessary Tax Returns and other documentation with respect to all such Transfer Taxes. If required by applicable Law, Parent shall, and shall cause its Affiliates to, join in the execution of any such Tax Returns and other documentation.

(ii) All Transfer Taxes (other than Korea Transfer Taxes) imposed on the Company or its Subsidiaries or Parent or its Affiliates in connection with consummation of the Merger shall be borne 50% by the Participating Holders (directly by indemnification, or by inclusion of such, as a Tax liability of the Company attributable to a taxable period ending on or before the Closing Date, in Closing Liabilities), and 50% by Parent.

(iii) Parent shall indemnify each Participating Holder for any increase in Tax imposed on such Participating Holder by reason of the consummation of the Merger which increase is attributable to direct or indirect ownership of capital stock of the Merger Sub at the Effective Time by a person that is not a U.S. person within the meaning of Section 7701(a)(30) of the Code.

6.7 Litigation Support. In the event and for so long as any Party actively is contesting or defending against any charge, complaint, action, suit, audit, proceeding, hearing, investigation, claim, or demand in connection with (i) any transaction contemplated under this Agreement or (ii) any fact, situation, circumstance, status, condition, activity, practice, plan, occurrence, event, incident, action, failure to act, or transaction on or prior to the Closing Date involving the Company, each of the other Parties will cooperate with such Party or its counsel in the contest or defense, make available its personnel, and provide such testimony and access to its books and records as shall be necessary in connection with the contest or defense, all at the sole cost and expense of the contesting or defending

Party (unless the contesting or defending Party is entitled to indemnification therefor under Article IX below).

6.8 Reasonable Efforts. During the Pre-Closing Period, each Party agrees to use all reasonable efforts promptly to take, or cause to be taken, all actions and do or cause to be done all things necessary, proper or advisable under applicable Laws to (a) obtain all consents, approvals or actions of, make all filings with and give all notices to Government Authorities or any other Person required to consummate the Merger and the other matters contemplated hereby, (b) provide such other information and communications to such Government Authorities or other public or private Persons as the other Party or such Government Authorities or other public or private Persons may reasonably request in connection therewith, and (c) execute such further documents, deeds, bills of sale, assignments and assurances and take such further actions as may reasonably be required to consummate and make effective the transactions contemplated by this Agreement including, without limitation, the satisfaction of all conditions hereto. If applicable, the Parties shall file all notices and other information and documents required under the Hart-Scott-Rodino Antitrust Improvement Act of 1976, as amended, as promptly as practicable after the date hereof.

6.9 Company Employees. The Company agrees that during the Pre-Closing Period it shall make all reasonable efforts to maintain good relations with its employees and will honor all previous agreements with employees to be performed prior to Closing. The Company agrees that promptly after the date hereof it shall allow Parent to make a presentation to the Company's and each of its Subsidiaries' employees and to interview such employees for continued employment with the Company or its Subsidiaries, as applicable, after the Closing. During the Pre-Closing Period, the Company will use all reasonable efforts to cause such Company Employees to make available their employment services to the Surviving Corporation.

6.10 Takeover Statutes. If any Takeover Statute is or may become applicable to the Merger or any of the other transactions contemplated by this Agreement, the board of directors of the Company shall use commercially reasonable efforts to grant such approvals and take such actions as are reasonably necessary so that the Merger and such other transactions contemplated by this Agreement may be consummated as promptly as practicable on the terms set forth in this Agreement and otherwise act to eliminate the effects of any Takeover Statute on the Merger and any of the other transactions contemplated by this Agreement.

6.11 Employee Benefits Matters. Effective immediately preceding the Closing, the Company will terminate any and all Company Plans intended to qualify as a qualified cash or deferred arrangement under Section 401(k) of the Code and, at the request of Parent, the Company will provide Parent with evidence that such plans have been terminated effective immediately prior to the Closing pursuant to resolutions duly adopted by the board of directors of the Company or other duly-designated authority. In addition, at the request of Parent no later than five (5) days prior to the Closing, the Company will terminate any one or more Welfare Plans, including any group health, dental, severance, separation or salary continuation plans, programs or arrangements, effective as of the date specified by Parent and, at the request of Parent, the Company will provide Parent with evidence that such Welfare Plans have been so terminated pursuant to resolutions duly adopted by the board of directors of the Company or other duly-designated authority. The Company also shall take such other actions in furtherance of terminating such Company Plans as Parent may reasonably require. Prior to the Closing, each of the officers, directors, employees and Affiliates of the Company shall repay in full, in accordance with their terms, all debts and other obligations, if any, owed to the Company.

6.12 Company Stockholder Approval .

(a) Subject to Section 6.4(b), the Company, through its board of directors, shall unanimously recommend to the Stockholders that the Stockholders approve and adopt this Agreement, the Merger and the transactions contemplated hereby and thereby (the " Recommendation "). As soon as practicable after the execution of this Agreement and in accordance with the DGCL, the Company shall submit this Agreement, the Merger and the transactions contemplated hereby and thereby, together with a consent solicitation statement describing the Company, the principal terms of the Merger and the transactions contemplated hereby in form and substance that complies in all respects with the DGCL, the Company's Certificate of Incorporation and the Bylaws and which includes the Recommendation (the " Consent Solicitation Statement ") to all of the Stockholders for approval as provided by the DGCL and the Company's Certificate of Incorporation and Bylaws.

(b) The Company shall promptly solicit, but in any event within three (3) business day of the date of this Agreement, and use reasonable and diligent efforts to promptly obtain written consents of the Stockholders constituting the Requisite Vote to approve the Merger, and to enable the Closing to occur as promptly as practicable following the date hereof, this Agreement, the other documents contemplated hereby and the transactions contemplated hereby and thereby (" Written Consents "). Prior to the distribution of the Consent Solicitation Statement or Information Statement, as defined below (or in each case any amendment or supplement thereto), Parent and its counsel shall be provided copies of the Consent Solicitation Statement and Information Statement (and any such amendment or supplement) and shall be provided a reasonable opportunity to review and comment thereon. The Company shall comply with the DGCL and all other applicable Laws with respect to the submission of this Agreement, the Merger and the transactions contemplated hereby and thereby, the distribution of the Consent Solicitation Statement and the solicitation of the Written Consents.

(c) Promptly, but in no event more than three (3) Business Days after the date of the Written Consents, the Company or Parent shall (i) deliver notice to each Company Stockholder that did not execute a Written Consent (the " Nonconsenting Stockholders ") of the action by Written Consent of the Company Stockholders pursuant to and in accordance with the applicable provisions of the DGCL, and the Company's Certificate of Incorporation and By-laws, (ii) deliver the notice required pursuant to the applicable provisions of the DGCL informing the Nonconsenting Stockholders that dissenters' rights are available for their shares along with such other information as is required by applicable provisions of the DGCL, and (iii) without limiting the generality of clause (ii), deliver an information statement (the " Information Statement ") containing substantially the same information as is contained in the Consent Solicitation Statement. Each Party hereto agrees that the information supplied by such Party for inclusion in the Consent Solicitation Statement and the Information Statement will not, on the date the Consent Solicitation Statement and the Information Statement is first sent or furnished to the Company Stockholders or at any time Written Consents are being solicited, contain any statement which, at such time, is false or misleading with respect to any material fact or omit to state any material fact necessary in order to make the statements made therein, in light of the circumstances under which they are made, not false or misleading.

(d) During the Pre-Closing Period, each of the Significant Stockholders agrees not to, and each Significant Stockholder agrees not to permit any Person to, directly or indirectly, (i) sell, assign, transfer, tender, pledge, encumber or otherwise dispose of (each, a " Transfer "), any Company Stock, other than pursuant to this Agreement, (ii) discuss, negotiate, make an offer or enter into an agreement, commitment or other arrangement, whether or not in writing, with respect to any Transfer of any Company Stock, or (iii) take any other action that could restrict or otherwise adversely affect such Significant Stockholder's legal power, authority and right to comply with its obligations under this Agreement. During the Pre-Closing Period, at every meeting of the Stockholders called with respect to any of the following, and at every postponement or adjournment thereof, and on every action or approval by written consent or resolution of the stockholders of Company with respect to any of the following, each of the Significant Stockholders shall vote or cause to be voted (including by written consent, if applicable), all Shares held or controlled by each of them (a) in favor of (i) approval of the Merger and this Agreement and (ii) any other transactions contemplated hereby or other matters that could reasonably be expected to facilitate the Merger, and (b) against the adoption of any Competing Transaction. Each Significant Stockholder hereby waives any rights of appraisal or rights of dissent to be exercised with respect to the Shares held by each of them.

(e) Promptly after the date hereof, the Company shall submit to the Company's stockholders for approval (in a manner satisfactory to Parent), by such number of stockholders of the Company as is required by the terms of Section 280G(b)(5)(B) of the Code, any payments or benefits that may, separately or in the aggregate, exceed 299% of such recipient's "base amount" (as that term is defined in Section 280G of the Code) (which determination shall be made by Company and shall be subject to review and approval by Parent), such that such payments and benefits shall not be deemed to be constitute "parachute payments" pursuant to Section 280G of the Code, and prior to the Effective Time the Company shall deliver to Parent evidence satisfactory to Parent that (i) a vote of the stockholders of the Company was solicited in conformance with Section 280G of the Code and the regulations promulgated thereunder.

6.13 Employee Matters .

(a) Parent shall provide or shall cause to be provided immediately following the Effective Time, to all employees of the Company whose employment continues with Parent or the Surviving Corporation or any applicable Subsidiary of Parent or Surviving Corporation following the Effective Time (the " Continuing Employees "): (i) an annual base salary or hourly wage rate that is no less favorable than the annual base salary or hourly wage rate in effect as of immediately prior to the Effective Time, and (ii) employee benefits that are substantially comparable in the aggregate to the employee benefits that are provided to similarly-situated employees of Parent under a Parent Plan.

(b) To the extent that Continuing Employees are transitioned to the employee welfare and retirement benefit plans of Parent or its subsidiaries after the Effective Time (each a " Parent Plan ") and to the extent permitted by Law, applicable Tax qualification requirements and the provisions of the applicable Parent Plan, and subject to any applicable break in service or similar rule, (i) each Continuing Employee shall be credited with his or her years of service with the Company or its Subsidiary (or any predecessor entities) before the Effective Time for purposes of eligibility to participate, vesting and determination of level of benefits (but not for purposes of benefit accruals under any Parent Plans or to the extent that such recognition would result in duplication of benefits), but only to the extent such service would have been taken into account under a Parent Plan had such service been performed as an employee of Parent and *provided that* , if the Company maintained a comparable plan prior to the Effective Time, such service will only be credited to the extent such service was credited under such Company Plan; and (ii) for purposes of each Parent Plan providing medical, dental, pharmaceutical and/or vision benefits to any Continuing Employee, Parent shall use commercially reasonable efforts to cause its third-party insurance providers or third-party administrators to ensure that such Continuing Employees will receive credit under such medical plans for the shorter of (i) the plan year in which the Closing occurs and (ii) the period commencing on such Continuing Employee's date of hire towards applicable deductibles and out-of-pocket limits for expenses incurred for the plan year in which the Closing occurs under the corresponding Company Plans.

(c) No provision of this Agreement is intended to provide or create any third party beneficiary rights in any stockholder, Key Employee, consultant, contractor or any other

Person, including any rights of employment for any specified period and/or any employee benefits, other than the parties hereto and their respective successors and permitted assigns. In addition, no provision of this Agreement is intended, or shall be interpreted, to amend any term or condition of any employee related plan, program or policy of Parent or any subsidiary of Parent or to prohibit the amendment of any such plan, program or policy.

6.14 Indemnification of Officers and Directors of the Company.

(a) From and after the Effective Time, Parent and the Surviving Corporation shall fulfill and honor in all respects the obligations of the Company pursuant to any Contract to which the Company or any of its Subsidiaries is a party or the Company or any of its Subsidiaries organizational documents in effect as of the date of this Agreement providing for the indemnification and exculpation from liability of its officers or directors and former officers and directors with respect to claims arising from facts or events that occurred before or at the Effective Time (the Persons entitled to be indemnified pursuant to such provisions, and all other current and former officers and directors of the Company or any of its Subsidiaries, and all other Persons entitled to be indemnified pursuant to such provisions or agreements being referred to collectively as the " Pre-Closing Indemnified Parties ").

(b) For the period from the Effective Time through the sixth anniversary of the Closing Date, Parent and the Surviving Corporation shall, solely with respect to claims arising from facts or events that occurred before or at the Effective Time, cause to be maintained in effect, for the benefit of the Pre-Closing Indemnified Parties (the " Insured Parties "), the current directors' and officers' liability insurance coverage as set forth in the Company's current directors' and officers' liability insurance policy in effect as of the date of this Agreement or provide for coverage and amounts on terms and conditions which are, in aggregate, no less advantageous to the Insured Parties; provided, however, that: (i) in no event shall Parent or the Surviving Corporation be required pursuant to this Section 6.14 (b) to expend in any one year an amount in excess of 300% of the annual premium currently payable by the Company with respect to such current policy, it being understood that if the annual premiums payable for such insurance coverage exceed such amount, Parent shall be obligated to obtain a policy with the greatest coverage available for a cost equal to such amount; and (ii) in lieu of the foregoing, and notwithstanding anything contained in clause "(i)" above, the Company may obtain a prepaid tail policy prior to the Effective Time that provides the Insured Parties with directors' and officers' liability insurance for a period ending no earlier than the sixth anniversary of the Closing Date.

(c) If Parent or the Surviving Corporation or any of the successors or assigns of Parent or the Surviving Corporation (i) shall consolidate with or merge into any other Person and shall not be the continuing or surviving corporation or entity of such consolidation or merger or (ii) shall transfer all or substantially all of its properties and assets to any other Person, then, and in each such case, proper provisions shall be made so that the successors and assigns of Parent or the Surviving Corporation shall assume all of the obligations set forth in this Section 6.14. This Section 6.14: (A) shall survive the consummation of the Merger and the Effective Time; (B) is intended for the benefit of, and will be enforceable by, each Insured Party and his or her heirs and representatives; (C) shall be binding on all successors and assigns of Parent and the Surviving Corporation; and (D) provides rights that are in addition to, and not in substitution for, any other rights to indemnification or contribution that any Insured Party, or any heir or representative of any Insured Party, may have by contract or otherwise.

6.15 Books and Records. Prior to the Closing, the Company shall deliver to Parent the original share records of the Company, books of account, minute books, minutes and other records of all meetings of the Company, the corporate seal of the Company and such other documents, records, keys and other items as shall be necessary for the operation of the business of the Company;

ARTICLE VII
CONDITIONS TO THE OBLIGATIONS OF PARENT AND MERGER SUB

The obligations of Parent and Merger Sub under this Agreement to consummate the Merger and the other transactions contemplated hereby are subject to the fulfillment and satisfaction, prior to or at the time at which the Closing is scheduled to occur, of each of the following conditions precedent, any one or more of which may be waived, in part or in full, by Parent in writing.

7.1 Representations and Warranties. All of the representations and warranties of the Company and Significant Stockholders contained in this Agreement: (i) shall be true, correct and complete in all material respects at and as of the date of this Agreement (except in the case of this clause (i) that those representations and warranties which speak as of a specific date need only be true, correct and complete on and as of such date); and (ii) shall be true, correct and complete in all respects on and as of the Closing Date with the same effect as though such representations and warranties had been made on and as of such date, except in each case where the failure of such representations and warranties to be accurate, individually or in the aggregate, does not, and would not reasonably be expected to have, a Material Adverse Effect on the Company (except that in the case of this clause (ii) those representations and warranties which speak as of a specific date need only be true, correct and complete on and as of such date, and the words “material,” “materially,” “Material Adverse Effect,” and similar qualifiers contained in such representations and warranties shall be disregarded for purposes of determining such accuracy of such representations and warranties).

7.2 Performance. The Company shall have performed and complied in all material respects with its covenants in this Agreement to be performed prior to or at the Closing.

7.3 No Litigation. No temporary restraining order, preliminary or permanent injunction or other order or judgment issued by any Government Authority challenging the transactions contemplated hereunder or limiting or restricting the conduct or operation of the Company following the Closing shall be in effect, nor shall any Proceeding brought by any Government Authority or other instrumentality, domestic or foreign, seeking any of the foregoing be pending.

7.4 No Material Adverse Effect. There shall not have occurred any Material Adverse Effect on the Company.

7.5 Governmental, Regulatory and Other Consents and Approvals. All consents, approvals, assignments and actions of, filings set forth on Schedule 7.5 shall have been obtained, and, if required, the expiration or termination without the objection of any of the relevant federal authorities of all applicable waiting periods (and any extensions thereof) under the Hart-Scott-Rodino Antitrust Improvement Act of 1976, as amended.

7.6 Indebtedness. Each holder of Indebtedness shall have executed and delivered to the Company a payoff letter satisfactory to Parent and each such holder shall have released in writing all liens and Encumbrances arising from such Indebtedness.

7.7 Warrants. The Company Warrants shall have been canceled or terminated pursuant to Section 1.9 hereof.

7.8 Key Agreements. Each of the Key Employee Agreements and Key Stakeholder Agreements entered into prior to or concurrently with the execution of this Agreement shall be in full force and effect, no Key Employee or Key Stakeholder shall have terminated, rescinded or repudiated any such Key Employee Agreement or Key Stakeholder Agreement, as applicable, and no Key Employee shall have notified Parent (in writing) of such Key Employee's intention of leaving the employ of Parent or the Surviving Corporation following the Closing.

7.9 Written Consents. The Requisite Vote shall have been obtained.

7.10 Closing Deliveries of the Company. At the Closing, the Company shall have performed and delivered the following:

(a) all of the officers, directors, employees and Affiliates of the Company shall have repaid (and shall delivered to Parent evidence of repayment) in full in accordance with their terms all debts and other obligations, if any, owed by any of them to the Company;

(b) the Company shall have executed and delivered to Parent a certificate of its secretary, setting forth the organizational documents of the Company and the resolutions of its board of directors and Stockholders authorizing the execution, delivery and performance of this Agreement and the other documents contemplated hereby and the consummation of the transactions contemplated hereby and thereby, and certifying that such organizational documents and resolutions have not been amended or rescinded and are in full force and effect;

(c) the Company's Chief Executive Officer shall have delivered to Parent an officer's certificate certifying to the satisfaction of the conditions set forth in Sections 7.1 and 7.2 hereof as of the Closing Date;

(d) the Company shall have delivered to Parent good standing certificates from the jurisdictions of incorporation of the Company and each Subsidiary and from each state in which the Company or any Subsidiary is qualified to do business, and its and their certified charter documents, each dated as of a date reasonably close to the Closing Date;

(e) the Company shall have caused the Stockholders' Representative to execute and deliver the Escrow Agreement;

(f) the Company shall have caused to be delivered to Parent the opinion of Cooley LLP, counsel to the Company, as to the matters attached hereto as Exhibit F;

(g) the Company shall have executed and delivered to Parent a properly executed FIRPTA Notification Letter; and

(h) the Company shall have secured effective and irrevocable 280G Waivers with respect to each Potential Parachute Recipient, conducted the stockholder vote, and delivered to Parent the results of such stockholder vote, all as contemplated by Section 6.12(e).

7.11 Other Key Employees. At least two (2) of the three (3) Persons identified on Appendix B-3 shall have entered into an employment arrangement with Parent or a subsidiary thereof to be effective as of the Closing Date pursuant to his or her execution of an offer letter and a non-disclosure agreement in forms provided to the Company by Parent.

ARTICLE VIII
CONDITIONS TO THE COMPANY'S OBLIGATIONS

The obligations of the Company under this Agreement to consummate the Merger and the other transactions contemplated hereby are subject to the fulfillment and satisfaction, prior to or at the time at which the Closing Date is scheduled to occur, of each of the following conditions precedent, any one or more of which may be waived, in part or in full, by the Company in writing.

8.1 Representations and Warranties True at the Closing Date . All of the representations and warranties of Parent and Merger Sub contained in this Agreement: (i) shall be true, correct and complete in all material respects at and as of the date of this Agreement (except in the case of this clause (i) that those representations and warranties which speak as of a specific date need only be true, correct and complete on and as of such date); and (ii) shall be true, correct and complete in all respects on and as of the Closing Date with the same effect as though such representations and warranties had been made on and as of such date, except in each case where the failure of such representations and warranties to be accurate, individually or in the aggregate, does not, and would not reasonably be expected to have, a Material Adverse Effect on Parent (except that in the case of this clause (ii), those representations and warranties which speak as of a specific date need only be true, correct and complete on and as of such date, and the words "material," "materially," "Material Adverse Effect," and similar qualifiers contained in such representations and warranties shall be disregarded for purposes of determining such accuracy of such representations and warranties).

8.2 Performance . Parent shall have performed and complied in all material respects with its covenants in this Agreement to be complied with or performed prior to or at the Closing.

8.3 No Litigation . No temporary restraining order, preliminary or permanent injunction or other order or judgment issued by any Government Authority challenging the transactions contemplated hereunder shall be in effect, nor shall any Proceeding brought by any Government Authority seeking any of the foregoing be pending.

8.4 Company Required Vote . The Company Required Vote shall have been obtained.

8.5 Governmental, Regulatory and Other Consents and Approvals . All consents, approvals, assignments and actions of, filings set forth on Schedule 8.5 shall have been obtained and, if required, the expiration or termination without the objection of any of the relevant federal authorities of all applicable waiting periods (and any extensions thereof) under the Hart-Scott-Rodino Antitrust Improvement Act of 1976, as amended.

8.6 Escrow Agreement . Parent and the Escrow Agent shall have executed and delivered the Escrow Agreement.

ARTICLE IX
INDEMNITY

9.1 General Indemnification . After the Closing and by virtue of the Merger:

(a) each Participating Holder, severally but not jointly, covenants and agrees to indemnify, defend, protect and hold harmless each of Parent, Merger Sub and, after the Closing, the Surviving Corporation, and their respective officers, directors, employees, shareholders, assigns, successors, agents, attorneys and Affiliates (each, an " Indemnified Party ") from, against and in respect of all Damages suffered, sustained, incurred or paid by any Indemnified Party, in each case in connection with, resulting from or arising out of, directly or indirectly: (i) the Breach of any representation or warranty made by the Company set forth in this Agreement; (ii) the Breach of any covenant or agreement on the part of the Company set forth in this Agreement; (iii) any Closing Liability not accurately reflected on the Statement of Closing Liabilities; (iv) any and all Liabilities (other than for Specified Taxes) for (x) all Taxes of the Company and its Subsidiaries incurred in connection with or arising out of the activities or business of the Company or its Subsidiaries on or before the Closing Date (determined, with respect to taxable periods that include but do not end on the Closing Date, in accordance with the allocation provisions of Section 6.6(b)) and all reasonable third party costs and reasonable third party expenses of filing Tax Returns that were required to have been filed, but have not been filed, by the Company or any of its Subsidiaries on or before the Closing Date, in excess of the amount of such Taxes, costs or expenses reflected as a liability in the computation of Final Net Working Capital, (y) all Taxes required to be paid by the Company or its Subsidiaries by reason of the Company or its Subsidiaries (or a predecessor of such entities) having been a member of an affiliated, consolidated, combined, or unitary group at any time on or before the Closing Date, including pursuant to Treasury Regulation Section 1.1502-6 or any analogous or similar U.S. state, local, or non-U.S. law, rule, or regulation in excess of the amount of such Taxes reflected as a liability in the computation of Final Net Working Capital and (z) all Taxes of any Person (other than the Company and its Subsidiaries) required to be paid by the Company or its Subsidiaries by reason of Contract, assumption, transferee liability, or operation of Law, if the liability of the Company or its Subsidiaries for such Taxes is attributable to an event or transaction occurring on or before the Closing Date (other than pursuant to Excluded Tax Sharing Agreements) in excess of the amount of such Taxes reflected as a liability in the computation of Final Net Working Capital; (vii) with respect to each Dissenting Share, any payments by Parent in respect of demands for appraisal of such Dissenting Shares in excess of the amounts that otherwise would have been payable in respect of such shares in accordance with this Agreement, (viii) any claim brought by a Stockholder or former stockholder of the Company, or any other Person, based upon (A) ownership or rights to ownership of any shares of capital stock or other securities of the Company, (B) any rights of a stockholder (other than the right to receive a portion of the Merger Consideration pursuant to Section 1.6 or with respect to Dissenting Shares), including any option, preemptive rights or rights to notice or to vote, (C) any rights under the Articles of Incorporation or Bylaws of the Company, (D) any claim that his, her or its shares were wrongfully repurchased by the Company or issued out of compliance with applicable securities Laws, or (E) any claim relating to any Company Option or the exercise thereof; (ix) any alleged improper allocation of the Merger Consideration among the Participating Holders; provided, that, for any distributions of Merger Consideration by Parent, such distributions were made in accordance with terms of an Allocation Certificate delivered by the Stockholders' Representative, (x) any action or inaction of the Payments Administrator, and (xi) enforcing the indemnification rights of the Indemnified Parties hereunder; and

(b) each Significant Stockholder, severally and not jointly, covenants and agrees to indemnify, defend, protect and hold harmless each of the Indemnified Parties from and against all Damages suffered, sustained, incurred or paid by any Indemnified Party, in each case in connection with, resulting from or arising out of, directly or indirectly: (i) the Breach of any representation or warranty made by such Significant Stockholder set forth in this Agreement; or (ii) the Breach on the part of such Significant Stockholder of any covenant or agreement set forth in this Agreement.

9.2 Claims for Indemnification .

(a) In the event that any Indemnified Party has a claim against any Person from whom indemnification is sought (an " Indemnifying Party ") pursuant to Section 9.1 hereof, which does not involve a claim being sought to be collected by a third party, the Indemnified Party shall provide written notice of such claim (a " Claim Notice ") to the Stockholders' Representative (or the particular Indemnifying Party in the event that recovery is being sought directly from such Indemnifying Party).

The Claim Notice shall set forth the amount, if known, or, if not known, an estimate of the maximum amount of claimed Damages (which estimate shall not be conclusive of the final amount of such Damages) and a reasonable description of the basis for such claim. If the Stockholders' Representative (or the Indemnifying Party, if applicable) does not notify the Indemnified Party within thirty (30) days from receipt of the Claim Notice that Stockholders' Representative (or the Indemnifying Party, if applicable) disputes such claim, or its (or the Indemnifying Parties') liability to the Indemnified Party for such claim, the amount of such claim as set forth in the Claim Notice shall be conclusively deemed a liability of the Indemnifying Parties hereunder. In case an objection is made in writing by the Stockholders' Representative (or the Indemnifying Party, if applicable) in accordance with this Section 9.2(a) (an " Objection Notice "), the Indemnified Party shall have thirty (30) days to respond in a written statement to such Objection Notice.

(b) In case the Stockholders' Representative (or the Indemnifying Party, if applicable) delivers an Objection Notice in accordance with Section 9.2(a) hereof, the Stockholders' Representative (or the Indemnifying Party, if applicable) and Parent shall attempt in good faith to agree upon the rights of the respective Parties with respect to each of such claims. If the dispute has not been resolved within thirty (30) days after the Indemnified Party is given an Objection Notice, either the Stockholders' Representative (or the Indemnifying Party, if applicable) or the Parent may initiate litigation in accordance with this Agreement. In the event the Parent does not receive a timely Objection Notice, the claim(s) set forth in the Claim Notice shall be conclusively deemed to be approved by the Stockholders' Representative (or the Indemnifying Party, if applicable) and the Indemnifying Party.

(c) Until the final resolution of any Claim Notice in accordance with this Agreement and the Escrow Agreement, an Indemnified Party, may from time to time, amend such Claim Notice to reflect additional Damages thereunder.

9.3 Third Party Claims . In the event of the assertion or commencement by any Person of any claim, demand or Proceeding (whether against Parent or against any other Person) with respect to which any Indemnified Party may be entitled to indemnification pursuant to this Article IX, Parent shall have the right, at its election, to proceed with the defense (including settlement or compromise) of such claim, demand or Proceeding on its own; provided , however , that Parent may not settle such claim without the prior written consent of the Stockholders' Representative (which consent may not be unreasonably withheld). Parent shall give the Stockholders' Representative prompt notice after it becomes aware of the commencement of any such claim or legal proceeding against Parent; provided , however , any failure on the part of Parent to so notify the Stockholders' Representative shall not limit any of the obligations of the Participating Holders or the Stockholders' Representative, or any of the rights of any Indemnified Party, under this Article IX (except to the extent such failure materially adversely prejudices the defense of such Proceeding). If Parent does not elect to proceed with the defense (including settlement or compromise) of any such claim, demand or Proceeding, the Stockholders' Representative may proceed with the defense of such claim, demand or Proceeding with counsel reasonably satisfactory to Parent; provided , however , that the Stockholders' Representative may not settle or compromise any such claim, demand or Proceeding without the prior written consent of Parent (which consent may not be unreasonably withheld). No Indemnified Party (other than Parent or any successor thereto or assign thereof) shall be permitted to assert any indemnification claim or exercise any other remedy under this Agreement unless Parent (or any successor thereto or assign thereof) shall have consented to the assertion of such indemnification claim or the exercise of such other remedy.

9.4 Survival of Representations, Warranties and Covenants . Each covenant and agreement contained in this Agreement or in any agreement or other document delivered pursuant hereto shall survive the Closing and be enforceable until such covenant or agreement has been fully performed. The representations and warranties contained in this Agreement or in any agreement or other document delivered pursuant hereto shall survive the Closing until the date that is twelve (12) months after the Closing Date and shall thereafter expire, except that any representation or warranty with respect to which a claim has been made for a Breach thereon prior to such date shall survive until such claim is resolved; provided, that , the foregoing limitations on survival shall not apply to (i) claims based on criminal matters, fraud or intentional misrepresentation (" Fraud Claims "), which shall survive without limitation (and in no event less than six years) or (ii) claims based on Breaches of the representations and warranties set forth in (x) Sections 3.2 (Authority), 3.4 (Capitalization), 3.8 (Company Plans), 3.10 (Taxes) and 3.15 (Environmental and Safety Matters) (the " Fundamental Representations "), and claims based on Section 9.1(a)(iv) (Taxes), which shall survive the Closing until the date on which the underlying statute of limitations expires (or if there is no applicable statute of limitations relating thereto, such representation and warranty shall survive indefinitely) (collectively, the claims described in this clause (ii), the " Excluded Claims "). Any Indemnified Party may bring a claim hereunder for potential or contingent Damages notwithstanding the fact that the full amount of such potential or contingent Damages is not readily determinable.

9.5 Limitations on Indemnification .

(a) Except with respect to Excluded Claims and subject to Section 9.5(d), the indemnification obligations of the Participating Holders for Damages for the matters specified in Section 9.1(a)(i) shall be limited to an amount equal to the Escrow Amount (the " General Cap "). Claims for Damages under this Agreement (other than pursuant to Sections 9.1(b) and 9.5(d)) shall be: (i) first against the Escrow Amount; and (ii) second, after such time as all Initial Escrow Amount deposited into the Escrow Amount have been exhausted, are subject to preexisting indemnification claims or have otherwise been distributed to the Participating Holders, and only prior to the deposit of the Additional Escrowed Funds, by set off against ten percent (10%) of any unpaid Initial Order Cash Consideration or unpaid Performance Payment. Parent shall seek payment for Damages indemnifiable pursuant to Sections 9.1(b) and 9.5(d) directly from the applicable Significant Stockholder.

(b) Notwithstanding anything to the contrary contained in this Agreement and subject to Section 9.5(d): (i) no Participating Holder shall be liable for an amount in excess of such Participant's Pro Rata Proportion of the Damages in respect of such matter; and (ii) no Participating Holder shall have an indemnification obligation under this Agreement in excess of the aggregate amount of the Merger Consideration actually received by such Participating Holder pursuant to this Agreement or the Phantom Equity Agreement.

(c) Subject to Section 9.5(d), Parent shall not be permitted to recover any Damages under this Article IX until such Damages exceed, in the aggregate, $500,000 (the " Threshold Amount "), provided , that , after the aggregate amount of Damages exceeds the Threshold Amount, only those Damages above the Threshold Amount shall be recoverable by Parent.

(d) Notwithstanding anything to the contrary contained in this Agreement, the limitations set forth in Section 9.5 shall not be applicable to claims against a Participating Holder based upon fraud committed by such Participating Holder, and the limitations set forth in Section 9.5(c) shall not be applicable to claims based on Section 9.1(a)(iv) (Taxes).

9.6 No Contribution . Each Stockholder waives, and acknowledges and agrees that he shall not have and shall not exercise or assert (or attempt to exercise or assert), any right of contribution, right of indemnity or other similar right or remedy against the Company, Parent, the Merger Sub and their respective Affiliates, directors, officers and employees, and, after the Effective Time, the Surviving Corporation, in connection with any actual or alleged breach of any representation, warranty or obligation set forth in this Agreement or any claim for Damages under Section 9.1.

9.7 Right of Offset . In the event that any Participating Holder shall have an indemnification obligation for Damages to Parent or any other Indemnified Party, Parent shall have the right (but not the obligation) to offset the amount of the Damages against any portion of the Merger Consideration otherwise payable pursuant to this Agreement to such Participating Holder (including without limitation the Escrow Amount and the unpaid Initial Order Cash Consideration and unpaid Performance Payment). Such remedy shall be in addition to and not in limitation of any injunctive relief or other rights or remedies to which the Parent or any other Indemnified Party is or may be entitled at law or equity or in any administrative or other proceeding or under this Agreement (including any exhibits hereto).

9.8 Exclusive Remedy . The indemnification provisions contained in this ARTICLE IX shall be the sole and exclusive remedy of an Indemnified Party attributable to claims under, relating to or arising out of the Agreement and the transactions contemplated hereby and the sole and exclusive source of satisfying obligations of the Participating Holders under this Agreement, other than Fraud Claims.

9.9 No Double Recovery . Notwithstanding anything herein to the contrary, no Party shall be entitled to reimbursement under any provision of this Agreement for any amount to the extent such Party has previously been reimbursed for such amount under any other provision of this Agreement.

9.10 Third Party Recovery . The amount of Damages otherwise recoverable under this Article IX shall be limited to the amount of any Damage that remains after deducting therefrom (i) any insurance proceeds and any indemnity, contribution or other similar cash payment recovered by the Indemnified Parties from any third party with respect thereto and (ii) any Tax benefits actually realized by Parent or any of its Affiliates in the taxable year that the Damage is incurred or in any of the following two (2) taxable years.

9.11 Waiver of Damages . Parent, on behalf of itself and the other Indemnified Parties, waives any claim to punitive, incidental, indirect, special, consequential or exemplary Damages (except to the extent payable in respect of third party claims).

ARTICLE X
RESERVED

ARTICLE XI
TERMINATION

11.1 Termination .

(a) This Agreement may, by notice given on or prior to the Closing Date, in the manner hereinafter provided, be terminated and abandoned at any time prior to the Closing Date:

(i) by mutual agreement of the Company and Parent;

(ii) by the Company if there has been a Breach by Parent with respect to its representations, warranties or covenants in this Agreement, in each case such that the conditions set forth in Sections 8.1 or 8.2 hereof would not be satisfied, and such misrepresentation, default or breach shall not have been cured within ten (10) days after receipt by Parent of notice specifying particularly such misrepresentation, default or breach;

(iii) by Parent if there has been a Breach by the Company or the Significant Stockholders with respect to any of their respective representations, warranties or covenants in this Agreement, in each case such that the conditions set forth in Sections 7.1 or 7.2 hereof would not be satisfied, and such misrepresentation, default or breach shall not have been cured within ten (10) days after receipt by the Company of notice specifying particularly such misrepresentation, default or breach;

(iv) by the Company or by Parent if the Closing shall not have occurred on or before 60 days after the date of this Agreement; provided that the Party seeking to terminate this Agreement shall not be entitled to terminate this Agreement if its breach or violation of any representation, warranty or covenant contained herein shall have been the principal cause of the Closing not having occurred on or before such date;

(v) by Parent if Written Consents evidencing the Requisite Vote shall not have been delivered, properly completed and executed to approve the Merger, this Agreement and the documents and transactions contemplated hereby within eight (8) business days after the date of this Agreement;

(vi) by the Company or by Parent, if (i) there shall be a final nonappealable order of a federal or state court in effect preventing the consummation of the transactions contemplated by this Agreement; or (ii) there shall be any action taken, or any statute, rule, regulation or order enacted, promulgated or issued or deemed applicable to the transactions by any Government Authority which would make the consummation of the transactions illegal; or

(vii) by Parent if, at any time prior to receipt of the Requisite Vote, it shall have determined there has occurred an effect, event or change which, individually or in the aggregate, has had or would reasonably be expected to have a Material Adverse Effect on the Company.

(b) In the event of the termination of this Agreement pursuant to Section 11.1 (a), this Agreement shall thereafter become void and have no effect, except that nothing herein will relieve any Party from Liability for any willful breach of any representation, warranty, covenant or agreement set forth in this Agreement prior to such termination.

11.2 Termination Fee .

(a) Parent shall reimburse the Company for its reasonable, documented, out-of-pocket costs incurred after August 1, 2013 in connection with the negotiation and anticipated consummation of this Agreement and the transactions contemplated hereby in an amount not to exceed Five Hundred Thousand Dollars ($500,000) (the " Expense Payment ") in the event that this Agreement is terminated (i) by the Company pursuant to Section 11.1(a)(ii) or Section 11.1(a)(iv) or (ii) by Parent pursuant to Section 11.1(a)(iv) in the event that, at the time of such termination, all conditions to Closing have been satisfied or waived (other than those conditions that by their nature are to be satisfied at the Closing). Parent shall pay the Expense Payment by wire transfer of immediately available funds within three (3) business days of the termination of this Agreement.

(b) In the event that the Expense Payment becomes payable and if requested by the Company, Parent will provide interim financing to the Company in an amount not to exceed Five Million Dollars ($5,000,000) (the " Interim Financing "). The Interim Financing may be provided by Parent in the form of a loan or an investment in the equity of the Company upon customary terms to be mutually agreed between the Company and Parent; provided that any debt financing shall include the following terms: (i) interest rate equal to LIBOR, (ii) 12 month term, (iii) subordinate to existing senior debt of the Company, (iv) unsecured and with no negative pledges on intellectual property or other assets of the

Company, (v) the absence of financial or other operating covenants, and (vi) the absence of warrant or other equity security coverage.

(c) Notwithstanding anything in this Agreement to the contrary, payment of the Expense Payment and, if requested, Interim Financing to the Company by Parent in accordance with this Agreement will be the sole and exclusive remedy of the Company and its Stockholders under this Agreement and will be deemed liquidated damages for any actual or purported breach of this Agreement and the other agreements contemplated hereby, and, after such payment has been made, Parent will have no further liability for any such actual or purported breach and the Company shall not seek to recover any other money damages or seek any other remedy, and all such claims are hereby waived, except that nothing herein will relieve any Indemnified Party from Liability for any willful breach of any representation, warranty, covenant or agreement set forth in this Agreement. The Parties agree that the Company's actual damages would be extremely difficult or impracticable to determine in the event of termination pursuant to the provisions set forth in Section 11.2(a)(i) and (ii). The Company acknowledges and agrees that the agreements contained in this Section 11.2(c) are an integral part of the transactions contemplated by this Agreement, that without these agreements Parent and Merger Sub would not enter into this Agreement and that the amounts payable hereunder do not constitute a penalty.

(d) In no event shall Parent be required to pay the Expense Payment or Interim Financing on more than one occasion, whether or not the Expense Payment or Interim Financing may be payable under more than one provision of this Agreement, at the same or at different times.

ARTICLE XII
MISCELLANEOUS

12.1 Successors and Assigns. This Agreement shall inure to the benefit of and be binding upon the Parties and their respective successors and assigns; provided, however, that the Company may not make any assignment of this Agreement or any interest herein without the prior written consent of Parent and Parent may not make any assignment of this Agreement or any interest herein without the prior written Consent of the Company (or after the Closing, the Stockholders' Representative). Any purported assignment without prior written consent shall be void and of no force or effect.

12.2 Governing Law. This Agreement shall in all respects be interpreted, construed and governed by and in accordance with the laws of the State of Delaware, without regard to its conflicts of laws principles.

12.3 Consent to Jurisdiction. Each party irrevocably submits to the exclusive jurisdiction of (a) the state courts located in Wilmington, Delaware, and (b) the United States District Court for the District of Delaware, for the purposes of any suit, action or other proceeding arising out of this Agreement or any agreement entered into in connection with this Agreement or any transaction contemplated hereby or thereby. Each party agrees to commence any such action, suit or proceeding either in the United States District Court for the District of Delaware or if such suit, action or other proceeding may not be brought in such court for jurisdictional reasons, in the state courts located in Wilmington, Delaware. Each party further agrees that service of any process, summons, notice or document by U.S. registered mail to such party's respective address set forth above shall be effective service of process for any action, suit or proceeding in Delaware with respect to any matters to which it has submitted to jurisdiction in this Section 12.3. Each party irrevocably and unconditionally waives any objection to the laying of venue of any action, suit or proceeding arising out of this Agreement or any agreement entered into in connection with this Agreement or the transactions contemplated hereby and thereby in (i) the state courts located in Wilmington, Delaware, or (ii) the United States District Court for the District of Delaware, and hereby and thereby further irrevocably and unconditionally waives and agrees not to plead or claim in any such court that any such action, suit or proceeding brought in any such court has been brought in an inconvenient forum. This Section 12.3 shall not apply to any dispute under Section 1.11 that is required to be decided by the Accounting Firm.

12.4 Waiver of Jury Trial. Each party hereby waives to the fullest extent permitted by applicable law, any right it may have to a trial by jury in respect to any litigation directly or indirectly arising out of, under or in connection with this Agreement or any agreement entered into in connection with this Agreement or any transaction contemplated hereby or thereby. Each party (a) certifies that no representative, agent or attorney of any other party has represented, expressly or otherwise, that such other party would not, in the event of litigation, seek to enforce the foregoing waiver and (b) acknowledges that it and the other parties hereto have been induced to enter into this Agreement and any agreement entered into in connection with this Agreement, as applicable, by, among other things, the mutual waivers and certifications in this Section 12.4.

12.5 Specific Performance. The Company acknowledges that Parent shall be irreparably harmed and that there shall be no adequate remedy at law for any violation by Company of any of the covenants or agreements contained in this Agreement. Parent acknowledges that the Participating Holders shall be irreparably harmed and that there shall be no adequate remedy at law for any violation by any Parent, the Surviving Corporation or any of their respective Affiliates of any of the covenants or agreements contained in this Agreement. It is accordingly agreed that, in addition to, but not in lieu of, any other remedies which may be available upon the breach of any such covenants or agreements, Parent and the Company, if prior to the Closing, or the Stockholders' Representative (on behalf of the Participating Holders), if after the Closing, shall have the right to obtain injunctive relief to restrain a breach or threatened breach of, or otherwise to obtain specific performance of, any of the covenants and agreements contained in this Agreement. All rights and remedies under this Agreement shall be cumulative, and the exercise of one or more rights or remedies will not preclude the exercise of any other right or remedy available under this Agreement or applicable law.

12.6 Severability. Each section, subsection and lesser section of this Agreement constitutes a separate and distinct undertaking, covenant and/or provision hereof. In the event that any provision of this Agreement shall finally be determined to be unlawful, such provision shall be deemed severed from this Agreement, but every other provision of this Agreement shall remain in full force and effect.

12.7 Amendment. This Agreement may be amended, supplemented or modified only by execution of an instrument in writing signed by Parent, the Company and, after the Closing, the Stockholders' Representative.

12.8 Waiver. Any Party hereto may to the extent permitted by applicable Law (i) extend the time for the performance of any of the obligations or other acts of the other Parties hereto, (ii) waive any inaccuracies in the representations and warranties of the other Parties hereto contained herein or in any document delivered pursuant hereto or (iii) waive compliance with any of the agreements of the other Parties hereto contained herein. No such extension or waiver shall be effective unless set forth in a written instrument duly executed by or on behalf of the Party extending the time of performance or waiving any such inaccuracy or non-compliance. No waiver by any Party of any term of this Agreement, in any one or more instances, shall be deemed to be or construed as a waiver of the same or any other term of this Agreement on any future occasion.

12.9 Notices. All notices, requests, consents, waivers, and other communications required or permitted to be given hereunder shall be in writing and shall be deemed to have been duly given (a) if personally delivered, upon delivery or refusal of delivery; (b) if mailed by registered or certified United

States mail, return receipt requested, postage prepaid, upon delivery or refusal of delivery; or (c) if sent by a nationally recognized overnight delivery service, upon delivery or refusal of delivery. All notices, consents, waivers, or other communications required or permitted to be given hereunder shall be addressed as follows:

(a) If to Parent:

Veeco Instruments Inc.
Terminal Drive
Plainview, New York 11803
Attention: General Counsel
Telephone: (516) 677-0200
Facsimile: (516) 677-0380

with a copy to:

Morrison & Foerster LLP
1650 Tysons Boulevard
Suite 400
McLean, Virginia 22102
Attention: Thomas J. Knox
Telephone: (703) 760-7700
Facsimile: (703) 760-7777

(b) If to the Company prior to the Closing:

Synos Technology, Inc.
3191 Laurelview Court
Fremont, CA 94538
Attn: Ilsong Lee
Fax: (510) 413-9769

with a copy to:

Cooley LLP
3175 Hanover Street
Palo Alto, CA 94304
Attention: John McKenna
Facsimile: (650) 849-7400

(c) If to the Stockholders' Representative:

Shareholder Representative Services LLC
1614 15th Street, Suite 200
Denver, CO 80202
Attention: Managing Director
Email: deals@shareholderrep.com
Telephone: (303) 648-4085
Facsimile: (303) 623-0294

with a copy (which shall not constitute notice) to:

Cooley LLP
3175 Hanover Street
Palo Alto, CA 94304
Attention: John McKenna
Facsimile: (650) 849-7400

or at such other address or addresses as the Party addressed may from time to time designate in writing pursuant to notice given in accordance with this section.

12.10 Expenses. All unpaid Transaction Expenses of the Company as of the Closing Date shall constitute Closing Liabilities hereunder and shall be deducted from the Merger Consideration pursuant to Article I hereof. All Transaction Expenses of Parent shall be the responsibility of Parent. All Transaction Expenses of any Significant Stockholder shall be the responsibility of such Significant Stockholder. Notwithstanding anything in this Section 12.10 to the contrary, any filing fees required under the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended, shall be paid by Parent.

12.11 Complete Agreement. This Agreement, those documents expressly referred to herein, including all exhibits and schedules hereto, and the other documents of even date herewith, together with the Confidentiality Agreement, dated as of November 16, 2012 between the Company and Parent, embody the complete agreement and understanding among the Parties and supersede and preempt any prior understandings, agreements or representation by or among the Parties, written or oral, which may have related to the subject matter herein.

12.12 Absence of Third Party Beneficiary Rights. Other than Section 6.14, no provision of this Agreement is intended, nor will be interpreted, to provide or create any third party beneficiary rights or any other rights of any kind in any client, customer, Affiliate, stockholder, employee or partner of any Party hereto or any other Person.

12.13 Mutual Drafting. This Agreement is the mutual product of the Parties, and each provision hereof has been subject to the mutual consultation, negotiation and agreement of each of the Parties, and shall not be construed for or against any Party hereto.

12.14 Further Representations. Each Party to this Agreement acknowledges and represents that it has been represented by its own legal counsel in connection with the transaction contemplated by this Agreement, with the opportunity to seek advice as to its legal rights from such counsel. Each Party (other than the Stockholders' Representative) further represents that it is being independently advised as to the Tax or securities consequences of the transactions contemplated by this Agreement and is not relying on any representation or statements made by any other Party as to such Tax and securities consequences.

12.15 Gender. Unless the context clearly indicates otherwise, where appropriate the singular shall include the plural and the masculine shall include the feminine or neuter, and vice versa, to the extent necessary to give the terms defined herein and/or the terms otherwise used in this Agreement the proper meanings.

12.16 Headings. The headings in this Agreement are intended solely for convenience of reference and shall be given no effect in the construction or interpretation of this Agreement.

12.17 Counterparts. This Agreement may be executed in two or more counterparts, each of which when executed and delivered shall be deemed an original and all of which, taken together, shall constitute the same agreement. This Agreement and any document or schedule required hereby may be executed by facsimile signature which shall be considered legally binding for all purposes.

12.18 Disclosure Schedule . The disclosure schedule (collectively the " Disclosure Schedule ") is a series of schedules corresponding to the sections contained in Article III, Article IV and certain other Articles herein and containing the information required to be disclosed pursuant to, and certain exceptions to, the representations and warranties in such Articles. Nothing in the Agreement or in the Disclosure Schedule constitutes an admission that any information disclosed, set forth or incorporated by reference in the Disclosure Schedule or in the Agreement is material, constitutes a Material Adverse Effect or is otherwise required by the terms of the Agreement to be so disclosed, set forth or incorporated by reference. Any disclosure set forth in any particular Schedule of the Disclosure Schedule will be deemed disclosed for any other Schedule of the Disclosure Schedule to the extent that its relevance or applicability to such other Schedule of the Disclosure Schedule is reasonably apparent on the face of such disclosure. The Disclosure Schedule is incorporated herein by reference. No disclosure in the Disclosure Schedules (including but not limited to those relating to any possible breach of violation of any agreement, law or regulation) shall be construed or deemed to be, nor shall it constitute, an admission to any third party concerning such item.

12.19 Conflict of Interest . If the Stockholders' Representative or any Participating Holder so desires, acting on behalf of each of the Participating Holders and without the need for additional consent or waiver by the Surviving Corporation or Parent, Cooley LLP ("Cooley") shall be permitted to represent the Stockholders' Representative and each Participating Holder after the Closing with respect to any matters related to this Agreement or any disagreement or dispute relating thereto. Upon and after the Closing, the Surviving Corporation shall cease to have any attorney-client relationship with Cooley, unless and to the extent Cooley is specifically engaged in writing by the Surviving Corporation to represent the Surviving Corporation after the Closing and either such engagement involves no conflict of interest with respect to the Participating Holders or the Stockholders' Representative consents in writing at the time to such engagement. Any such representation of the Surviving Corporation by Cooley after the Closing shall not affect the foregoing provisions hereof.

[Signatures appear on following pages.]

IN WITNESS WHEREOF , each Party hereto has caused this Agreement to be signed by its officer thereunto duly authorized as of the date first above written.

VEECO INSTRUMENTS INC.

By: /s/ Authorized Signatory
Name:
Title:

VEECO WYOMING INC.

By: /s/ Authorized Signatory
Name:
Title:

Signature Page to Agreement and Plan of Merger

IN WITNESS WHEREOF , each Party hereto has caused this Agreement to be signed by its officer thereunto duly authorized as of the date first above written.

SYNOS TECHNOLOGY, INC.

By: /s/ Authorized Signatory
Name:
Title:

Signature Page to Agreement and Plan of Merger

IN WITNESS WHEREOF , each Party hereto has caused this Agreement to be signed by its officer thereunto duly authorized as of the date first above written.

SHAREHOLDER REPRESENTATIVE SERVICES LLC , solely in its capacity as the Stockholders' Representative

By: /s/ Authorized Signatory
Name:
Title:

Signature Page to Agreement and Plan of Merger

IN WITNESS WHEREOF , each Party hereto has caused this Agreement to be signed by its officer thereunto duly authorized as of the date first above written.

/s/ Sang-In Lee

SANG-IN LEE

Signature Page to Agreement and Plan of Merger

IN WITNESS WHEREOF , each Party hereto has caused this Agreement to be signed by its officer thereunto duly authorized as of the date first above written.

/s/ Daniel C. Rubin

DANIEL C. RUBIN

Signature Page to Agreement and Plan of Merger

IN WITNESS WHEREOF , each Party hereto has caused this Agreement to be signed by its officer thereunto duly authorized as of the date first above written.

/s/ Ilsong Lee

ILSONG LEE

Signature Page to Agreement and Plan of Merger

APPENDICES

Appendix A	Defined Terms
Appendix B	Key Employees

EXHIBITS

Exhibit A	Form of 280G Waiver
Exhibit B	Form of Certificate of Merger
Exhibit C	Form of Certificate of Incorporation
Exhibit D	Form of Escrow Agreement
Exhibit E	Form of Letter of Transmittal
Exhibit F	Form of Opinion of Company Counsel
Exhibit G	Phantom Equity Agreement
Exhibit H	Retention Plan

SCHEDULES

See attached.

APPENDIX A

DEFINED TERMS

"280G Stockholder Approval" shall have the meaning set forth in Section 6.12(e).

"280G Waiver" shall have the meaning set forth in the Recitals.

"Accounting Firm" means an accounting firm mutually satisfactory to Parent and the Stockholders' Representative.

"Affiliate" means as to any Party, any Person which directly or indirectly is in control of, is controlled by, or is under common control with, such Party, including any Person who would be treated as a member of a controlled group under Section 414 of the Code and any officer or director of such Party. For purposes of this definition, an entity shall be deemed to be "controlled by" a Person if the Person possesses, directly or indirectly, power either to (i) vote a majority of the securities (including convertible securities) having ordinary voting power or (ii) direct or cause the direction of the management or policies of such entity whether by contract or otherwise; and, as to a Party who is a natural person, such person's Immediate Family Member. For the avoidance of doubt, from and after the Closing, Parent's Affiliates shall include without limitation the Company.

"Aggregate Exercise Amount" means the sum of: (a) the aggregate exercise price of all Company Options that have vested prior to Closing or that will vest in connection with Closing and that are outstanding, unexercised and unexpired immediately prior to the Effective Time; plus (b) the aggregate exercise price of all Series A Warrants that are outstanding immediately prior to the Effective Time.

"Aggregate Preference Amount" means an amount equal to the product of (i) the Series A Per Share Preference, multiplied by (ii) the sum of (A) the aggregate number of shares of Series A Preferred Stock outstanding immediately prior to the Effective Time, plus (B) the aggregate number of shares of Series A Preferred Stock issuable upon exercise of the Series A Warrants.

"Agreement" shall have the meaning set forth in the Introduction.

"Allocation Certificate" means signed written instructions from the Company (prior to Closing) or the Stockholders' Representative (following Closing) specifying (i) the allocation and payment among the Participating Holders of any Merger Consideration payable to such Participating Holders and whether such payment is subject to wage or payroll tax withholding (provided, that the Stockholders' Representative shall not be required to make any independent determinations with respect to wage or payroll tax withholding, but shall be entitled to rely solely on such designations provided in the original Allocation Certificate provided by the Company), (ii) the portion of such Merger Consideration that constitutes payments pursuant to Section 1.9 to any employee or former employee of the Company or any of its Subsidiaries, and (iii) the address and other identifying information for such Participating Holders and any other information reasonably requested by Parent for purposes of effecting the payments set forth in the Allocation Certificate.

"Balance Sheet" means the unaudited balance sheet of the Company and each of its Subsidiaries at July 31, 2013.

"Balance Sheet Date" means the date of the Balance Sheet.

There shall be deemed to be a " Breach " of a representation, warranty, covenant, obligation or other provision if there is or has been any inaccuracy in or breach of, or any failure to comply with or perform, such representation, warranty, covenant, obligation or other provision.

" Capped Pro Rata Share " means the quotient obtained by dividing (i) 1, by (ii) the sum of (x) the aggregate number of shares of Company Common Stock outstanding as of immediately prior to the Effective time, plus (y) the aggregate number of shares of Company Common Stock into which all Company Options that have vested prior to Closing or that will vest in connection with Closing, and that are outstanding immediately prior to the Effective Time, if any, could be converted. Any shares of Company Stock to be canceled pursuant to the last sentence of Section 1.6(b)(iii) shall be disregarded for the purposes of this definition.

" Cash " means the aggregate amount of cash and cash equivalents held or owned by the Company and its Subsidiaries, in each case determined as of the date of this Agreement in accordance with GAAP in a manner consistent with the historical accounting policies and procedures used in preparing the Year-End Financials in accordance with the Estimated Net Working Capital as set forth on the Estimated Balance Sheet.

" Cause " for termination of a Key Employee's employment shall mean any of the following: (i) commission of any felony, or of any other crime involving moral turpitude or material dishonesty; (ii) participation in a fraud or act of material dishonesty (or any such attempted acts) against Surviving Corporation or Parent; (iii) willful and material breach of such Key Employee's duties or of any of Surviving Corporation or Parent policies; (iv) deliberate and continued failure to act in accordance with any specific lawful and reasonable instructions of Surviving Corporation or Parent; (v) intentional or material damage to Surviving Corporation or Parent's property; and (vi) material breach of any written and fully signed agreement with Surviving Corporation, Parent or an affiliate (including without limitation, the confidentiality agreement between Surviving Corporation and such Key Employee or any other agreement covering proprietary information and assignment of inventions).

" Certificate of Incorporation " means the Company's Amended and Restated Certificate of Incorporation, in effect as of immediately prior to the Effective Time.

" Certificate of Merger " shall have the meaning set forth in Section 1.2.

" Certificates " shall have the meaning set forth in Section 1.14(a).

" Claim Notice " shall have the meaning set forth in Section 9.2(a).

" Closing " means the closing of the transactions contemplated by this Agreement.

" Closing Amount " means an amount equal to (i) the Upfront Cash Consideration, plus (ii) Cash, plus (iii) the Aggregate Exercise Amount, plus (iv) the Estimated Net Working Capital Surplus, if any, less (v) the Estimated Net Working Capital Deficit, if any, less (vi) the Estimated Closing Liabilities, if any, less (vii) the Initial Escrow Amount.

" Closing Date " means the date on which the Closing occurs.

" Closing Liabilities " means the amount of Indebtedness of the Company and Non-Ordinary Course Liabilities, in each case determined as of the Closing Date in accordance with GAAP in a manner consistent with the historical accounting policies and procedures used in preparing the Year-End Financials.

" Code " means the Internal Revenue Code of 1986, as amended.

" Common Per Share Closing Amount " means an amount equal to the quotient obtained by dividing (i) an amount (but not below zero) equal to the difference between (A) the Closing Amount, minus (B) the Aggregate Preference Amount, divided by (ii) the Fully Diluted Share Number.

" Company " shall have the meaning set forth in the Introduction.

" Company Common Stock " means the Company's Common Stock, no par value per share.

" Company Employees " shall have the meaning set forth in Section 3.9(a).

" Company Intellectual Property " means the Company Owned Intellectual Property and the Company Licensed Intellectual Property.

" Company Licensed Intellectual Property " means all Intellectual Property that is licensed to the Company by any third party.

" Company Options " means all options to purchase shares of Company Common Stock granted pursuant to the Company Option Plan.

" Company Owned Intellectual Property " has the meaning set forth in Section 3.17(a).

" Company Plan " shall have the meaning set forth in Section 3.8(a).

" Company Products " means the products and services that have been or are currently being developed, marketed, distributed, sold, licensed, or otherwise made available by the Company or any Subsidiary.

" Company Registered Intellectual Property " means each of the following that are registered or filed in the name of or for the benefit of the Company or any Subsidiary, alone or jointly with others: (i) United States and foreign Patent Rights; (ii) registered Trademarks; (iii) registered copyrights, designs and mask work registrations; (iv) network and web site domain name and other universal resource locator (URL) registrations; (v) Internet Names; and applications for each of the foregoing.

" Company Required Vote " means the affirmative vote of such number of holders of shares of capital stock of the Company necessary to approve the Merger by law or as provided in the Certificate of Incorporation, and evidenced by a writing reasonably satisfactory to Parent.

" Company Source Code " means the source code for any Software included in the products and services developed, manufactured, distributed, licensed or sold by the Company or any Subsidiary, or in Internal Systems, or other confidential information constituting, embodied in or pertaining to such Software.

" Company Stock " means the capital stock of the Company.

" Company Stock Plan " means the 2011 Stock Incentive Plan.

" Competing Transaction " shall have the meaning set forth in Section 6.4.

" Consent Solicitation Statement " shall have the meaning set forth in Section 6.12(a).

" Contract " means any note, bond, mortgage, debt instrument, security agreement, contract, license, lease, sublease, covenant, commitment, power of attorney, proxy, indenture, purchase and sale order, or other agreement or arrangement, oral or written, to which the Company is a party or by which the Company or any of its assets or properties are bound.

" Damages " means all Liabilities, losses, claims, demands, damages, lost profits, causes of actions, lawsuits, administrative proceedings (including informal proceedings), investigations, audits, demands, assessments, adjustments, judgments, settlement payments, deficiencies, penalties, fines, Taxes, and costs and expenses (including, without limitation, reasonable attorneys' fees and disbursements, whether incurred in connection with a third party claim, demand or Proceeding in seeking to enforce the Agreement (including the indemnification obligations set forth in Article IX)), or otherwise.

" DGCL " means the Delaware General Corporation Law.

" Dissenting Shares " shall have the meaning set forth in Section 1.16.

" Effective Time " shall have the meaning set forth in Section 1.2.

" Employer Taxes " shall mean all employer Taxes associated with payments to any Participant or Participating Holder in each case, arising in contemplation of, or in connection with, the transactions contemplated by this Agreement, required to be paid by Parent, the Company or any of their respective Affiliates on or after the Closing Date and not in the ordinary course of business of the Company, including payments payable pursuant to this Agreement, the Retention Plan or the Phantom Equity Agreement.

" Encumbrance " means any claim, lien, pledge, option, charge, easement, security interest, right-of-way, encumbrance, mortgage or other right, but excluding in all cases any Permitted Encumbrance.

" Environment " means navigable waters, waters of the contiguous zone, ocean waters, natural resources, surface waters, ground water, drinking water supply, land surface, subsurface strata, ambient air, both inside and outside of buildings and structures, man-made buildings and structures, and plant and animal life on earth.

" Environmental Laws " means all Laws relating to pollution, protection of the Environment, public or worker health and safety, or the emission, discharge, release or threatened release of pollutants, contaminants or industrial, medical, toxic or hazardous substances or wastes into the Environment or otherwise relating to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of pollutants, contaminants or industrial, medical, toxic or hazardous substances or wastes, including, without limitation, the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. Section 9601 et. seq., the Resource Conservation and Recovery Act, 42 U.S.C. Section 6901 et. seq., the Toxic Substances Control Act, 15 U.S.C. Section 2601 et. seq., the Federal Water Pollution Control Act, 33 U.S.C. Section 1251 et seq., the Clean Air Act, 42 U.S.C. Section 7401 et seq., the Federal Insecticide, Fungicide and Rodenticide Act, 7 U.S.C. Section 121 et. seq., the Occupational Safety and Health Act, 29 U.S.C. Section 651 et. seq., the Asbestos Hazard Emergency Response Act, 15 U.S.C. Section 2601 et. seq., the Safe Drinking Water Act, 42 U.S.C. Section 300f et. seq., the Oil Pollution Act of 1990 and analogous state acts.

" ERISA " means the Employee Retirement Income Security Act of 1974, as amended.

" ERISA Affiliate " means each Person which is or was required to be treated as a single employer with the Company or its current or former Subsidiaries under Section 414 of the Code or Section 4001(b)(1) of ERISA.

" Estimated Balance Sheet " "means a consolidated balance sheet of the Company and its Subsidiaries as of the date of this Agreement, prepared by the Company in accordance with GAAP in a manner consistent with the historical accounting policies and procedures used in preparing the Year-End Financials.

" Estimated Closing Liabilities " means the amount of Closing Liabilities set forth on the Statement of Estimated Closing Liabilities.

" Estimated Net Working Capital " means the Net Working Capital set forth on the Estimated Balance Sheet.

" Estimated Net Working Capital Deficit " shall mean the amount, if any, by which the Target Net Working Capital exceeds the Estimated Net Working Capital.

" Estimated Net Working Capital Surplus " shall mean the amount, if any, by which the Estimated Net Working Capital exceeds the Target Net Working Capital.

" Excluded Claims " shall have the meaning set forth in Section 9.4.

" Excluded Contract " means any and all (a) nondisclosure and confidentiality agreements (having typical form and substance) entered into in the ordinary course of the business of the Company and/or any Subsidiary, (b) agreements (having typical form and substance) for off-the-shelf commercial software, and (c) employee and independent contractor agreements (having typical form and substance).

" Excluded Tax Sharing Agreements " shall have the meaning set forth in Section 3.10(s).

" Exploit " means develop, design, test, modify, make, use, sell, have made, used and sold, import, export, copy, reproduce, publish, display, perform, market, distribute, commercialize, support, maintain, correct, translate and create derivative works of, in any medium or means of storage or transmission, now known or hereafter invented.

" Facilities " shall have the meaning set forth in Section 3.11(a).

" Final Balance Sheet " means a consolidated balance sheet of the Company and its Subsidiaries as of the date of this Agreement, prepared by Parent in good faith in accordance with GAAP in a manner consistent with the historical accounting policies and procedures used in preparing the Year-End Financials.

" Final Closing Liabilities " means the amount of Closing Liabilities set forth on the Statement of Closing Liabilities.

" Final Net Working Capital " means the Net Working Capital as set forth on the Final Balance Sheet.

" Financial Statements " means the Year-End Financials and the Interim Financials.

" FIRPTA " means the Foreign Investment and Real Property Tax Act of 1980, as amended.

" Fraud Claims " shall have the meaning set forth in Section 9.4.

" FIRPTA Notification Letter " means a letter from the Company stating that the Company Stock does not constitute "United States real property interests" under Section 897(c) of the Code, for purposes of satisfying Parent's obligations under Treasury Regulation Section 1.1445-2 (c)(3) and a form of notice to the IRS in accordance with the requirements of Treasury Regulation Section 1.897-2(h)(2).

" Fraud Claims " shall have the meaning set forth in Section 9.4.

" Fundamental Representations " shall have the meaning set forth in Section 9.4.

" Fully Diluted Share Number " means the sum (without duplication as to any share of Company Common Stock in the event more than one of (A), (B) or (C) are applicable to such share of Company Common Stock) of (A) the aggregate number of shares of Company Common Stock outstanding immediately prior to the Effective Time, plus (B) the aggregate number of shares of Company Common Stock into which all shares of Series A Preferred Stock outstanding could be converted immediately prior to the Effective Time (assuming full exercise of all Series A Warrants that are outstanding immediately prior to the Effective Time), plus (C) the aggregate number of shares of Company Common Stock into which all Company Options that have vested prior to Closing or that will vest in connection with Closing, and that are outstanding immediately prior to the Effective Time, if any, could be converted, plus (D) sixty five thousand two hundred and eight (65,208). Any shares of Company Stock to be canceled pursuant to the last sentence of Section 1.6(b)(iii) shall be disregarded for the purposes of this definition.

" GAAP " means United States generally accepted accounting principles, consistently applied.

" General Cap " shall have the meaning set forth in Section 9.5(b).

" Government " means any agency or instrumentality of the United States of America or any state or territory or subdivision thereof and any agency or instrumentality of any of the foregoing.

" Government Authority " means any nation or government, any state or other instrumentality or political subdivision thereof (including any county or city), and any entity exercising executive, legislative, judicial, military, regulatory or administrative functions of or pertaining to government.

" Government Bid " means a bid, tender or proposal which, if accepted, would result in a Government Contract.

" Government Contract " means any Contract between the Company and the U.S. Government or any other Government Authority, as well as any Contract by which the Company has agreed to provide goods or services as a sub-contractor to a prime contractor or to a higher-tier subcontractor, in each case, to a Government Authority.

" Hazardous Substance " means any toxic waste, pollutant, hazardous substance, toxic substance, hazardous waste, special waste, industrial substance or waste, petroleum or petroleum-derived substance or waste, radioactive substance or waste, or any constituent of any such substance or waste, or any other substance regulated under or defined by any Environmental Law.

" Holder " has the meaning as set forth in Section 1.12(b).

" Indebtedness " of any Person means, without duplication, (i) all obligations of such Person for borrowed money, (ii) all obligations of such Person evidenced by notes, debentures, bonds or other similar instruments for the payment of which such Person is responsible or liable, (iii) all obligations of such Person for the reimbursement of any obligor on any letter of credit, banker's acceptance, guarantee or similar credit transaction, in each case, that has been drawn or claimed against, (iv) all interest rate and currency swaps, caps, collars and similar agreements or hedging devices under which payments are obligated to be made by such Person, whether periodically or upon the happening of a contingency, (v) all obligations created or arising under any conditional sale or other title retention agreement with respect to property acquired by such Person (even though the rights and remedies of the seller or lender under such agreement in the event of default are limited to repossession or sale of such property), (vi) all obligations of such Person or another Person secured by an Encumbrance on any asset of such first Person, whether or not such obligation is assumed by such first Person, and (vii) any guaranty of any Indebtedness of any other Person.

" Indemnified Party " shall have the meaning set forth in Section 9.2(a).

" Indemnifying Party " shall have the meaning set forth in Section 9.2(a).

" Initial Escrow Amount " shall have the meaning set forth in Section 1.11.

" Information Statement " shall have the meaning set forth in Section 6.12(c).

" Intellectual Property " means the following subsisting throughout the world: (i) Patent Rights; (ii) Trademarks; (iii) Copyrights (whether or not registered), works of authorship, copyrightable works (including, but not limited to, Software), designs, data and database rights and registrations and applications for registration thereof, including moral rights of authors, and derivative works, renewals, extensions, reversions, and restorations of the foregoing, regardless of the medium of fixation or means of expression throughout the world; (iv) inventions, invention disclosures, statutory invention registrations, trade secrets and confidential business information, know-how, manufacturing and product processes and techniques, research and development information, financial, marketing and business data, pricing and cost information, business and marketing plans and customer and supplier lists and information, whether patentable or nonpatentable, whether copyrightable or noncopyrightable and whether or not reduced to practice; and (v) other intellectual property and proprietary rights relating to any of the foregoing (including remedies against infringement thereof and rights of protection of interest therein under the laws of all jurisdictions), including, but not limited to, rights to recover for past, present and future violations thereof.

" Interim Financials " means the Balance Sheet and the unaudited statement of income of the Company and its Subsidiaries for the period ended July 31, 2013.

" Internal Systems " means the Software and documentation and the computer, communications and network systems (whether mobile, desktop or enterprise), servers, hardware, equipment, materials and apparatus used by the Company or any Subsidiary in their business or operations or to develop, manufacture, fabricate, assemble, provide, distribute, support, maintain or test the products and services developed, manufactured, distributed, licensed or sold by the Company or any Subsidiary, whether located on the premises of the Company or any Subsidiary or hosted at a third party site

" Internet Names " means all (i) internet, network and web site domain names, addresses and universal resource locators (URLs), (ii) Facebook, Twitter, Google+ and other social networking names, tags and registrations, and (iii) all AdWords, AdCenter, SmartAds and other search, advertising and directory keyword rights and registrations.

" IRS " means the Internal Revenue Service or any successor agency thereto.

“ Key Employees ” means the key Company Employees set forth on Appendix B-1 and Appendix B-3 .

“ Key Employee Agreements ” shall have the meaning set forth in the Recitals.

“ Korea Transfer Taxes ” means any stock transfer Tax, stock documentary Tax, stock stamp Tax, stock registration Tax or other similar Taxes and fees imposed by a Taxing Authority of the Republic of Korea.

“ Laws ” means all laws, statutes, ordinances, rules and regulations of any Government Authority, including all orders, judgments, injunctions, awards, decisions or decrees of any court having effect of law.

“ Letter of Transmittal ” shall have the meaning set forth in Section 1.14(a).

“ Liability ” or “ Liabilities ” means, without limitation, any direct or indirect liability, indebtedness, guaranty, endorsement, claim, loss, damage, deficiency, cost, expense, obligation or responsibility, either accrued, absolute, contingent, mature, unmature or otherwise and whether known or unknown, fixed or unfixed, choate or inchoate, liquidated or unliquidated, secured or unsecured.

“ Material Adverse Effect ” means any effect, event or change which, individually or in the aggregate, has or would reasonably be expected to have a material adverse effect on (a) the operations, assets, the business or the financial condition, prospects, Liabilities, or relations with customers, suppliers or employees, or (b) the right or ability to consummate the transactions contemplated hereby; provided that , in no event shall any of the following, in and of itself, be deemed to have or constitute a Material Adverse Effect: (i) any effects, events or changes that are directly caused by or directly result from conditions affecting the industries in which such Person or its Subsidiaries participates, (ii) any effects, events or changes that are directly caused by or directly result from conditions affecting the U.S. or non-U.S. economy, or any disruptions thereof, as a whole, (iii) any effects, events or changes that are directly caused by or directly result from acts of war or terrorism, (iv) any effects, events or changes that are directly caused by any changes in applicable Law or applicable accounting regulations or principles or interpretations thereof, or (v) any effects, events or changes that are directly caused by the negotiation, announcement, pendency, execution, delivery or performance of this Agreement or the ancillary documents contemplated hereby but only if, in the case of (i), (ii), (iii) and (iv), such effects, events or changes do not disproportionately affect such Person or its Subsidiaries.

“ Merger ” shall have the meaning set forth in the Recitals.

“ Merger Sub ” shall have the meaning set forth in the Introduction.

“ Merger Sub Common Stock ” means the Company Common Stock, $0.01 par value per share, of Merger Sub.

“ Net Working Capital ” means the amount by which the total consolidated current assets of the Company and its subsidiaries (excluding Cash and Tax assets) exceeds the total consolidated current liabilities (other than deferred income Tax liabilities attributable to timing differences between book and Tax income, Specified Taxes, Closing Liabilities and any payments payable pursuant to the Retention Plan or the Phantom Equity Agreement) of the Company and its Subsidiaries, in each case determined as of the date of this Agreement in accordance with GAAP in a manner consistent with the historical accounting policies and procedures used in preparing the Year-End Financials.

“ Nonconsenting Stockholders ” shall have the meaning set forth in Section 6.12(c).

“ Non-Ordinary Course Liabilities ” means: (i) any Transaction Expenses of the Company or its Subsidiaries that remain unpaid as of the Closing; and (ii) any amounts which become payable by the Company or any of its Subsidiaries to any employees of the Company or its Subsidiaries arising in contemplation of, or in connection with, the transactions contemplated by this Agreement, including all amounts payable pursuant to any carve-out plan, transaction bonus or other cash compensation, in each case, other than: (a) Specified Taxes; (b) payments that become due as a result of the termination of service to the Parent after the date of this Agreement; or (c) amounts payable pursuant to plans implemented, or Contracts entered into, by Parent, the Surviving Corporation or any of their respective Affiliates after the Effective Time; or (d) any payments payable pursuant to the Retention Plan or the Phantom Equity Agreement.

“ Objection Notice ” shall have the meaning set forth in Section 9.2(a).

“ Offer Letter ” shall have the meaning set forth in the Recitals.

“ Open Source Materials ” means all Software, documentation and other materials, data and information that is distributed as “freeware,” “open source,” or “copyleft” materials, or licensed under a similar licensing or distribution model, including, but not limited to, the GNU General Public License (GPL), GNU Lesser General Public License (LGPL), Apache License, MIT License, MSD License, Artistic License, Mozilla Public License (MPL), or any other license described by the Open Source Initiative as set forth on www.opensource.org.

“ Overflow Funds ” shall have the meaning set forth in Section 1.6(b)(i).

“ Parent ” shall have the meaning set forth in the Introduction.

“ Parent Confidential Information ” means all documents and information concerning Parent or the Company or any of their respective Representatives furnished in connection with this Agreement or the transactions contemplated hereby (including, without limitation, any claim or dispute arising out of or related to this Agreement or the transactions contemplated hereby, or the interpretation, making, performance, breach or termination thereof).

“ Parent Permitted Prepared Return ” shall have the meaning set forth in Section 6.6(a)(i).

“ Parent Prepared Return ” shall have the meaning set forth in Section 6.6(a)(i).

“ Parent Required Prepared Return ” shall have the meaning set forth in Section 6.6(a)(i).

“ Participant ” shall have the meaning given to such term in the Retention Plan.

“ Participating Holders ” shall each holder of: (a) Company Stock (other than holders of Dissenting Shares); (b) Series A Warrants; (c) Company Options that have vested prior to Closing or that will vest in connection with Closing and that are outstanding, unexercised and unexpired immediately prior to the Effective Time; and (d) the Recipient.

“ Party ” and “ Parties ” shall have the meanings set forth in the Introduction.

“ Patent Rights ” means all patents, patent applications, utility models, design patents, design patent applications, design registrations, inventor certificates, and certificates of invention and other governmental grants for the protection of inventions or industrial designs (including all related continuations, continuations-in-part, divisionals, renewals, extensions, provisionals, reissues and reexaminations) and any improvements to the inventions disclosed in each such registration, patent, or patent application throughout the world.

" Performance Payment " shall have the meaning set forth in Section 1.8.

" Performance Period " shall have the meaning set forth in Section 1.8.

" Permitted Encumbrance " means, (a) any mechanic's, materialmen's or similar statutory lien incurred in the ordinary course of business for monies not yet due, (b) any lien on real estate or other property for Taxes, assessments, governmental charges or levies not yet due or delinquent, (c) any purchase money lien or lien securing rental payments under capital lease arrangements to the extent related to the assets purchased or leased, (d) any easement, right-of-way, zoning restriction, existing building restriction, ordinance, easement of roads, privilege, or right of public service companies and other similar encumbrances relating to real property and all other matters that do not prohibit or materially impair the current use, occupancy or marketability of title of the real property subject thereto, (e) with respect to leased or subleased real property, any Encumbrance or restriction explicitly set forth in the lease or sublease for such leased or subleased real property and (f) any lien to secure performance of, surety or appeal bonds, performance bonds or bids or similar statutory obligations.

" Person " means any person, limited liability company, partnership, trust, unincorporated organization, corporation, association, joint stock company, business, group, Government Authority or other entity.

" Phantom Equity Agreement " means the Synos Technology, Inc. Phantom Equity Agreement adopted by the board of directors of the Company on September 18, 2013, as attached hereto as Exhibit G.

" Post-Closing Adjustment " shall have the meaning set forth in Section 1.12(e).

" Potential Parachute Recipient " shall have the meaning set forth in Section 3.10(i).

" Pro Rata Initial Order Cash Consideration " means an amount equal to the quotient obtained by dividing (i) any Initial Order Cash Consideration payment, by (ii) the Fully Diluted Share Number.

" Pro Rata Performance Amount " means an amount equal to the quotient obtained by dividing (i) the Performance Amount, by (ii) the Fully Diluted Share Number.

" Pro Rata Proportion " means with respect to each Participating Holder an amount equal to the quotient obtained by dividing (i) the sum (without duplication as to any share of Company Common Stock in the event more than one of (A), (B) or (C) are applicable to such share of Company Common Stock) of (A) the aggregate number of shares of Company Common Stock held by such Participating Holder immediately prior to the Effective Time, plus (B) the aggregate number of shares of Company Common Stock into which all shares of Series A Preferred Stock held by such Participating Holder could be converted immediately prior to the Effective Time (assuming full exercise of all Series A Warrants that are held by such Participating Holder immediately prior to the Effective Time), plus (C) the aggregate number of shares of Company Common Stock into which all Company Options held by such Participating Holder that have vested prior to Closing or that will vest in connection with Closing, and that are outstanding immediately prior to the Effective Time, if any, could be converted, plus (D) the number of shares of Company Common Stock subject to phantom stock rights held by such Participating Holder immediately prior to the Effective Time, by (ii) the Fully Diluted Share Number.

" Proceeding " means any action, arbitration, audit, examination, investigation, hearing, litigation, suit or appeal (whether civil, criminal, administrative, judicial or investigative, whether formal or informal, and whether public or private) commenced, brought, conducted, heard by or before or otherwise involving any Government Authority or arbitrator.

" Product " means any software (including software provided for use as a service), hardware, firmware or other product now or within the past four (4) years offered for sale or license by the Company or any Subsidiary, together with all user documentation, data, scripts, macros, modules and other files and information supplied, sold or licensed with such software, hardware, firmware or other product.

" Product Agreement " means the Company's and its Subsidiaries' standard form of agreement pursuant to which the Company and/or any Subsidiary licenses or sells any products to customers.

" Pro Rata Share " means the quotient obtained by dividing 1, by the Fully-Diluted Share Number.

" Purchase Order " means a final, written, binding purchase order on commercial terms (exclusive of prepayments) otherwise consistent with those negotiated previously by the Company for similar system sales.

" Recipient " shall have the meaning given to such term in the Phantom Equity Agreement.

" Recommendation " shall have the meaning set forth in Section 6.12(a).

" Related Party " means any officer, director, Key Employee, stockholder or Affiliate of the Company, any Immediate Family Member of any of the foregoing individuals or any entity in which any such Person or individual owns any beneficial interest. An " Immediate Family Member " of a person is any child, stepchild, parent, stepparent or spouse.

" Release " means any release, spill, emission, leaking, pumping, injection, deposit, disposal, discharge, dispersal, leaching or migration into, onto or through the indoor or outdoor Environment or into, through or out of any property, including the movement of Hazardous Substances through or in the air, soil, surface water, ground water or property.

" Representatives " means, as to a Person, such Person's Affiliates and stockholders and any officers, directors, employees, consultants, advisors, trustees, accountants, agents, representatives and attorneys, or any representative thereof, including without limitation, any broker disclosed in Article III or Article V hereof.

" Requisite Vote " means the affirmative vote of the holders of 90% of the shares of the Company's capital stock, calculated on an as-if-converted to Common Stock basis, voting together as a single class.

" Restricted Shares " shall have the meaning set forth in Section 1.9.

" Retention Plan " means the Synos Technology, Inc. Employee Retention Plan adopted by the board of directors of the Company on September 18, 2013, as attached hereto as Exhibit H.

“ Series A Per Share Closing Amount ” means an amount equal to the difference between (i) the sum of (A) the Series A Per Share Preference, plus (B) the Common Per Share Closing Amount, minus (ii) an amount equal to the product of (A) the Pro Rata Share, multiplied by (B) the Escrow Amount.

“ Series A Per Share Preference ” means the preference amount which each share of Series A Preferred Stock issued and outstanding immediately prior to the Effective Time is entitled to receive under the Certificate of Incorporation upon a liquidation of the Company.

“ Series A Preferred Stock ” means the Company’s Series A Preferred Stock, par value $0.00001 per share.

“ Series A Warrant ” means the warrants issued by the Company to purchase shares of Series A Preferred Stock.

“ Significant Contract ” means each Contract in effect as of the date of this Agreement to which the Company or any of its Subsidiaries is a party, (i) with a dealer, broker, sales agency, advertising agency or other Person engaged in sales or promotional activities; (ii) which by its terms requires aggregate payments by or to the Company or any of its Subsidiaries in excess of $25,000; (iii) pursuant to which the Company or any of its Subsidiaries has made loans or advances (other than for ordinary course travel and expenses consistent with past practices of the Company), or has incurred debts or become a guarantor or surety or pledged its credit on or otherwise become responsible with respect to any undertaking of another; (iv) which is an indenture, credit agreement, loan agreement, note, mortgage, security agreement, lease of real property or personal property or agreement for financing; (v) creating a partnership or joint venture; (vi) prohibiting the Company or any of its Subsidiaries from conducting their respective businesses in any geographical area of operations or limiting the scope or type of their respective businesses or prohibiting the Company’s or any of its Subsidiaries’ from hiring or soliciting any Person as an employee, consultant or independent contractor; (vii) which is a power of attorney or agency agreement or written arrangement with any Person pursuant to which such Person is granted the authority to act for or on behalf of the Company or any of its Subsidiaries; (viii) with respect to which the requirements for performance extend beyond two (2) years from the date of this Agreement; (ix) which contains warranties with respect to the Company Products other than those warranties expressly made in the literature accompanying such products or in the Company’s or any of its Subsidiaries’ standard license agreement; (x) which provides for the acquisition, directly or indirectly (by merger or otherwise), of substantially all of the assets (whether tangible or intangible) or the capital stock of another Person; (xi) which is an employment, consulting or professional advisor agreement (other than standard offer letters and consulting agreements that cannot be terminated without penalty or payment on at least ninety (90) days’ notice); (xiii) which involves the sale, issuance or repurchase by the Company or any of its Subsidiaries of any capital stock or securities of the Company or any of its Subsidiaries; (xiv) with any Government or Government Authority; or (xv) disclosed on Schedule 3.11(a) or Schedule 3.11(b) or (xvi) which is not made in the ordinary course of business and which is to be performed at or after the date of this Agreement.

“ Significant Customers ” shall have the meaning set forth in Section 3.19.

“ Significant Stockholder ” shall have the meaning set forth in the Introduction.

“ Software ” means computer software code, objects, applications, utilities, tools, libraries, configuration files, development tools, firmware, operating systems and specifications, diagnostics, databases and embedded systems, whether in source code, interpreted code or object code form, together with all boot, compilation, configuration and runtime files, data, passwords and other information accompanying or relating to the foregoing.

"Specified Taxes" means (i) any income Taxes arising in connection with any election made by Parent under Section 338 of the Code (or comparable provision of state, local or non-U.S. Law) with respect to the acquisition of the Company or any of its Subsidiaries under this Agreement, (ii) any income Taxes resulting from transactions not in the ordinary course of business of the Company or its Subsidiaries attributable to actions occurring on the Closing Date after the Effective Time and not otherwise contemplated by this Agreement, (iii) any additional income Taxes that arise in the taxable year of the Company or its Subsidiaries ending on the Closing Date solely as a result of an election pursuant to Treasury Regulation Section 1.1502-76(b)(2)(ii), (iv) the portion of any Transfer Taxes to be borne by Parent pursuant to Section 6.6(g), and (v) any Employer Taxes, and (y) severance or other termination benefits provided for in a Key Employee Agreement or an offer letter or other employment agreement between Parent and a Key Employee or other Continuing Employee.

"Statement of Closing Liabilities" means a schedule prepared by Parent in good faith setting forth the Final Closing Liabilities.

"Statement of Estimated Closing Liabilities" means a schedule prepared by the Company in good faith setting forth the Estimated Closing Liabilities.

"Stockholders" means the holders of the Company Stock.

"Stockholders' Representative" shall have the meaning set forth in Section 2.3(a).

"Subsidiary" of a Person means any other Person more than 50% of the voting stock (or of any other form of other voting or controlling equity interest in the case of a Person that is not a corporation) of which is beneficially owned by the Person directly, or indirectly through one or more other Persons.

"Surviving Corporation" shall have the meaning set forth in Section 1.1.

"Takeover Statute" means any "fair price," "moratorium," "control share acquisition" or other antitakeover statute or regulation enacted under state or federal Laws in the United States.

"Target Net Working Capital" means Sixty Six Thousand Dollars ($66,000).

"Tax" means (i) all taxes, regardless of formal characterization, imposed by any Government Authority, including without limitation, all income, gross receipts, license, payroll, employment, excise, severance, stamp, occupation, premium, windfall profits, environmental, customs duties, capital stock, ad valorem, value added, inventory, franchise, profits, withholding, social security (or similar), unemployment, disability, real property, personal property, sales, use, transfer, registration, alternative, minimum, or estimated tax, and (ii) any interest, penalty, or addition arising with respect to the foregoing, or the obligation to file Tax Returns, whether disputed or not.

"Tax Return" means any report, return, statement, claim for refund, election, declaration or other information with respect to any Tax required to be filed or actually filed with a Government Authority, including any schedule or attachment thereto, and including any amendment thereof, and where relevant, any statement required by a Government Authority be provided to a third party with respect to Taxes.

"Taxing Authority" means any Government Authority responsible for the assessment, determination, collection or administration of any Tax.

" Third Party Intellectual Property " means any Company Intellectual Property specifically designated as not owned by the Company on Schedule 3.18(b)(ii) that are necessary to or useful in the conduct of the business of the Company as currently conducted and proposed to be conducted.

" Trademarks " means all trademarks and service marks, logos, Internet Names, corporate names and doing business designations and all registrations and applications for registration of the foregoing, unregistered corporate names, trade names, common law trademarks and service marks and trade dress, including all variations, derivations, combinations of the foregoing, together with all goodwill pertaining thereto throughout the world.

" Transaction Expenses " means, with respect to a Person, all fees, costs, commissions and expenses incurred by, paid or payable by such Person in connection with the transactions contemplated hereby, including, without limitation, financial advisory fees, legal fees and expenses, broker and finder fees, fees and expenses of accountants, and bank fees.

" Transfer Taxes " means any transfer, documentary, sales, use, stamp, registration or other similar Taxes and fees.

" Upfront Cash Consideration " shall mean $70,000,000, plus interest at the rate of 2% per annum for the period commencing September 13, 2013 and ending on the Closing Date, less the aggregate Closing Bonus Payment (as defined in the Retention Plan) payable to all Participants pursuant to the Retention Plan.

" Welfare Plan " means any (i) Employee Welfare Benefit Plan which is currently maintained, administered or contributed to (directly or indirectly through a professional employer organization or otherwise) by the Company or any ERISA Affiliate or (ii) Employee Welfare Benefit Plan which was previously maintained, administered or contributed to by the Company or an ERISA Affiliate.

" Written Consents " shall have the meaning set forth in Section 6.12(b).

" Year-End Financials " means the audited balance sheet of the Company and its Subsidiaries and the audited statements of income, cash flow and retained earnings of the Company and its Subsidiaries at and for the fiscal years ended December 31, 2011 and 2012.

Exhibit 10.22

VEECO INSTRUMENTS INC.

AMENDED AND RESTATED
SENIOR EXECUTIVE CHANGE IN CONTROL POLICY

Effective January 1, 2014

1. Purpose . Effective as of September 12, 2008, Veeco Instruments Inc., a Delaware corporation (the " Company " or " Veeco "), has adopted this Senior Executive Change in Control Policy (as may be amended from time to time, the " Policy "). The Compensation Committee of the Board (the " Committee ") recognizes that, as is the case for most publicly held companies, the possibility of a Change in Control (as defined below) exists, and the Company wishes to ensure that certain Eligible Employees (as defined below) are not practically disabled from discharging their duties in respect of a proposed or actual transaction involving a Change in Control. Accordingly, the Company wishes to provide additional inducement for the Eligible Employees to continue to remain in the employ of the Company and to provide certain severance benefits to the Eligible Employees in the event that their employment is terminated under certain circumstances related to a Change in Control.

2. Certain Defined Terms . In addition to terms defined elsewhere herein, the following capitalized terms have the following meanings when used herein:

" Affiliate " shall mean with respect to any Person, any other Person directly or indirectly, through one or more intermediaries, controlling, controlled by, or under common control with, such Person. For purposes of this definition, "control" shall have the meaning given such term under Rule 405 of the Securities Act of 1933, as amended.

" Board " shall mean the Board of Directors of the Company.

" Cause " shall mean a termination based on (i) Eligible Employee's willful and substantial misconduct in the performance of his duties, (ii) Eligible Employee's willful failure to perform his duties after two weeks written notice from the Company (other than as a result of a total or partial incapacity due to a physical or mental illness, accident or similar event), (iii) the Eligible Employee's material breach of any of the agreements contained in Section 6 hereof, (iv) the commission by the Eligible Employee of any material fraudulent act with respect to the business and affairs of the Company or any subsidiary or affiliate thereof, or (v) Eligible Employee's conviction of (or plea of nolo contendere to) a crime constituting a felony.

" Change in Control " shall mean:

(i) any person or group acquires stock of the Company that, together with stock held by such person or group, constitutes more than 50% of the total fair market value or total voting power of the stock of the Company. However, if any person or group is considered to own more than 50% of the total fair market value or total voting power of the stock of the Company, the acquisition of additional stock by the same person or group is not considered to cause a Change in Control of the Company. An increase in the percentage of stock owned by any person or group as a result of a transaction in which the Company acquires its stock in exchange for property will be treated as an acquisition of stock for purposes of this subsection. This subsection applies only when there is a transfer of stock of the Company (or issuance of stock of such entity) and stock in such entity remains outstanding after the transaction;

(ii) any person or group acquires (or has acquired during the 12-month period ending on the date of the most recent acquisition by such person or group) ownership of stock of the Company possessing 30% or more of the total voting power of the stock of the Company;

(iii) a majority of members of the Board is replaced during any 12-month period by Directors whose appointment or election is not endorsed by a majority of the members of the such entity's Board or Directors prior to the date of the appointment or election; or

(iv) any person or group acquires (or has acquired during the 12-month period ending on the date of the most recent acquisition by such person or group) substantially all of the assets of the Company immediately prior to such acquisition or acquisitions. However, no Change in Control shall be deemed to occur under this subsection (iv) as a result of a transfer to:

(A) A shareholder of the Company (immediately before the asset transfer) in exchange for or with respect to its stock;

(B) An entity, 50% or more of the total value or voting power of which is owned, directly or indirectly, by the Company;

(C) A person or group that owns, directly or indirectly, 50% or more of the total value or voting power of all the outstanding stock of the Company; or

(D) An entity, at least 50% of the total value or voting power of which is owned, directly or indirectly, by a person described in clause (iii) above.

For purposes of this definition, the term "person" shall mean an individual, corporation, association, joint-stock company, business trust or other similar organization, partnership, limited liability company, joint venture, trust, unincorporated organization or government or agency, instrumentality or political subdivision thereof (for clarification, other than the Company or any subsidiary of the Company, or any employee benefit plan maintained by the Company or any subsidiary thereof). The term "group" shall have the meaning set forth in Rule 13d-5 of the Securities Exchange Commission ("SEC"), modified to the extent necessary to comply with Treasury Regulation Section 1.409A-3(g)(5)(v)(B), or any successor thereto in effect at the time a determination of whether a Change in Control has occurred is being made. If any one person, or persons acting as a group, is considered to effectively control the Company as described in subsections (ii) or (iii) above, the acquisition of additional control by the same person or persons is not considered to cause a Change in Control.

"Code" shall mean Internal Revenue Code of 1986, as amended.

"Confidential Information" shall mean any information that: (a) is disclosed to an Eligible Employee, learned by an Eligible or created by an Eligible Employee in connection with his employment with Veeco (or a predecessor company now owned by or part of Veeco), and (b) Veeco treats as proprietary, private or confidential. Confidential Information may include, without limitation, information relating to Veeco's products, services and methods of operation, the identities and competencies of Veeco's employees, customers and suppliers, trade secrets, know-how, processes, techniques, data, sketches, plans, drawings, chemical formulae, computer software, financial information, operating and cost data, research databases, selling and pricing information, business and marketing plans, and information concerning potential acquisitions, dispositions or joint ventures. Notwithstanding the foregoing, "Confidential Information" does not include any of the foregoing items which has become publicly known or made generally available (provided that information will not cease to be "Confidential Information" as a result of an Eligible Employee's breach of confidentiality).

"Eligible Employee" shall mean an employee of the Company selected by the Committee to be covered by the Policy pursuant to Section 3 and listed on Exhibit A hereto, as it may be amended from time to time.

"Good Reason" shall mean any of the following events: (i) any reduction in the total amount of an Eligible Employee's base salary or target bonus; or (ii) any involuntary relocation of an Eligible Employee's principal place of business to a location more than 50 miles from the Eligible Employee's current principal place of business (or, in the case of employees whose principal place of business is more than 50 miles from their primary residence, an involuntary relocation of such employee's principal place of business such that the employee's overall level of commuting substantially increases). Good Reason shall not be deemed to have occurred unless the Eligible Employee provides the Company with written notice of the existence of the applicable condition described in clauses (i) and (ii) above, within 90 days after the initial existence of such condition and the Company fails to remedy such condition within 30 days of the date of such written notice.

"Person" shall mean an individual, partnership, corporation, business trust, limited liability company, joint stock company, trust, unincorporated association, joint venture, governmental authority or other entity of whatever nature.

"Voting Stock" shall mean all capital stock of the Company which by its terms may be voted on all matters submitted to stockholders of the Company generally.

3. Eligibility. The Committee shall determine which employees of the Company shall be Eligible Employees covered by the Policy. As of the effective date of the Policy, all Eligible Employees are listed on Exhibit A. From time to time, the Committee may, in its sole discretion, revise the list of individuals who are Eligible Employees by adding additional employees to, or, subject to Section 13, removing any Eligible Employee from, the list of Eligible Employees set forth on Exhibit A.

4. Effect of Change in Control; Certain Terminations in Connection with a Change in Control.

(a) Upon the consummation of a Change in Control, the vesting, payment and/or exercisability of all stock option grants, restricted stock awards and any other equity-based compensation awards granted prior to January 1, 2014 and held by the Eligible Employee that would otherwise be eligible to become vested during the Eligible Employee's continued employment shall be accelerated and any outstanding stock options then held by the Eligible Employee shall remain exercisable until the earlier of (x) 12 months following the date of termination of the Eligible Employee's employment with the Company and (y) the expiration of the original term of such options.

(b) If an Eligible Employee's employment shall be terminated by the Company without Cause, or by the Eligible Employee for Good Reason, during the period commencing three (3) months prior to, and ending eighteen (18) months following, a Change in Control, and subject to the Eligible Employee's execution of a separation and release agreement in a form reasonably satisfactory to the Company:

(i) The vesting, payment and/or exercisability of all stock option grants, restricted stock awards and any other equity-based compensation awards granted on or after January 1, 2014 and held by the Eligible Employee that would otherwise be eligible to become vested during the Eligible Employee's continued employment shall be accelerated and any outstanding stock options then held by the Eligible Employee shall remain exercisable until the earlier of (x) 12 months following the date of termination of the Eligible Employee's employment with the Company and (y) the expiration of the original term of such options.

(ii) The Company shall pay to the Eligible Employee an amount equal to the product of (i) the sum of his then current (A) annual base salary and (B) the target bonus payable to the Eligible Employee pursuant to the Company's performance-based compensation bonus plan with respect to the fiscal year ending immediately prior to the date of termination, and (ii) 1.5; such amount shall be payable in a lump sum as soon as reasonably practicable (x) if such termination of employment occurs on or following the consummation of the Change in Control, after the date of such termination of employment, or (y) if such termination occurs prior to the consummation of the Change in Control, after the effective date of such Change in Control (either such date, the " Vesting Date "), but in any event, such payment shall be made within 2½ months following the end of the calendar year in which the Vesting Date occurs;

(iii) The Company shall continue to provide the Eligible Employee (and his dependents) with all health and welfare benefits which he (or his dependents) was participating in or receiving as of the date of termination (at a level then in effect with respect to coverage and employee premiums) until the 18-month anniversary of the date of termination. If such benefits cannot be provided under the Company's programs, such benefits and perquisites will be provided on an individual basis to the Eligible Employee such that his after-tax costs will be no greater than the costs for such benefits and perquisites under the Company's programs. Any tax gross-up payment required under this paragraph shall be paid in a single lump sum payment at the same time severance is otherwise payable under paragraph (i) above;

(iv) The Company shall pay to the Eligible Employee a pro-rated amount of the Eligible Employee's bonus for the fiscal year in which the date of termination occurs equal to the product of (i) the amount of the bonus the Eligible Employee would have otherwise earned had he been employed by the Company on the last day of the fiscal year in which the date of termination occurs multiplied by (ii) the number of days elapsed during such fiscal year prior to the date of termination divided by 365. Such pro-rated bonus shall be payable at the same time as bonuses for the year of termination are paid to employees generally, *provided, however*, that such payment shall be made within 2 ½ months following the end of the calendar year in which the Vesting Date occurs but in any event within 2½ months after the end of the performance period; and

(v) The vesting, payment and/or exercisability of all stock option grants, restricted stock awards and any other equity-based compensation awards held by the Eligible Employee that would otherwise be eligible to become vested during the Eligible Employee's continued employment shall be accelerated and any outstanding stock options then held by the Eligible Employee shall remain exercisable until the earlier of (x) 12 months following the date of termination of the Eligible Employee's employment with the Company and (y) the expiration of the original term of such options.

(c) For the sake of clarity, "termination" as used in this Section 4 shall not include the case where (i) Veeco offers to retain the Eligible Employee in a position of substantial responsibility or (ii) Veeco requests that the Eligible Employee accepts a position with the acquiring entity in the Change in Control but the Eligible Employee declines the position.

5. Parachute Payments .

(a) Notwithstanding Section 4 (but subject to Section 5(b)), in the event that an Eligible Employee becomes entitled to any payments or benefits under this Policy and any portion of those payments or benefits, when added to any other amount theretofore or thereafter payable to the Eligible Employee as a result of or in connection with any Change in Control, whether or not under any other plan, arrangement or agreement with the Company, any Person whose actions resulted in the Change in Control or any Person having such a relationship with the Company or such Person as to require attribution of stock ownership between the parties under Section 318(a) of the Code (the " Aggregate Payments "), would be subject to the tax (the " Excise Tax ") imposed by Section 4999 of the Code, then the payments or benefits under this Policy and, if applicable, any other plan, arrangement or agreement shall be reduced (first by reducing the cash payments under this Policy, then by reducing any fringe or other benefits required to be provided under this Policy, and finally by reducing the payments and/or benefits under any other plan, arrangement or agreement) to an amount which is ten dollars ($10.00) less than the amount of the Aggregate Payments that could be made to the Eligible Employee before any portion of the Aggregate Payments would be subject to the Excise Tax.

(b) Notwithstanding Section 5(a), the Aggregate Payments shall be reduced pursuant to Section 5(a) only if the net after-tax amount received by the Eligible Employee after the application of Section 5(a) is greater than the net after-tax amount (taking into account the application of the Excise Tax) that the Eligible Employee would otherwise receive in connection with the Change in Control without the application of Section 5(a).

(c) All determinations and calculations required to effectuate this Section 5 (including, without limitation, the determination as to whether any Aggregate Payments would be subject to the Excise Tax and the amount of any reduction of the Aggregate Payments) shall be made by the Company's independent auditors (or another nationally recognized United States public accounting firm selected in good faith by the Company) (the " Auditors "). For purposes of making the calculations and determinations required by this Section 5, the Auditors may make reasonable assumptions and approximations concerning applicable taxes and may rely on reasonable, good faith interpretations concerning the application of Sections 280G and 4999 of the Code and the Department of Treasury Regulations issued thereunder.

6. Obligations of the Eligible Employee

As a condition to being designated as an Eligible Employee and to being eligible to receive benefits hereunder, each individual so designated agrees as follows (any individual not so agreeing shall notify the Company in writing within 10 days of being notified of the designation, in which case the designation shall be null and void):

(a) Confidentiality . The Eligible Employee acknowledges that the Company and its Affiliates continually develop Confidential Information; that the Eligible Employee may develop Confidential Information for the Company and its Affiliates; and that the Eligible Employee may learn of Confidential Information during the course of employment, including Confidential Information that may relate to a transaction which, if consummated, would constitute a Change in Control. The Eligible Employee will comply with the policies and procedures of the Company and its Affiliates for protecting Confidential Information and shall not disclose Confidential Information to any Person or use Confidential Information except for the benefit of the Company or as required by applicable law after notice to the Company and a reasonable opportunity for the Company to seek protection of the Confidential Information prior to disclosure. The Eligible Employee understands that this restriction shall continue to apply after his employment terminates, regardless of the reason for such termination.

(b) Return of Company Property. All documents, records, tapes and other media of every kind and description relating to the business, present or otherwise, of the Company and its Affiliates and any copies, in whole or in part, thereof (the "Documents"), whether or not prepared by the Eligible Employee, shall be the sole and exclusive property of the Company and its Affiliates. The Eligible Employee shall safeguard all Documents and shall surrender to the Company at the time his employment terminates, or at such earlier time or times as the Board or its designee may specify, all Documents and other property of the Company and its Affiliates then in the Eligible Employee's possession or control.

(c) Restricted Activities. In further consideration of the compensation that the Eligible Employee may become entitled to hereunder, the Eligible Employee agrees that some restrictions on his activities during and after his employment are necessary to protect the goodwill, Confidential Information and other legitimate interests of the Company and its Affiliates:

(i) While the Eligible Employee is employed by the Company and for eighteen (18) months after the termination of the Eligible Employee's employment (the "Non-Competition Period"), the Eligible Employee will not own, manage, work for or otherwise participate in any business whose products, services or activities compete with the current or currently contemplated products, services or activities of Veeco in any state or country in which Veeco sells products or conducts business and (x) in which such Eligible Employee was involved or (y) with respect to which such Eligible Employee had access to Confidential Information, in each case, during the 5 years prior to termination, *provided*, *however*, that the Eligible Employee may own up to 1% of the securities of any such public company (but without otherwise participating in the activities of such enterprise).

(ii) The Eligible Employee further agrees that while he is employed by the Company and during the Non-Competition Period, the Eligible Employee will not for himself or any other person: (a) induce or try to induce any employee to leave Veeco or otherwise interfere with the relationship between Veeco and any of its employees, (b) employ or engage as an independent contractor, any current or former employee of Veeco, other than former employees who have not worked for Veeco within the past year, (c) induce or try to induce any customer, supplier, licensor or business relation to stop doing business with Veeco or otherwise interfere with the relationship between Veeco and any of its customers, suppliers, licensors or business relations; or (d) solicit the business of any person known by the Eligible Employee to be a customer of Veeco, whether or not the Eligible Employee had personal contact with such person, with respect to products or activities which compete with the products or activities of Veeco in existence or contemplated at the time of termination of such Eligible Employee's employment.

(d) Enforcement of Covenants. The Eligible Employee acknowledges that he has carefully read and considered all the terms and conditions of this Agreement, including the restraints imposed upon him pursuant to this Section 6. The Eligible Employee agrees that those restraints are necessary for the reasonable and proper protection of the Company and its Affiliates and that each and every one of the restraints is reasonable in respect to subject matter, length of time and geographic area. The Eligible Employee further acknowledges that, were he to breach any of the covenants contained in this Section 6, the damage to the Company could be irreparable. The Eligible Employee therefore agrees that the Company, in addition to any other remedies available to it, shall be entitled to seek preliminary and permanent injunctive relief against any breach or threatened breach by the Eligible Employee of any of said covenants, without having to post bond. The Eligible Employee agrees that, in the event that any provision of this Section 6 shall be determined by any court of competent jurisdiction to be unenforceable by reason of its being extended over too great a time, too large a geographical area or too great a range of activities, such provision shall be deemed to be modified to permit its enforcement to the maximum extent permitted by law.

7. Successors .

(a) The Company will require any successor (whether direct or indirect, by purchase, merger, consolidation, reorganization or otherwise, including, without limitation, any successor due to a Change in Control) to the business or assets of the Company expressly to assume this Policy and to perform in the same manner and to the same extent the Company would be required to perform if no such succession had taken place. This Policy will be binding upon and inure to the benefit of the Company and any successor to the Company, including, without limitation, any persons directly or indirectly acquiring the business or assets of the Company in a transaction constituting a Change in Control (and such successor shall thereafter be deemed the "Company" for the purpose of this Policy), but will not otherwise be assignable, transferable or delegable by the Company.

(b) This Policy will inure to the benefit of and be enforceable by the Eligible Employees' personal or legal representatives, executors, administrators, successors, heirs, distributees and legatees.

(c) This Policy is personal in nature and neither the Company nor any Eligible Employee shall, without the consent of the Company, assign, transfer or delegate any rights or obligations hereunder except as expressly provided in Sections 7(a) and 7(b). Without limiting the generality or effect of the foregoing, an Eligible Employee's right to receive payments hereunder will not be assignable, transferable or delegable, other than by a transfer by such Eligible Employee's will or by the laws of descent and distribution and, in the event of any attempted assignment or transfer contrary to this Section 7(c), the Company shall have no liability to pay any amount so attempted to be assigned, transferred or delegated.

8. Administration; ERISA . This Policy shall be administered by the Committee (or the Committee's delegate or successor). The Committee shall have the sole authority to interpret this Policy and to determine all questions (whether of fact or interpretation) arising in connection with this Policy. The Committee's decisions shall be final and bind all parties. This Policy is intended to be an unfunded "top hat plan" that is not subject to the Employee Retirement Income Security Act of 1974, as amended (" ERISA ").

9. Notices . For all purposes of this Policy, all communications, including without limitation notices, consents, requests or approvals, required or permitted to be given hereunder will be in writing and will be deemed to have been duly given when hand delivered or dispatched by electronic facsimile transmission (with receipt thereof orally confirmed), or five business days after having been mailed by United States registered or certified mail, return receipt requested, postage prepaid, or three business days after having been sent by a nationally recognized overnight courier service, addressed to the Company (to the attention of the General Counsel of the Company) at its principal executive office and to the Eligible Employee at his principal residence, or to such other address as any party may have furnished to the other in writing and in accordance herewith, except that notices of changes of address shall be effective only upon receipt.

10. Validity . If any provision of this Policy or the application of any provision hereof to any person or circumstances is held invalid, unenforceable or otherwise illegal, the remainder of this Policy and the application of such provision to any other person or circumstances will not be affected, and the provision so held to be invalid, unenforceable or otherwise illegal will be reformed to the extent (and only to the extent) necessary to make it enforceable, valid or legal.

11. Governing Law; Jurisdiction . The laws of the state of New York shall govern the interpretation, validity and performance of the terms of this Policy, regardless of the law that might be applied under principles of conflicts of law. Any suit, action or proceeding against any Eligible Employee, with respect to this Policy may be brought in any court of competent jurisdiction in the State of New York.

12. Relationship with Other Plans . This Policy is intended to supplement, but not duplicate, any benefits to which an Eligible Employee may be entitled under any other severance, employment or other individual agreement. The Committee, in its sole discretion, will make any interpretation or determination necessary to implement this provision.

13. Amendment; Termination . The Company expressly reserves the right to amend or terminate this Policy, to discontinue or eliminate benefits hereunder or to remove any employee from the list of Eligible Employees covered by this Policy at any time in its sole discretion; *provided, however,* that, during the period commencing upon the earlier of (a) three months prior to the signing of a definitive agreement that, if consummated, would result in a Change in Control, and (b) the filing of a Schedule TO (or any appropriate successor form) with respect to a tender offer with the Commission that, if accepted, would result in a Change in Control, (each, a " Triggering Event ") and ending upon the earlier of (x) the date on which the Committee in its sole discretion determines that the Triggering Event will not actually result in a Change in Control, and (y) the 18 month anniversary of the Change in Control, no amendment which would deprive an Eligible Employee of any benefit to which he would have been entitled hereunder, nor any termination of this Policy, nor removal of an employee from the list of Eligible Employees covered by this Policy, shall be effective with respect to such Eligible Employee.

14. Section 409A .

(a) This Policy is intended to be exempt from the requirements of Section 409A of the Code (together with any Department of Treasury regulations and other interpretive guidance issued thereunder, including without limitation any such regulations or other guidance that may be issued after the date hereof, " Section 409A "). The Company may, in its discretion, adopt such amendments to the Policy or adopt other procedures, or take any other actions, as the Company determines are necessary or appropriate to exempt this Policy from Section 409A (or, if the Committee determines appropriate, to comply with the requirements of Section 409A), including without limitation amendments, procedures and action with retroactive effect.

(b) Notwithstanding the foregoing or any other provision of this Policy, if and to the extent that the Company determines, in its sole discretion, that any payments or benefits payable under this Policy are deferred compensation subject to Section 409A, the following will apply:

(i) if the Eligible Employee is a "specified employee" (as defined in Section 409A) at the time of his termination of employment, (x) during the first 6 months after such Eligible Employee's termination of employment, such Eligible Employee shall be paid only the portion, if any, of such payments that will not subject him to additional taxes and interest under Section 409A (" Delay Period "). If this Section applies and the method of payment is not a lump sum, the first payment to the Eligible Employee will include all amounts that would have been paid during the Delay Period but for this Section, and (y) to the extent that benefits to be provided to such an Eligible Employee pursuant to this Policy are not non-taxable medical benefits or other benefits not considered nonqualified deferred compensation for Section 409A, such provision of benefits shall be delayed until the end of the Delay Period to the extent necessary to avoid the imposition of additional taxes and interest on the Eligible Employee, provided that, if the provision of any ongoing benefits would not be required to be delayed if the premiums were paid by the Eligible Employee, the Eligible Employee shall pay the full cost of the premiums for such benefits during the Delay Period and the Company shall pay him an amount equal to the amount of such premiums within ten (10) days after the end of the Delay Period.

(ii) To the extent that any benefits to be provided to an Eligible Employee pursuant to this Policy are considered nonqualified deferred compensation and are reimbursements subject to Section 409A, the reimbursement of eligible expenses related to such benefits shall be made on or before the last day of the Eligible Employee's taxable year following the Eligible Employee's taxable year in which the expense was incurred.

(iii) Each of the payments and benefits under Section 4(b) of this Agreement are designated as separate payments for purposes of the short-term deferral rules under Treasury Regulation Section 1.409A-1(b)(4)(i)(F), the exemption for involuntary terminations under separation pay plans under Treasury Regulation Section 1.409A-1(b)(9)(iii), and the exemption for medical expense reimbursements under Treasury Regulation Section 1.409A-1(b)(9)(v)(B). As a result, (1) any payments that become vested as a result of a qualifying termination that are made on or before the 15th day of the third month following the later of the end of the Company's taxable year or the end of the Executive's taxable year in which occurs the Executive's termination of employment, (2) any additional payments that are made on or before the last day of the second calendar year following the year of the Executive's termination and do not exceed the lesser of two times annual base salary or two times the limit under Code Section 401(a)(17) then in effect, and (3) the payment of medical expenses within the applicable COBRA period, are exempt from the requirements of Code Section 409A. If the Executive dies prior to the expiration of the Delay Period, payment of any amounts previously withheld under Section 14(b)(i) above shall be paid to the Executive's beneficiary as soon as practicable following the Executive's death.

15. Miscellaneous .

(a) Pronouns . Masculine pronouns and other words of masculine gender shall refer to both men and women.

(b) Titles and Headings . The titles and headings of the sections in the Policy are for convenience of reference only, and in the event of any conflict, the text of the Policy, rather than such titles or headings, shall control.

Veeco Instruments Inc.

Senior Executive Change in Control Policy

Exhibit A: Eligible Employees

Exhibit 21.1

Subsidiaries of the Registrant

Subsidiary	Jurisdiction of Organization
U.S. Subsidiaries	
Veeco ALD Inc.	DE
Veeco APAC Inc.	DE
Veeco Process Equipment Inc.	DE
Veeco TK LLC	DE
Foreign Subsidiaries	
Nihon Veeco K.K.	Japan
Veeco ALD Korea Ltd.	South Korea
Veeco Asia Pte. Ltd.	Singapore
Veeco Malaysia Sdn. Bhd.	Malaysia
Veeco Korea LLC	South Korea
Veeco Instruments GmbH	Germany
Veeco Instruments Limited	England
Veeco Instruments (Shanghai) Co. Ltd.	China
Veeco Taiwan Inc.	Taiwan

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the following Registration Statements of Veeco Instruments Inc. and Subsidiaries (the “Company”):

- the Registration Statement (Form S-8 No. 333-39156) pertaining to the Veeco Instruments Inc. 2000 Stock Option Plan;
- the Registration Statement (Form S-8 No. 333-66574) pertaining to amendments to the Veeco Instruments Inc. 2000 Stock Option Plan;
- the Registration Statement (Form S-8 No. 333-88946) pertaining to the offer and sale of 2,200,000 shares of common stock under the 2000 Stock Option Plan;
- the Registration Statement (Form S-8 No. 333-107845) pertaining to the offer and sale of 630,000 shares of common stock under the 2000 Stock Option Plan;
- the Registration Statement (Form S-8 No. 333-127235) pertaining to the offer and sale of 2,000,000 shares of common stock under the 2000 Stock Incentive Plan;
- the Registration Statement (Form S-8 No. 333-127240) pertaining to the offer and sale of 1,500,000 shares of common stock under the 2000 Stock Incentive Plan; and
- the Registration Statement (Form S-8 No. 333-166852) pertaining to Veeco Instruments, Inc. 2010 Stock Incentive Plan

of our reports dated February 28, 2014, with respect to the consolidated financial statements and schedule of the Company and the effectiveness of internal control over financial reporting of the Company included in this Annual Report (Form 10-K) of the Company for the year ended December 31, 2013.

/s/ Ernst & Young LLP

New York, New York
February 28, 2014

Exhibit 31.1

CERTIFICATION PURSUANT TO
RULE 13a—14(a) or RULE 15d—14(a)
OF THE SECURITIES EXCHANGE ACT OF 1934

I, John R. Peeler, certify that:

1. I have reviewed this annual report on Form 10-K for the year ended December 31, 2013 (the “Report”) of the Company;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and

5. The registrant’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):

   (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and

   (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

/s/ JOHN R. PEELER
John R. Peeler
Chairman and Chief Executive Officer
Veeco Instruments Inc.
February 28, 2014

Exhibit 31.2

**CERTIFICATION PURSUANT TO
RULE 13a—14(a) or RULE 15d—14(a)
OF THE SECURITIES EXCHANGE ACT OF 1934**

I, David D. Glass, certify that:

1. I have reviewed this annual report on Form 10-K for the year ended December 31, 2013 (the “Report”) of the Company;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and

5. The registrant’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):

   (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and

   (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

/s/ DAVID D. GLASS
David D. Glass
Executive Vice President and
Chief Financial Officer
Veeco Instruments Inc.
February 28, 2014

Exhibit 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Veeco Instruments Inc. (the "Company") on Form 10-K for the year ended December 31, 2013 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, John R. Peeler, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ JOHN R. PEELER
John R. Peeler
Chairman and Chief Executive Officer
Veeco Instruments Inc.
February 28, 2014

A signed original of this written statement required by Section 906 has been provided to Veeco Instruments Inc. and will be retained by Veeco Instruments Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

Exhibit 32.2

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Veeco Instruments Inc. (the "Company") on Form 10-K for the year ended December 31, 2013 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, David D. Glass, Executive Vice President and Chief Financial Officer and Secretary of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ David D. Glass
David D. Glass
Executive Vice President and
Chief Financial Officer
Veeco Instruments Inc.
February 28, 2014

A signed original of this written statement required by Section 906 has been provided to Veeco Instruments Inc. and will be retained by Veeco Instruments Inc. and furnished to the Securities and Exchange Commission or its staff upon request.